



GOVERNMENT OF THE COOK ISLANDS

Te Kaveinga Nui

The National Sustainable Development Plan 2016 – 2020

Report on NSDP Indicators Year Two Report – 2018

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Central Policy & Planning Office, the Office of the Prime Minister, Rarotonga, COOK ISLANDS

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Acronyms and Abbreviations

2G, 3G, 4G	Second, third, fourth generation cellular communication network
AMIS	Asset management information system
BESS	Battery Energy Storage System
BTIB	Business Trade and Investment Board
CI	Cook Islands
CICC	Cook Islands Climate Change (a division of OPM)
CIIC	Cook Islands Investment Corporation
CITTI	Cook Islands Tertiary Training Institute
COTS	Crown of thorns starfish
CPPO	Central Policy and Planning Office (a division of OPM)
EEZ	Exclusive Economic Zone
EMCI	Emergency Management Cook Islands (a division of OPM)
ESS	Energy Storage System
FPR	Framework for Pacific Regionalism
FTE	Full time equivalents
GDP	Gross Domestic Product
GPRS	General packet radio services
GPS	Global positioning system
GSM	Global system for mobile communication
HD	High definition
HES	Household Expenditure Survey
HIES	Household Income and Expenditure Survey
HYEFU	Half Year Economic and Fiscal Update
ICT	Information and Communications Technology
ICI	(Ministry of) Infrastructure Cook Islands
INTAFF	Ministry of Internal Affairs
ITU	Internet Telecommunication Union

JNAP II	Joint National Action Plan II (for Climate Change and Disaster Risk Management)
LPG	Liquefied petroleum gas
LTE	Long term evolution (high-speed wireless communication)
MFAI	Ministry of Foreign Affairs and Immigration
MFEM	Ministry of Finance and Economic Management
MMR	Ministry of Marine Resources
MOA	Ministry of Agriculture
MOCD	Ministry of Cultural Development
MOE	Ministry of Education
MOH	Ministry of Health
MOJ	Ministry of Justice
MOT	Ministry of Transport
NCD	Non-Communicable Disease
NCEA	National Certificate of Educational Achievement
NGO	Non-governmental organisation
NES	National Environment Service
NSDP	National Sustainable Development Plan 2016-2020
NSO	National Statistics Office (a division of MFEM)
MFEM	Ministry of Finance and Economic Management
MMS	Multi-media messaging service
NZD	New Zealand dollars
OECD	Organisation for Economic Cooperation and Development
OPM	Office of the Prime Minister
OPSC	Office of the Public Service Commissioner
PEG	Pa Enua ¹ Governance (a division of OPM)
PIFS	Pacific Island Forum Secretariat
REDD	Renewable Energy Development Division (of OPM)
RMD	Revenue Management Division (of MFEM)

¹ 'Pa Enua' refers to the 14 outer islands (both habited and inhabited) to the main island of Rarotonga. The Cook Islands is an ocean state which consists of 15 islands scattered over approximately two million square miles of the Pacific Ocean.

SAMOA	Small island development states (SIDS) Accelerated Mode Of Action pathway
SMS	Short messaging service
SDG	Sustainable Development Goals
SIDS	Small Island Development States
SOE Report	State of the Environment Report
SPC	Secretariat for the Pacific Community
TAU	Te Aponga Uira o Tumutevarovaro (Electricity Authority)
TMV	Te Mato Vai (Rarotonga water supply project)
USP	University of the South Pacific
VOIP	Voice over internet protocol
WATSAN	Water, Waste, Sanitation Division (of ICI)
WCPO	Western and Central Pacific Ocean
WHO	World Health Organisation
WiMax	Worldwide Interoperability for Microwave Access
xDSL	All types of Digital Packet Radio Services
YOY	Year over year

Measurements

decr.	Decrease
GBPS	gigabyte per second
ha	hectares
incr.	Increase
km	kilometres
KBPS	kilobits per second
kWh	kilowatts per hour
M	million
MBPS	megabits per second
mt	metric tonnes
nm	nautical miles
pwk	per week
p.a.	per annum

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Guide: Indicator status and trend symbols

The Report includes data and analysis for each of the indicators, together with some explanation of the methodology. Where possible, the Report identifies a status and trend for each of the indicators. Status is illustrated using a traffic light system (green, yellow, red) to identify the different levels of concern or urgency. Trends are illustrated using arrows (up or down) or a circle (no change). This is shown in the figure below:









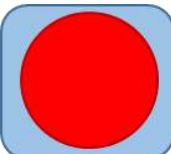
	Positive Trend	Negative Trend	No Change	Indicator Analysis The indicator is...
On Track	 1	 2	 3	1. on track and continues to improve 2. on track, however there are signs of regression.
Of Concern	 4	 5	 6	3. on track, and no changes since the previous year 4. of concern, however there are signs of improvement 5. of concern, and regressing. Requires attention.
Off Track	 7	 8	 9	6. of concern, and no change since the previous year. 7. off track, however data suggests an improvement. However the situation is still critical. 8. off track and continues to regress 9. off track and there has been no change since the previous year

Figure: Symbology for illustrating status and trend for indicators

Executive summary

This is the second report on the 66 national indicators spread across 16 national sustainable development goals in the NSDP 2016-2020. It is a national scorecard to assess our progress in achieving our national development vision:





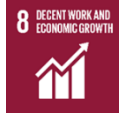


2020 National Vision
“To enjoy the highest quality of life consistent with the aspirations of our people, and in harmony with our culture and environment”

2020 Orama
“Kia rauka te ora'anga tiratirātū tei umuūmu'ia 'e te 'iti-tangata, tango'ia ki runga i tā tātou peu Māori 'ē te aotini tāporoporo'ia o te Basileia”








Further, 18 of the 66 indicators are relatively aligned to the Sustainable Development Goals (SDG) indicators will be highlighted for the first time in this report². The information provided in the Report is from either the 2016/17 or 2017/18 financial year to report on progress for the 2017 calendar year. The release of Household Income and Expenditure Survey (“HIES”) 2016 and the Cook Islands Population Census 2016 will provide additional information about progress towards approximately 11 indicators.

















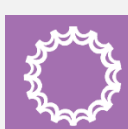

A quick reference to goal and indicator results for both years 2016 (Year 1) and 2017 (Year 2, this report), is provided in Appendix I. A summary of the goal results for 2017 (Year 2) are provided below:





Summary of Goal results

SDGs	NSDP Goal	Status Trend	Summary of indicator results
 	 <p>Goal 1: Improve welfare, reduce inequity and economic hardship</p>		<p>‘Of concern’ with slow growth in lowest 20% of income with slight improvement in minimum livable income at NZD\$20,542; welfare goals progressing well with improvements in the equitable spread of wealth</p>
	 <p>Goal 2: Expand economic opportunities, improve economic resilience and</p>		<p>‘On track’ with steady but slow growth of real median income at NZD\$21,504. Strong growth in tourism but more information and effort required for diversification of economy; employee</p>

² CPPO to report on SDG indicators which has ‘relative’ or to some degree close alignment to data being collected for identified nation indicators. There are some variances to the data between the SDG and NSDP, however data reported will be specifically for the national indicators. The respective SDG indicators is mentioned in the methodology.

SDGs	NSDP Goal	Status Trend	Summary of indicator results
	productive employment to ensure decent work for all		wellbeing in the public service is 'on track'. Labour force survey to provide more information on national wellbeing of employees, especially with migrant workers.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Goal 3: Promote sustainable practices and effectively manage solid and hazardous waste		'Of concern' with limited information on recycling for Rarotonga, Aitutaki and the rest of the Pa Enua. E-waste survey completed with report pending, but will require more information on the status and management of hazardous waste. MoU with private sector to repatriate recyclable and hazardous waste is on a 'needs basis'.
6 CLEAN WATER AND SANITATION	Goal 4: Sustainable management of water and sanitation		Mixed results with low property numbers reported that comply with sanitation standards as per Regulations. However, major improvements made with improved water storage capacity for the Pa Enua through aid funded water tank project.
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Goal 5: Build resilient infrastructure and ICT to improve our standard of living		Mixed results with concern of affordability of broadband offset by improvement in other ICT measures. Public asset register is being addressed but traction is a concern.
7 AFFORDABLE AND CLEAN ENERGY	Goal 6: Improve access to affordable, reliable, sustainable, modern energy and transport		'On track' for renewable energy projects, with radical reduction of petrol, diesel and LPG imports. More information needed for affordability of electricity and transport connectivity.
3 GOOD HEALTH AND WELL-BEING	Goal 7: Improve health and promote healthy lifestyles		'Of concern' with physical activity among youth, life expectancy, mental health and health expenditure. 'Off track' with the increase of sexually transmitted disease and slow decline of premature deaths from NCDs.
4 QUALITY EDUCATION	Goal 8: Inclusive and equitable quality education and promote life-long learning opportunities		'On track' and continuous improvement of literacy and numeracy, early childhood and secondary school education. 'Off track' for vocational and tertiary qualifications, but data needs updating. 'Of concern' for education spending.
5 GENDER EQUALITY	Goal 9: Accelerate gender equality, empower all women and girls, and advance the rights of youth, the elderly and disabled		Mixed results with youth wellbeing and disability access still a concern. 'Off track' 15% political representation of women and 21% gender pay disparity for women.

SDGs	NSDP Goal	Status Trend	Summary of indicator results
			<p>'On track' for reported biosecurity outbreaks. 'Of concern' with early data of 12.6% of land use for agriculture for land used would be reducing slowly due to development and construction. Purchase and production of local food is 'off track' but information is lacking.</p>
			<p>'Of concern' for extent of protected land, and biodiversity loss (kakeroi, tamanu, paua). 'Off track' for extent and state of wetland areas.</p>
			<p>'On track' for extent of marine protected areas as established under the Marae Moana Act 2017, and tuna catch against maximum sustainable yields. 'Of concern' with lagoon water quality, and 'off track' for coral coverage and economic returns from marine resources.</p>
			<p>'Of concern' with limited data for overall resilience; 'on track' for improved access to protection from cyclones in the Pa Enua, but 'off track' for cyclone readiness of public buildings and infrastructure.</p>
			<p>'Of concern' with limited data on population involvement in cultural activities (Census to inform on this in the next report); and digitising of cultural resources has commenced with about 30% of cultural items digitised. 'On track' for Cook Island Maori literacy rates. National Cultural Policy and Strategy completed.</p>
			<p>'Of concern' with the lack of information for the overall quality of life and the average performance of Government Ministries. 'On track' for voter turnout and research applications. Need to develop a national research agenda to better coordinate research needed for the Cook Islands. But 'off track' with the lack of local and foreign investment info and for the overall population decline despite the increase population for Rarotonga. More information from the Census 2016 required to update this measure.</p>

SDGs	NSDP Goal	Status Trend	Summary of indicator results
 	 <p>Goal 16: Promote a peaceful and just society and practice good governance with transparency and accountability</p>		<p>'Of concern' with limited information to access to justice except turnover of criminal cases disposed is 'on track'. No updated information provided for domestic violence, motor vehicle accidents caused by reckless driving; no information on reoffending rates; and low number of parliamentary sitting days is 'off track'. The financial responsibility index is progressing slowly, with the backlog of consolidated crown accounts audit a major concern. The financial management information system project will soon improve on this.</p>

Introduction

The NSDP requires the integration and balancing of economic, socio-cultural and environmental considerations that best serve the public interest of current and future generations. The 16 national sustainable development goals underpinned by the 66 national indicators, is a policy guide to implement positive change. The challenge remains in bringing to life the sentiments of the NSDP. As a national development scorecard, the annual national indicator results is reported to Parliament and the public. This is to inform and drive change through Government planning processes and improve medium term expenditure planning to achieve national sustainable development.

The Budget Policy Statement released every December, identifies the goals that will be priorities for new and additional expenditure for that respective financial year and for multi-years thereafter. Preparation work is in progress in shifting towards a medium term budget and sustainable expenditure framework hence why policy outcomes must be clear and coherent from the outset. The NSDP roadmap on how we are to achieve our goals are linked and implemented through policy and/or sector and/or agency strategies, and business plans. The Education Masterplan 2008-2023 and National Health Roadmap 2017-2037 and National Health Strategic Plan 2017-2021 are good examples in aligning Ministry and Sector goals to the NSDP and sets the framework for both agencies annual business.

Collaborative partnerships need to be strengthened if we are to succeed in achieving our national goals. Working together with stakeholders (i.e. government agencies, private sector, tapere (village) communities on all islands, Cook Islanders living overseas, NGOs, donor partners, the media and the general public), bring wide and varying capacities to supporting our development process.

Furthermore, the NSDP goals are closely aligned to the United Nations sustainable development framework (i.e. SDGs 2030 Agenda) and regional commitments (e.g. SAMOA pathway and Framework for Pacific Regionalism – refer to Appendix II).

A snapshot of the Cook Islands economic and social development is provided below with the most recent data available at the time of this Report.

Economic indicators	2013	2014	2015	2016(p)	2017(p)
Economic activity					
Nominal GDP (NZD\$NZ'000)	352,655	385,080	433,309	445,119	486,413
Real GDP (at Constant 2016 Prices, NZD\$'000)	380,681	401,233	424,303	445,151	487,498
Consumer Price Index (base 2006=100)	125.87	128.53	130.99	130.63	130.51
% Change	1.88	2.11	1.91	-0.28	-0.09
Construction/Capital Investment					
Commercial building approvals (NZD\$'000)	2,378	3,310	4,390	8,305	23,346

Economic indicators	2013	2014	2015	2016(p)	2017(p)
Residential building approvals (NZD\$'000)	6,173	6,428	9,208	13,820	13,913
Visitor arrivals	120,774	121,458	125,130	146,473	161,362
Pearl exports (NZD\$'000)	142	364	158	297	163
Fish exports(NZD\$'000) ³	12,129	20,350	19,344	18,717	28,024

Source: Economic and NSO Advice 2018

Social indicators (Census 2011)	Males	Females	Total
Resident population	7,490	7,484	14,974
Rarotonga – Resident population	5,278	5,294	10,572
Life expectancy (2016)	69.6 years	77.6 years	73.6 years
Retired	578	523	1,101
Home duties	294	960	1,254
Labour force participation rate (%)	76.6%	65.4%	71.0%
Employment-population ratio	68.9	59.3	64.0
Unemployment rate (%)	8.2%	8.1%	8.2%
Education (National enrolments 2017)			
- Early childhood education	268	248	516
- Primary level	960	878	1,838
- Secondary level	878	866	1,744
Total	2,106	1,992	4,098
Percentage of population with trade and vocational qualifications	22.7%	24.0%	21.3%

Source: Census 2011 and 2016, MOE advice 2018

The next section provides an assessment of the 16 goals. It provides a summary of the goal and the indicators, the scope, methodology used and limitations followed by an analysis of the findings. The last section is the conclusion of this document.

³ Fisheries export data reported looks at all fish captured by Cook Islands flagged vessels, including fish caught outside the Cook Islands. They are classified as exports from the Cook Islands by Customs because of the flagging. For indicator 12.5 under Goal 12, the data looks at fish that are exported by Cook Islands based companies through a port based in the Cook Islands.

Goal 1: Improve welfare, reduce inequality and economic hardship



This goal seeks to address economic wellbeing across society by alleviating economic hardship, improving the distribution of wealth, and promoting economic equity. Two of the three national indicators under Goal 1 have close alignments to SDG indicators which will relate to data provided. The overall status for the Goal 1 indicators are 'of concern' with indicative signs of improvement. Challenges from the first indicator report remain with data limitations for all these indicators due to a reliance on income tax records which do not include some of the lowest income earners and late submissions of tax returns for the period assessed.

Indicator 1.1 Percentage of people under minimum liveable income




SDG Indicator 1.2.1: Proportion of population living below the national poverty line, by sex and age.

Introduction

This indicator provides information about the proportion of the population who find it difficult to pay for basic needs. This is done by assessing the percentage of the Cook Islands resident population earning under the minimum liveable income.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	15%	14%	6%		<15%	
Date	2015	2016	2017(p)			

Source	Income tax data: RMD-MFEM; calculations and analysis: Economic Division Advice: MFEM; minimum living level: NSO-MFEM (p) provisional data
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Comments on methodology

The Cook Islands National Statistics Office (NSO) developed an estimate of minimum liveable income, this was estimated at NZD\$20,542.80 in 2017 and has been adjusted for inflation. The minimum liveable income is estimated for a family of two adults and two children. The family minimum liveable income has been halved to result in a figure that estimates the minimum liveable income for one adult. The tax data is used to determine the number of income earners under the minimum liveable income.

There are significant gaps in the methodology being utilised for this indicator, the use of a halved minimum liveable income level can overstate the minimum liveable income for some individuals; for example the cost will not be as high if an individual is sharing living arrangements with members of the household that contributes to living expenses. The use of tax data does not allow identification of these individual circumstances. Furthermore, tax data does not include those individuals that are not registered for tax purposes, this tends to largely be individuals undertaking subsistence living.

Finally due to timing, data for 2017 is largely incomplete. These gaps should be filled once the HIES 2016 and Census 2016 is available within the 2018/19 financial year.

The SDG goal one has a number of indicators that measures poverty. SDG Indicator 1.2.1 measures the proportion of the population living below the national poverty line, by sex and age and is relatively aligned to NSDP indicator 1.1. Although a national poverty line is not officially defined for the Cook Islands. Instead, we look at the percentage of people who live below the minimum liveable income.

Analysis

The information for this indicator is set out in the table below:

Description	2015	2016	2017(p)
Minimum liveable income (NZD)	NZD\$20,705	NZD\$20,561	NZD\$20,542
Number of people under minimum liveable income	2310	2133	957 ⁴
% of total resident population ⁵ under minimum liveable income	15%	14%	6%

Table: Minimum liveable income information for 2015 to 2017 (Source: Economic Division Advice-MFEM)

⁴ Compared to the last two years, there are approximately over 1,000 tax returns yet to be filed at the time of this report. Presumption this will improve with the incentive of the tax amnesty offer in 2017.

Results in 2015 were at the 15 per cent NSDP target, however we saw a mild improvement in 2016 to 14 per cent, just below the target. The provisional (p) results in 2017 show a significant improvement, however these results are based on the limited data available at the time, and as a result should not be relied upon at this time until the Census 2016 and HIES 2016 results are published. The improvement in 2016 is the result of a decrease in the number of people living under the minimum liveable income of 177.


The status of this indicator is assessed as 'on track' with slight improvement seen from 2014 to 2016 in meeting the target for this indicator.

Indicator 1.2 Gini coefficient

Introduction

This indicator uses the Gini coefficient (derived from the Lorenz curve) which is a statistical measure used to assess the distribution of income in the economy. It is commonly used as a measure of income inequality. The Gini coefficient is a number between 0 and 1, where 0 corresponds with perfect equality (where everyone has the same income), and 1 corresponds with perfect inequality (where one person has all the income, and everyone else has zero income).

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	0.438	0.446	0.359		<0.37 or consecutive yrs ⁶ of decrease (decr.)	
Date	2015	2016	2017(p)			
Source	Income tax data: RMD-MFEM; calculations and analysis: Economic Division Advice: MFEM					

Comments on methodology

A major limitation of the methodology is that the data only considers people for which MFEM has taxpayer records. It does not include people who are in the informal employment sector of which some of the lowest income earners fall into this category.

⁶ 'Consecutive years' is defined as the trend (decrease/increase) follows one after another without interruption; successive.

For 2017, the data is likely to be more complete in the next two years once more outstanding income tax returns have been filed and processed. The presumption with the tax amnesty⁷ time limited offer last year will improve tax return submissions by businesses and individuals.

Analysis

The Gini coefficients for 2014 to 2016 and preliminary 2017 data have been calculated by Economic Division (MFEM) as follows:

Year	Gini coefficient
2014	0.469
2015	0.438
2016	0.446
2017(p)	0.359

As can be seen the gini coefficient has not remained at a consistent level over the past four years. The Gini coefficient improved in 2015, however greater inequality was seen in 2016, although this is still below the 2014 level. As stated above in indicator 1.1, 2017 data is preliminary and subject to change for this indicator.

This indicator has been assessed as 'on track', with signs of improvement.

Other

In addition, the Ministry of Internal Affairs have reported progression of welfare goals with the increase of the national minimum wage to NZD\$7 per hour along with a review and anticipated increase to the child benefit monthly allowance from NZD\$66 to NZD\$100.

Indicator 1.3 Real growth in lowest 20 per cent of incomes




SDG Indicator 10.1.1: Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population

Introduction

This indicator provides information about the impact of economic growth on the lowest 20 per cent of incomes. This assists with assessing the extent to which the benefits of economic growth are being shared equitably.

⁷ Tax amnesty limited offer (1 August – 31st December 2017) for all taxpayers to clear tax debt or evaded tax. Benefits include: (i) a remission or write off of all additional tax owed; (ii) a write off of any turnover tax still owing; and, (iii) a waiver from prosecution for any disclosure of evaded income and a 20% penalty only charge.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	2.96%	3.50% (0.54% annual increase)	4.93% (1.43% annual increase)		>1.5% annual increase or consecutive yrs of growth	
Date	2015	2016	2017(p)			
Source	Income tax data: RMD-MFEM; calculations and analysis: Economic Division Advice: MFEM					

Comments on methodology

Tax data is used in this indicator to determine the percentage of total income earned by the bottom 20% of income earners.

The above measure is closely aligned to the SDG Indicator 10.1.1 that measures the growth rate of household expenditure or income per capita among the bottom 40 per cent of the population and the total population. As mentioned above, more data gaps should be filled once the Census 2016 and HIES 2016 is available.

Analysis

The results indicate a steady increase in the income earned by the bottom 20 per cent of the population, however they are not at the levels required by the target. Furthermore, the percentages are very low for example, in 2016, the lowest 20 per cent of income earners made 3.5 per cent of the total income generated by individuals in the Cook Islands.

This indicator has been assessed as 'of concern' where data only captures those who submit their tax returns for the required periods. However based on the available data, there are signs of slow improvement over the three years especially for 2017 with the tax amnesty.

Goal 2: Expand economic opportunities, improve economic resilience and productive employment to ensure decent work for all




This goal addresses the growth and health of the economy including the labour force. The results for the Goal 2 indicators show that progress towards the goal is 'on track' and continues to improve. An increase in real median income has been identified, but due to reliance on income tax data this finding should be further assessed once more comprehensive information is available from the HIES 2016 and the Census 2016. Real GDP has grown, primarily driven by growth in tourism numbers. Growth is also supported by Government and development partner investment in key infrastructure projects. There continue to be risks to the economy resulting from the large dependence on tourism. The contribution of non-tourism related industries to GDP has grown but there is a need to further broaden the economic base of the Cook Islands and reduce economic vulnerability. The total debt to GDP ratio indicates an appropriate level of economic security and financial stability. A wider labour force survey is scheduled to be carried out in 2019, so information about employee wellbeing is currently limited to the public service. In addition, information on GDP per capita is provided aligned to the SDG measure for this.

Indicator 2.1 Real median income

Introduction

This indicator provides information about the real median income of people living and working in the Cook Islands. Median income measures the annual income of the 50th percentile.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	6.7% change Year over Year	6.3% change Year over Year	4.0% Change Year over year		>1.5% annual increase or consecutive years of increase	
Date	2015	2016	2017(p)			
Source	Income tax data: RMD-MFEM; calculations and analysis: Economic Division Advice: MFEM					

Comments on methodology

Tax data was used to determine the median income. The limitations of relying on this data source have been previously outlined under Goal 1. It relates to the exclusion of some of the lowest income earners (for which there are no tax records), and the inclusion of fewer taxpayers in the 2017 data pending the filing and processing of outstanding income tax returns.

Analysis

The table below sets out the information for 2014 to 2016, and 2017(p):

Description	2014	2015	2016	2017(p)
Real median income (NZD)	NZD\$18,219	NZD\$19,444	NZD\$20,669	NZD\$21,504
Change in median (%)	-	6.7%	6.3%	4.0%
Total number of values ⁸	4234	4239	4293	2062

Table: Real median income information for 2014 to 2017 (Source: Economic Division Advice-MFEM)

The Cook Islands has seen a steady increase in the median wage over the period assessed, from 2014 to 2017 and is more than achieving its target of more than 1.5% growth. However, results in 2017 are preliminary and are likely to change as the number of values, or tax records increases.

This indicator has been assessed as 'on track' with a positive trend. However, there are limitations in the data used for measuring this indicator. The release of the HIES 2016 and the Census 2016 results will further inform this indicator.

⁸ This refers to the total number of taxpayers used to calculate median income

Indicator 2.2 Real GDP (aggregate)




SDG Indicator 8.1.1: Annual growth rate of real GDP per capita

Introduction

This indicator uses GDP information to measure national economic growth.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	6%	6.8%	8.6%		>2% annual increase, or 2+ consecutive yrs of incr.	
Date	2015/16	2016/17	2017/18 (est)			
Source	HYEFU; National accounts; Calculations and analysis: Economic Division Advice-MFEM					

Comments on methodology

The figures above show the growth in real GDP year-on-year using official statistics provided by the National Statistical Office (NSO). Real GDP removes the impact of inflation as it is calculated using constant 2016 prices.

The above measure is relatively aligned to The SDG Indicator 8.1.1 that measures the annual growth rate of real GDP per capita.

Analysis

The Cook Islands has maintained strong economic growth over the period assessed. It must be noted that 2017/18 data is an estimate from the Ministry of Finance and Economic Management (MFEM), and is not official data provided by the National Statistics Office. In assessing these three years, we expect average annual growth of 7.1 per cent. This is a significant level of growth. Growth has largely been driven by increases in tourism arrivals and both private and public capital expenditure. The Economic update⁹ reported a higher than expected building approvals for residential and commercial (commercial, tourism and community buildings) in the three years to 2017/18. Residential approvals appears to be for holiday houses, rather than residential living, driven by tourism growth. Commercial

⁹ Cook Islands Government Budget book 1 2018/19, p46

approvals have been led by a number of large community projects, as well as a significant spike in tourist accommodation approvals.

This strong economic performance in the last three years may result in the graduation of the Cook Islands from the Organisation for Economic Cooperation and Development's (OECD) Official Development Assistance (ODA) eligibility list in early 2019. The graduation is determined by a country's Gross National Income (GNI)¹⁰ in the last three years. The NSO is currently working on the GNI to determine whether the Cook Islands has reached the level of economic development required to graduate to 'high income status'. This may mean that the Cook Islands will be the first Pacific Island to be accorded this status. Moving forward, Government has taken steps to mitigate risks including effective (long term) planning and efforts in securing climate change financing is an important step.

The status of this indicator has been assessed as 'on track' with a positive trend.

Other


The SDG measures GDP per capita; the provisional results for 2016 was NZD\$16,706 (-0.8% annual decrease) to NZD\$19,211 (14.9 per cent annual increase) in 2017.

Indicator 2.3 Growth in tourism

Introduction

This indicator tracks the growth in the tourism industry which is the primary revenue earner for the economy of the Cook Islands.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result						
Total visitor numbers	125,130 3% change Year over Year	146,473 17% change Year over Year	161,362 10.2% change year over year		(yet to be determined) ¹¹	

¹⁰ OECD defines Gross national income (GNI) as "gross domestic product, plus net receipts from abroad of wages and salaries and of property income, plus net taxes and subsidies receivable from abroad. All OECD countries compile their data according to the 2008 System of National Accounts (SNA)." Source: <https://data.oecd.org/natincome/gross-national-income.htm>

¹¹ Targets 'yet to be determined' in this Report will be set in the next NSDP Year 3 indicator report

Average length of stay	10 days	10 days	8 days		(yet to be determined)
Date	2015	2016	2017		
Source	Cook Islands Statistical Bulletin, Migration Statistics: NSO-MFEM				

Comments on methodology

Data has been sourced from the National Statistics Office (NSO). The NSO use visitor arrival cards to determine visitor arrivals, and intended length of stay. Targets have not yet been set for this indicator.

Analysis

The table below shows the total number of visitors:

Year	No. of visitors	Difference	% Change
2014	121,458	684	0.6%
2015	125,130	3,672	3.0%
2016	146,473	21,343	17.1%
2017	161,362	14,889	10.17%

Table: Total number of visitors 2014 to 2017 (Source: NSO-MFEM)

The table below sets out visitor arrivals by country of usual residence and intended average days stay.

Year	Total	New Zealand	Australia	USA	Canada	Europe	Asia	French Polynesia	Other country
2012	10	10	11	10	11	10	10	13	15
2013	10	9	11	10	11	10	11	10	12
2014 ^(p)	10	9	11	10	11	10	11	11	14
2015 ^(p)	10	9	11	10	11	10	11	11	13
2016 ^(p)	10	9	11	10	11	10	11	11	14
2017 ^(p)	8	7	8	8	8	7	8	8	10

Table: Visitor arrivals by country of usual residence and intended average days stay, 2012 to 2017 (Source: NSO-MFEM) - (p) Provisional figures

The strong growth in tourism experienced in 2016 has continued into 2017, however at a slower rate of 10.17 per cent. Key tourist markets are New Zealand, Australia, Europe and

USA with marked growth from each of these markets. Further, visitors intended average days stay has declined from 10 days (2012 to 2016) to eight days in 2017. There is no official maximum carrying capacity and cap to the number of visitors allowed on island at any one time. However the increased numbers are contributing to pressures on food security, the environment (waste management), infrastructure, our culture, language and society in general.


The status of this aspect of the indicator has therefore been assessed as 'on track' with a growing trend.

Indicator 2.4 Total Debt to GDP ratio

Introduction

This indicator uses the Total Debt to GDP as a measure of economic security and financial stability. It assesses the ability of the country to achieve personal and national aspirations and absorb economic shocks while meeting public and private debt obligations.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	0.75:1 (75%)	0.69:1 (69%)	0.725:1 (72.5%)		<1:1	
Date	2015/16	2016/17	2017/18			
Source	National accounts, and Financial Supervisory Commission data; analysis: Economic Division Advice-MFEM					

Comments on methodology

The figures for this is from the National accounts with analysis from the Economic Division Advice-MFEM. The ratio compares the total private sector and net government debt to the (nominal) GDP. The Government is committed to staying within the 30 per cent debt target so that there is at least 5 per cent of GDP available in debt financing if there is a major natural or economic disaster before the Government breaches the voluntary debt limit.¹² The GDP is subject to change based on information from NSO.

Analysis

The findings for two financial years are set out below:

	2015/16	2016/17	2017/18

¹² Total net debt ceiling is set at a maximum of 30-35% of GDP; progress for this is reported in indicator 16.6 financial responsibility.

Private sector debt	NZD\$228.7m	NZD\$ 229.3m	NZD\$229.6m
Net Government (public) debt	NZD\$95.9m	NZD\$ 76.6m	NZD\$85.3m
Total private and public debt	NZD\$324.6m	NZD\$ 305.9m	NZD\$314.9m
GDP	NZD\$433.3m	NZD\$445.1m	NZD\$486.4m (est)
Total debt to GDP	74.9%	68.7%	64.7%

As can be seen, the results for this indicator have improved. This is largely due to a decrease in Government debt. However, it is expected that government debt will increase again in the coming years as new loans are entered into.


The status of this indicator is assessed as 'on track' with a positive trend, since the total debt to GDP ratio is still less than 1:1 and the decrease in Government debt as of June 2017.

Indicator 2.5 Employee wellbeing index

Introduction

This indicator assesses the wellbeing of employees as a measure of the fairness of the labour force and the adequacy of working conditions.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	77% (degree of satisfaction)	77% (degree of satisfaction)	79% (degree of satisfaction)		>60%	
Date	2015	2016	2017			
Source	Public Service Employee Engagement Survey: OPSC					

Comments on methodology

The methodology described in the NSDP requires a labour force survey which is scheduled in 2019. In the absence of a labour force survey, information from the Public Service Employee Engagement Surveys undertaken by the Office of the Public Service Commission (OPSC) was used.

The responses relate to the public service sector only and should not be used to draw conclusions about employee satisfaction beyond this sector. It should be noted that the response rates were relatively low thereby limits the reliability of the conclusions that can be drawn for the public sector from the Public Service Employee Engagement Survey. There

have been changes in the questions for the 2017 survey, which will make it difficult to compare some of the findings about employee perceptions with the previous survey results.

Analysis

The relatively low response rates from 2015 to 2017 surveys limits the reliability of the data for drawing general conclusions about the public service. The response rate for 2015 was 18 per cent, and this dropped to 11 per cent in both 2016 and 2017. Employees from 19 out of 37 agencies participated in the 2017 survey, with most agency participation rates under 30 per cent.

The survey respondents were predominantly positive about their wellbeing in the public sector. Survey results showed that employee degree of satisfaction improved from 77 per cent in 2016 to 79 per cent in 2017, in particular, their perceptions of their agency, the work they do, and their work environment. However, areas identified as needing improvement were remuneration, leadership, training and development, and adequacy of staffing levels within the agencies.

In the absence of a labour force survey, there has been limited information about employee wellbeing in the private sector. The Labour division with the Ministry of Internal Affairs (INTAFF) reported on average, 20 submissions on labour issues mainly from migrant workers in the Hospitality and Tourism industry. Issues raised included mainly - breach of contract of employment by employer; unfair dismissal (i.e. no due process, no fair grounds for dismissal, discrimination, unpaid notice in lieu, unpaid termination entitlements); violation of the Employment Relations Act (ERA) 2012 (i.e. unpaid overtime, incorrect or no pay slips, unpaid holiday pay); being paid minimum wage rate, to name a few. INTAFF reported that enforcement and labour support is mostly absent in terms of legal aid, human resource management, contract management especially for the private sector. The Labour Force survey will further inform on employee wellbeing in the Cook Islands.


Based on the public sector information, the status of this indicator is 'on track' with an upward trend.

Indicator 2.6 Growth in non-tourist related industries

Introduction

This indicator assesses economic diversity by measuring the proportion of economic growth that comes from industries that are not directly related to tourism.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	6.31%	-1.46%	11.36%		>3% annual increase, or consecutive yrs of incr.	

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Date	2015	2016	2017			
Source	National accounts: NSO & Economic Division Advice-MFEM.					

Comments on methodology

This indicator uses information from the national accounts to calculate the contribution of identified 'non-tourist related' industries to real GDP. The value of economic activity for the following industries have been subtracted from the overall total:

- Trade
- Transportation
- Accommodation services
- Restaurants and bars
- Information and communication
- Travel Agents, Tour Operators

The remainder is assumed to indicate the GDP for non-tourist related industries. The percentage change (year on year) has then been used to measure growth in the non-tourist related industries.

One of the limitations of this approach, is that it relies on assumptions about which industries are related to tourism. The Cook Islands economy is heavily dependent on tourism which is integrated into many aspects of the economy. It is likely that the restaurant and accommodation is essentially tourism related. However, some of the wholesale and retail trade will relate to local rather than tourist use, as will communications and transport.

Analysis

The table below shows the contribution of non-tourism related industries to Real GDP, and growth in that contribution over time.

Calendar year	Real GDP (NZD\$M)	Real GDP excluding tourist industries (NZD\$M) ¹³	Growth in non-tourism related industries (%)
2013	380.7	221.7	-3.0
2014	401.2	230.0	3.8
2015	424.3	244.6	6.3
2016	445.2	241.0	-1.5
2017	487.5	268.4	11.4

Table: Contribution of non-tourist related industries to GDP (Source: Economic Division Advice-MFEM)

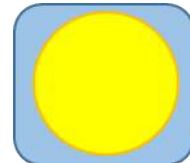
¹³ Excludes real GDP from Wholesale and Retail Trade, or Restaurants and Accommodation industries

Growth in non-tourism related industries has shifted from year-to-year as highlighted above. Strong growth in 2017 reflects the flow-on effect that the growth in tourism is having to the overall economy, in terms of growth in private consumption and investment. While tourism has been the key economic driver in recent years, the Government is undertaking investment in a range of areas to encourage growth and development in a broader set of sectors. One such area is the (safe) extraction of manganese nodules from the seabed within our EEZ. The pre-cautionary approach is to be taken and lessons learnt from the positive and negative experiences of neighbouring Pacific countries who have undergone such activity¹⁴. Other areas that require further support is the agriculture industry (for the domestic market), fisheries and pearl industry, and the financial sector. More investment and work should focus on strengthening the Cook Islands economy, in particular, maintaining sustainable tourism.

The status of this indicator is therefore assessed as being 'of concern' based on negative growth seen in 2016.

¹⁴ Papua New Guinea Solwara mines: <https://www.theguardian.com/world/2017/dec/12/troubled-papua-new-guinea-deep-sea-mine-faces-environmental-challenge>

Goal 3: Promote sustainable practices and effectively manage solid and hazardous waste



This goal seeks sustainable management of solid and hazardous waste to avoid adverse effects on the environment, human health and the economy. Overall status and trend of this goal is 'of concern' with the need to improve consistent monitoring and reporting of information on the indicators. Current recycling rates are 'of concern' for Rarotonga, Aitutaki and the other islands. Pleasing to see is the progress in monitoring hazardous waste, in particular electronic waste. However, management of hazardous waste is known to be an area that continues to need attention throughout the Cook Islands.

Indicator 3.1 Recycling rate (percentage of total waste diverted to recycling)







SDG Indicator 12.5.1: National recycling rate, tons of material recycled

Introduction

This indicator measures the extent to which products are recycled rather than sent to landfill. This is consistent with achieving effective and sustainable management of waste.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	-					

		Rarotonga 45%	Rarotonga 2% (plastic only)		>2% annual increase or consecutive years of incr.	  
		Aitutaki 50%	Aitutaki (n/a)			
		Other islands 0%	Other islands 0%			
Date		2016	2017(p)			
Source	ICI waste audit 2016; WATSAN/ICI advice 2017					

Comments on methodology

This indicator has been modified since it was published in the NSDP in 2016, to better match the information available¹⁵. A Waste Management Feasibility Study undertaken in 2016 for ICI by Tonkin and Taylor International Ltd¹⁶ (T+TI) provides the initial data for this indicator. WATSAN have committed to provide similar information on a yearly basis for Rarotonga. The data collected through the waste audit provides a baseline, or a reference point, to measure against for subsequent years.

The diversion rate is measured by dividing the weight of recycling (tonnes/year) by the weight of the total waste generated (tonnes/year of landfill plus recycling), and converting this to a percentage (dividing by 100).

The SDG Indicator 12.5.1 measures the national recycling rate, tons of material recycled and is relatively aligned to this NSDP indicator.

Analysis

From July 2016 to June 2017, WATSAN reported that Rarotonga had a total of 1,793 bales (606 tonnes) of general waste that went to the landfill of which a total of 26 bales was plastic (11 tonnes). Therefore based on data for plastic, the recycling rate¹⁷ for Rarotonga was approximately two per cent. No information was available for glass, aluminium and other recyclable materials which limits the reliability of the conclusions that can be drawn for Rarotonga recycling efforts in comparison to the 45 per cent baseline provided for 2016. Further, no data was available for Aitutaki and the Pa Enua at the time of this report.

¹⁵ Amended from published NSDP indicator which was 'Total waste recycled'. This required tracking of the amount (tonnage) of potential waste being recycled.

¹⁶ Tonkin and Taylor International Ltd 2016. Waste Management Feasibility Study, prepared for Infrastructure Cook Islands, draft for issue, Oct 2016

¹⁷ Percentage of total waste diverted to recycling


The status of this indicator has been assessed as 'of concern' with a downward trend due to lack of recycling data for Rarotonga, Aitutaki, where there is a roadside recycling system, and 'off track' for the other islands, where there are no established systems of recycling.

Indicator 3.2 Percentage of hazardous waste that is accounted for and managed

Introduction

This indicator measures how effectively hazardous waste is managed and disposed of. This recognises the risk that hazardous waste poses to human health and the natural environment.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	n/a	4,317 E-waste items ¹⁸	2,303 E-waste items		>2% annual incr. or consecutive yrs of incr.	
Date	-	2016	2017			
Source	NES advice					

Comments on methodology

The NES has commenced the drafting of the State of the Environment report that will provide information on hazardous waste which includes: asbestos, health care wastes; e-waste (for e.g. disposed computers, phones, other electronics, and so forth); and, bulky items that are difficult to dispose of and/or contains hazardous materials (for e.g. refrigerators). The data provided for hazardous waste are from electronic wastes (e-waste) collected through a waste management survey undertaken in 2016 and 2017. This work was led by NES. Data for this indicator for the Pa Enua is very limited.

Analysis

Whilst programmes to dispose of asbestos and health care waste are slowly improving, a major concern is, the country's increasing consumption trends of products that end up as e-waste and bulky items. Cook Islands Customs Office will be able to provide information on the total number of products that end up as e-waste and bulky items.

The findings from the Waste Management Survey led by NES in 2016 and 2017 provided the following information:

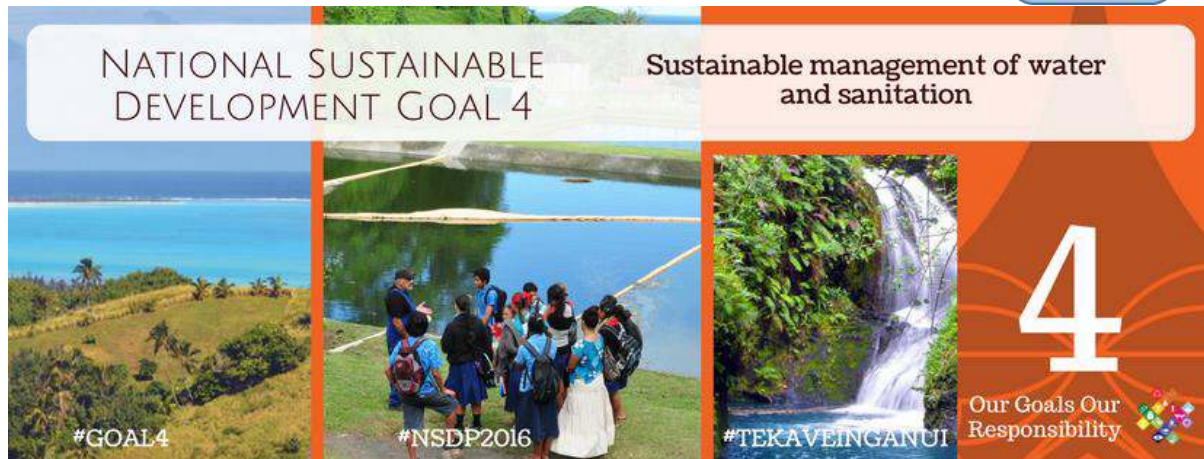
¹⁸ E-waste refers to electronic waste such as computers, printers/copiers/scanners, consumer electronics and household appliances.

E-waste initiative	2016	2017	Total
ADF Government E-waste audit	3,342	-	3,342
PAC E-waste programme	975	2,303	3,278
Total E-waste	4,317	2,303	6,620

Over half of the e-waste accounted for both years (2016 and 2017) were computers, printers, copiers and scanners which will require recycling and off-island shipment.

The status of this indicator has been assessed as 'of concern' with the increased consumption of electronic products overtaking management of hazardous waste. This is an area that continues to need attention throughout the Cook Islands.

Goal 4: Sustainable management of water and sanitation



This goal recognises that sustainable management of water and sanitation is necessary to maintain the health of people, the environment, and the economy. The overall status of this goal is 'of concern' but is improving with the continuous efforts of key agencies and partners in alleviating the national water and sanitation system whilst catering to the increasing growth of tourists in the country.

Water

Overall status for the water indicator has been assessed 'on track' with a positive trend. Information from the Census 2016 will indicate any change to the status quo of piped water into number of dwellings since 2011. The quality of drinking water at Rarotonga school and community water stations is 'of concern' as MOH testing shows that relevant WHO standards are not always met. There is a lack of information about the quality of drinking water in the Pa Enua where testing is sporadic and not always reliable.

There has been considerable investment in improving water supply and security in the Pa Enua¹⁹ with the water tank project establishing minimum water service standard at 6,000 litres per household (up to 6 occupants) based on 10L/per head/per day drinking water and a three month drought period contingency. It was reported approximately 900 out of 970²⁰ households benefited from this scheme. The Te Mato Vai ('TMV') project is still in progress. The Reticulated Services Bill was drafted with consultations undertaken in 2017 to provide a better water supply on Rarotonga as well as improved collection of data to monitor water use and quality.

Based on MOH information, there was sufficient drinking water supply for all islands in 2017, but there remains caution for conserving water across the Cook Islands.

¹⁹ Except for the islands of Mangaia and Manihiki (covered under a different community water project)

²⁰ Total household numbers excluding Mangaia and Manihiki (Source: Census 2011)

Sanitation

The Public Health (Sewage and Wastewater Treatment and Disposal) Regulations 2014 sets the approved standard for wastewater management systems that requires every new building application to have a design compliant to the Regulations. The annual *tutaka*²¹ programme has been effective in monitoring wastewater management systems especially on Rarotonga where the population density is high (over 70 per cent of total population). There is also a Sanitation Unit within Community Health Services which is dedicated to Targets around compliance with development partners funding assistance.

In addition, the sanitation upgrade programme (Mei Te Vai Ki Te Vai) masterplan that is in development will help guide efforts in addressing wastewater issues on Rarotonga and Aitutaki. The status of this indicator is assessed to be 'off track' due to the low compliance of properties, but with an upward trend with the ongoing efforts to improve compliance.

Indicator 4.1 Percentage of population with access to sufficient and safe water in their homes






SDG Indicator 6.1.1: Proportion of population using safely managed drinking water services



Introduction

This indicator measures the accessibility, quality and quantity of water provision to households.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result						
% of dwellings on Rarotonga with piped supply to inside	91%	(no change)	(no change)		>85%	
No. of inhabited islands outside Rarotonga with less than 50% of dwellings with piped water to inside	7 Pa Enua with piped water to inside of home with 3 Islands outstanding to meet target	(no change)	(no change)		>85% of households	

²¹ Tutaka refers to a national health inspection of homes with regards to waste management, sanitation, eradicating mosquito breeding grounds and so forth.

Date	2011	2016	2017			
Source	Census 2011, 2016 (tbc)					
% of water quality samples from Rarotonga community and school water stations meeting WHO standards	63% (community)	63% (community)	n/a		100% compliance	
	61% (schools)	93% (schools)	n/a			
No. of water outages	-	None	None		None	
Date	2015	2016	2017			
Source:	MOH					

Comments on methodology

The approach identified for assessing this indicator still remains as follow:

- Access – census information is used to identify the percentage of dwellings that have water piped from tank to indoors (from a public water main and / or own water). The 2017 National Water Policy identifies the Water Authority as responsible for collecting some data about water usage - the establishment of this entity is still in progress.
- Quality - MOH water testing at water stations is used. On Rarotonga water quality is tested at the first pipe from the water intake, and the 24 water stations, for compliance with WHO standards. Testing in the Pa Enua is ad hoc and less reliable.
- Sufficiency - 'water outages by island' is used as an indicator.

The Pa Enua Governance Division of OPM does collect some information about water availability and security on the Pa Enua, including some demand and storage calculations. The Division acknowledges that there is a need to improve the robustness of the supply, storage and demand information for each island to be better able to assist in scoping future projects and identifying delivery gaps.

The SDG Indicator 6.1.1 measures the proportion of population using safely managed drinking water services and is relatively aligned to this NSDP indicator.

Analysis

1. Access to piped water in the home

The Census 2011 reported 78.8 per cent households in the Cook Islands main source of water supply came from public water mains. However by region, the Northern Islands and the island of Atiu (from the Southern Group Islands) main source of water is from water tanks harvested from rainwater.

Information from the Census 2011 and the Pa Enua Governance division (OPM) has been used to collate the following table:

Location	% of dwellings with supply from public water main piped to inside		% of dwellings with supply from own water tank piped to inside		
	Census 2011	Census 2016	Census 2011	Census 2016	Pa Enua Water project: No. of Dwellings/ Community buildings with water tanks (2012-2017) funded by the NZ Government
Rarotonga	90.74%	n/a	21.50%	n/a	n/a
Southern islands:	62.19%	n/a	29.61%	n/a	n/a
Aitutaki	78.22%	n/a	29.88%	n/a	309 (62%)
Mangaia	58.24%	n/a	18.82%	n/a	n/a
Atiu	0.00%	n/a	49.64%	n/a	140 (96%)
Mauke	84.78%	n/a	16.30%	n/a	61 (64%)
Mitiaro	51.72%	n/a	32.76%	n/a	50 (86%)
Northern islands:	1.08%	n/a	47.67%	n/a	n/a
Palmerston	0.00%	n/a	46.15%	n/a	21 (78%)
Pukapuka	1.98%	n/a	17.82%	n/a	118 (n/a%)
Nassau	0.00%	n/a	15.38%	n/a	32 (n/a%)
Manihiki	0.00%	n/a	82.05%	n/a	(different project) ²²
Rakahanga	4.76%	n/a	47.62%	n/a	45 (n/a%)
Penrhyn	0.00%	n/a	62.26%	n/a	65 (n/a%)
Cook Islands	78.89%	n/a	24.91%	n/a	n/a

Table: Percentage of dwellings with piped water to inside (by island) (Source: Census 2011, Pa Enua Governance-OPM)

During and post 2011, a Northern Water Rainwater project to improve water catchments especially during drought conditions was delivered on four islands in the Northern group. The minimum water service standard set at 6,000 litres per household (up to 6 occupants) based on 10L/per head/per day drinking water and a three month drought period and contingency²³. Two hundred and eighty seven (287) dwellings/community buildings had

²² Funding did not include household level water tanks for Manihiki, because a separate project had equipped the island with micro shelters with household water tanks.

²³ Northern Group Rainwater Harvesting Project report (2014)

water tanks installed as follow: Penrhyn (65), Rakahanga (45), Pukapuka (118) and Nassau (32). Of the 287 buildings, 260 received new roofing, fascia and spouting. This programme was later extended to Palmerston and the Southern Group.

Status and trend for this component of the indicator will remain the same from the first year report as 'on track' for Rarotonga and 'of concern' for the Pa Enua with an upward trend but will be subject to change once the Census 2016 information is available.

2. Quality of drinking water

MOH has provided analysis of the water quality testing they undertake at community water stations, and school water stations. Water samples are tested for faecal coliforms (E. coli and Enterococcus) as indicators of possible faecal contamination by warm-blooded animals. MOH applies the World Health Organisation (WHO) standards.

Results of MOH water quality testing at the Rarotonga schools and community water stations (filtration and UV treatment).

The table below show the results of the water quality testing at the Rarotonga community water stations.

Description	2012	2013	2014		2015		2016		2017	
S-school	S	S	S	C	S	C	S	C	S	C
C-community	S	S	S	C	S	C	S	C	S	C
% samples meeting WHO standard of 0 faecal coliform count / 100ml	69%	69%	56%	73%	61%	63%	93%	63%	n/a	n/a
Number of samples meeting WHO standards of <10 faecal coliform count / 100ml	33	22	9	27	17	17	40	36	n/a	n/a
Total number of samples	48	32	16	37	28	27	43	57	n/a	n/a

Table: Results of water testing at Rarotonga schools and community water stations 2012-2017 (Source: MOH)

To analyse this data further, more information is be needed about the frequency and location of the testing at the community and school water stations. The 2016 results of 63 per cent compliance for community water stations, and 93 per cent compliance for school water stations, are considered unsatisfactory.

The status of these components of the indicator have therefore been assessed as 'off track' with no change, largely because of the difficulty in comparing across the years due to the different sample sizes.

3. Sufficiency of water supply

MOH have advised that for 2016, there were no water outages for any of the islands. No information comparing the supply of potable water and non-potable water has been provided.

The status of this component of the indicator has been assessed as 'on track' with a static (no change) trend.


Overall status of this indicator has been assessed as 'on track' with an upward trend.

Indicator 4.2 Percentage of properties using sanitation systems that meet approved standards

Introduction

This indicator measures the proportion of properties which use sanitation systems that meet approved standards. This recognises that inadequate sanitation systems pose a risk to human health, the natural environment, and the tourism industry.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	Rarotonga 7.7%	Rarotonga 8.9%	Rarotonga 20.7%		>85%	
	Cook Is - 6%	Cook Is - 12%	Cook Is - 15%			
Date	2014	2016	2017			
Source	Annual Public Health Tutaka Report: MOH					

Comments on methodology

The data was provided by Public Health and compiled from the WATSAN Water Management Initiative (WMI)²⁴ programme, the Sanitation Upgrade Programme (SUP)²⁵ programme and the Public Health wastewater permit applications approved for wastewater upgrade and new buildings.

²⁴ WMI pilot project funded by New Zealand and the Cook Islands Govt to upgrade all residential wastewater treatment in Muri for the purpose of protecting the lagoon waters of Muri from wastewater pollution. Up to 240 residential properties upgraded to comply with regulations. Commercial properties not included

²⁵ SUP is the follow up programme to WMI funded by New Zealand, Cook Islands Govt and European Union. At the end of 2016, this was put on hold to make way for the reticulation system in Muri.

Total household properties derived from the Cook Islands census reports (2011, 2016) establishes the total households/dwellings/properties. Total commercial properties are also taken into account and are the focus for compliance purposes as the risks are higher in this sector.

This indicator required information about sanitation systems that meet approved standards. The Public Health (Sewage and Wastewater Treatment and Disposal) Regulations 2014 provides standards for sanitation system and applies to Rarotonga and Aitutaki, but not to the other islands.

Analysis

The table below shows the number of properties that comply with approved wastewater management systems.

	2014	2016	2017	Total properties
Rarotonga - Households	7.7% (244)	8.9% (281 additional households)	20.7% (127 additional households)	3,149
Rarotonga - Commercial properties (tourist accommodations)	n/a	n/a	17% (56)	399
Pa Enua²⁶	n/a	n/a	n/a	n/a
Cook Islands	6%	12%	15%	4,372

Table: Number of properties compliant to wastewater approved systems (Source: MOH)

The first wastewater treatment regulation was introduced in 2008 called the Public Health (Sewage and Wastewater Treatment and Disposal) Regulations with amendments made in 2014. Pre-2014 indicated all of wastewater treatment on Rarotonga as non-compliant.

There has been ongoing concern that discharge from on-site treatment systems is contributing to some of the environmental issues in Muri Lagoon, and that Aitutaki Lagoon faced similar threats. The health of these lagoons is essential for overall health of the environment, the people and consequently the ongoing success of the tourism industry.

A Wastewater Management Initiative (WMI) pilot project was introduced and funded by NZAID and Government to upgrade all residential wastewater treatment systems in Muri for

²⁶ Note that only Aitutaki is subject to the Public Health (Sewage and Wastewater Treatment and Disposal) Regulations 2014.

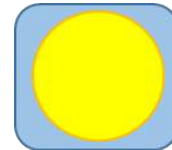
the purpose of protecting the lagoon waters of Muri from wastewater pollution. Up to 244 residential properties were upgraded to comply with the Regulations in 2014 and has increased by 408 additional properties (168 per cent increase) in 2017. The programme was put on hold towards the end of 2016 to make way for the proposed reticulation system in Muri. Commercial properties were not reported until 2017 with 17 per cent compliance of tourist accommodations around Rarotonga.

It must be noted that the Regulations give property owners up to two or three years (depending on soil type) to comply. This means that the results of fully compliant properties should progressively improve as compliance timelines are met. Further information is needed on the compliance timeline and where properties fit within this process.

In January 2017 the Government launched an 18 month wastewater project (Mei Te Vai Ki Te Vai) to manage wastewater issues in Rarotonga and Aitutaki, with a particular focus on the impact on the lagoons.

The status of this indicator is assessed to be 'off track' due to the low compliance percentage of properties, but with an upward trend with the ongoing efforts to improve compliance.

Goal 5: Build resilient infrastructure and ICT to improve our standard of living



This goal recognises that appropriate infrastructure and access to information and communications technology can improve the standard of living by providing services and supporting economic growth and security. The results for the Information and Communications Technology ('ICT') indicators remains the same as last year with no new information provided. With the introduction of the Manatua submarine cable, more bandwidth will become available, and the Cook Islands will become more connected.

In 2014 the Cook Islands Government invested in an asset management information system (AMIS) called AssetFinda to formally and comprehensively capture in one data base all fixed public assets. The revised Cook Islands Building Code provides robust standards for new public buildings constructed post-2017.

It must also be noted that further investment in projects such as the Manatua cable project will need to be monitored once it is operationalised as it is envisioned that there will be impacts to goal 5.

Indicator 5.1 Broadband connectivity index






SDG Indicator 17.6.2: Fixed Internet broadband subscriptions per 100 inhabitants, by speed
SDG Indicator 17.8.1: Proportion of individuals using the Internet

Introduction

This indicator measure the average broadband speed and penetration rate to determine how connected the Cook Islands is.

Results

	Earlier	Year 1	Year 2	Year 3	Target	Current
--	---------	--------	--------	--------	--------	---------

	year					status & trend
Result						
Average speed (Kbit/s)	n/a	n/a	42.7 kbps		>42.7kbps	
Broadband penetration	n/a	n/a	28% broadband subscribers. 100% coverage on all islands			
Date	-	2017	2017			
Source	Bluesky Cook Islands					

Comments on methodology

The data for the two components of this indicator is currently being collected by Bluesky as follow:

1. Average broadband speed coming into the country and is measured in kilobits per second, rather than megabits per second. The international Internet bandwidth per inhabitant is calculated as (500mbps/resident population x1000).
2. Broadband penetration measures the number of broadband sub as a percentage of the population. Penetration rate is the percentage of a country's population that are subscribers. Although this will not reflect the actual level of access to broadband internet of the population because a single internet subscription may be shared by many people, or they may still have access to the internet via mobile data, public WiFi hotspots, and at the workplace.

There are two SDG Indicators identified that are relatively aligned to this NSDP indicator. The SDG indicator 17.6.2 measures the fixed Internet broadband subscriptions per 100 inhabitants, by speed; and SDG indicator 17.8.1 measures the proportion of individuals using the Internet. The Census 2016 and HIES 2016 will provide additional information on this indicator once it is made available.

Analysis

All populated islands in the Cook Islands have access to broadband services, for example, through public WiFi hotspots and Bluesky telecentres. There has been a significant increase in broadband penetration since the introduction of O3B satellite service in 2013. Broadband penetration (3258 subscriptions, 28 per cent users per capita).

Speed, affordability and bandwidth are expected to improve with the introduction of the Manatua submarine cable to Rarotonga. This will not replace the existing satellite network, in fact network resilience will rely on the management of both cable and satellite so that if one fails there is a backup ready to continue services.


Both components of this indicator (average speed, and broadband penetration) have been assessed as 'on track' with no change to previous year results.

Indicator 5.2 Percentage of average monthly income spent on broadband

Introduction

This indicator measures the average household monthly income spent on broadband to determine the affordability of broadband services.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	8%	n/a	n/a		<5%	
Date	2010	2016	2017			
Source	Bluesky Cook Islands					

Comments on methodology

The name of this indicator has modified from the NSDP²⁷ to reflect the methodology used by Bluesky. Bluesky calculate affordability by expressing the monthly spend on broadband²⁸ as a percentage of average monthly income. GDP per capita divided by 12 is used as a proxy for average monthly income. Cook Islands resident population²⁹ has been used to calculate GDP per capita.

Analysis

The results have not changed as of last year's indicator report. Approximately 8 per cent of average monthly income is spent on broadband services, and nearly 5 per cent is spent on mobile services.

²⁷ In the NSDP as published this indicator was called 'Percentage of median income spent on broadband'

²⁸ The percentage of average monthly income required to pay the monthly fee of the least expensive available broadband plan.

²⁹ Sourced from NSO-MFEM September 2016 Vital Statistics Resident population estimate

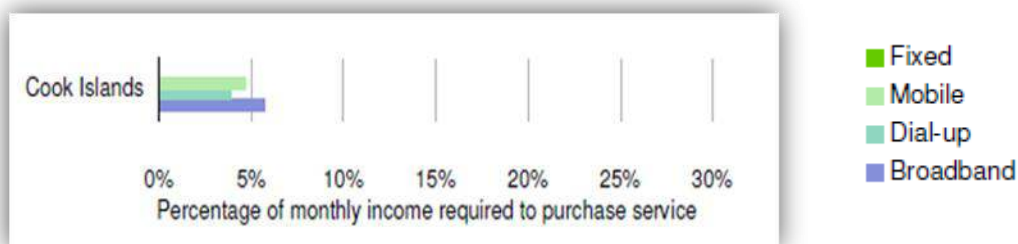


Figure: ICT services affordability (Source: Network Strategies Report 2010)

Cook Islanders are well connected once other measures are considered such as the high number of mobile subscribers, and increases in broadband subscriptions and usage over time. However, the cost of broadband and mobile data is still considered too expensive for many users living in the Pa Enua. To determine the affordability of broadband services, the NSDP target for this indicator is the average household monthly income spent on broadband is less than five per cent. Therefore the status of this indicator is therefore assessed as 'off track' with no change to status.

Indicator 5.3 Mobile connectivity index







SDG Indicator 9.c.1: Proportion of population covered by a mobile network, by technology

Introduction

This indicator measures mobile data speed, mobile penetration, and mobile data usage to determine the extent to which the Cook Islands is connected via mobile technology.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result						
Data speed		n/a	2G Pa Enua 4G Rarotonga & Aitutaki		>2mbps minimum 4G	
Penetration		n/a	100%		>80%	
Data usage		n/a	120 megs ³⁰		>3.5GB	
Date		2016	2017			

³⁰ Assigned Mobile Network Data capacity

Source | Bluesky Cook Islands

Comments on methodology

The data for the three components of this indicator is currently being collected by Bluesky as follow:

1. Data rates measure the speed at which data is transferred. 4G (fourth generation cellular communication network) offers speeds that are about 10 times faster than 3G networks and is only available to Rarotonga and Aitutaki residents. The Pa Enua have been on 2G GSM since 2011.
2. Mobile phone penetration rate measures the number of active mobile subscribers over a population.
3. Data usage measures the assigned mobile network data capacity. This measures the maximum bandwidth capacity which is 120 megabytes. Bandwidth is expected to increase with the introduction of the submarine fibre optic cable in the near future.

The SDG Indicator 9.c.1 measures the proportion of population covered by a mobile network, by technology; and is relatively aligned to this NSDP indicator. The Census 2016 and HIES 2016 will provide additional information on this indicator once it is made available.

Analysis

Rarotonga and Aitutaki have access to 4G mobile networks which offers speeds of 100 megabytes per second (MBPS) to 1 gigabyte per second (GBPS). This enables users to access high definition video streaming, teleconferencing, online gaming, GPS and location based services, and a better quality internet surfing experience. This contrasts with the 2G mobile network available in the Pa Enua which only offers 40 kilobytes per second (KBPS) limiting services to calls, SMS (short message service) and MMS (multi-media message service). This information is summarised in the table below.

Mobile Network (G)	Data Rates (speed and data)	Deployment technology	Mobile network enabled applications
4G	100 megabytes per second to 1 gigabyte per second	LTE , WiMax, xDSL	Available on Rarotonga & Aitutaki wireless broadband; HD video streaming, online gaming, VOIP and teleconferencing, and more
3G	384 kilobytes per second to 2 megabytes per second	WCDMA	Digital, data and voice; video calling, file transmission, internet surfing, online TV, telemedicine, view high definition videos on demand, GPS, location based services.
2.5G	40 kilobytes per second	GPRS	Available in the rest of the Pa Enua Digital, voice; improved call service and SMS text and MMS messaging. Improved global connectivity
2G	9.6 kilobytes per second	GSM	

Table: Mobile network technical specifications as per ITU standards [Internet Telecommunication Union]

The Cook Islands have a high mobile penetration rate at 118 per cent, indicating that some users have more than one mobile subscription. The following table sets out the subscription rates for mobile phones, fixed phone lines, internet and broadband in 2017:

Type of telecommunications	Subscribers per 100 inhabitants	No. of subscribers
Mobile cellular	118%	13,831
Fixed telephone lines	56%	6530
Internet	54%	6265
Broadband	28%	3258

Table: 2017 subscription rates for telecommunications (Source: Bluesky)

The calculations are based on a population of 11,700. Notable from this table is the high rate of mobile cellular subscribers when compared with the other options. Mobile cellular telephony covers 100 per cent of the population and hence has a penetration rate of 100 per cent.

There is no information on the average data usage per mobile subscription, however with the advances in mobile network technology from 2G to 4G, data usage appears to have increased. With the introduction of the submarine cable this will increase the available mobile network data capacity, speed and affordability.

The status of all components of this indicator are assessed as 'on track' with no change to status.

Indicator 5.4 Percentage of national infrastructure and public buildings that are fit for purpose

Introduction

This indicator measures the extent to which national infrastructure and buildings are fit for purpose.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	AssetFinda established	n/a	n/a		>75%	
Date	2014	2016	2017			
Source	-					

Comments on methodology

This data needed for this indicator is not currently available. The intended source is the Public Asset Register which is not currently online. For future reporting there is a need to clarify what type of national infrastructure and public buildings will be assessed, and how it will be determined as 'fit for purpose'.

Analysis

In 2014 the Cook Islands Government invested in an asset management information system (AMIS) called AssetFinda to formally and comprehensively capture in one data base all fixed crown assets. To date the system's full potential has not been realised due to inadequate integration into individual agencies business as usual operations. Government effort is working towards improving integration support with government agencies that will allow for this indicator to be reported on.

The status of this indicator is assessed as 'off track' with no changes from the previous year.

Goal 6: Improve access to affordable, reliable, sustainable, modern energy and transport



This goal focuses on improving access to renewable energy (RE) sources and achieving reliable transport between the various islands. The results for the Goal 6 indicators shows that there are some areas where progress towards this goal is 'on track', and some areas 'of concern'. The renewable energy project has already delivered 100 per cent electricity generated from renewable sources for the Northern Group Islands, and progress is 'on track' for the Southern Group Islands. Compared with the previous year, there has been a significant decrease in the amount of petrol, diesel and LPG imported. Affordability of electricity is 'off track' and warranting further consideration once information from the HIES 2016 is available.

The number of domestic shipping trips is 'on track' for the Southern Group, but 'of concern' for the Northern Group. The number of domestic flights to the Southern Group and Manihiki is 'on track', but 'of concern' for Penrhyn and Pukapuka.

Indicator 6.1 Percentage of electricity generation from renewable energy




SDG Indicator 7.2.1: Renewable energy share in the total final energy consumption

Introduction

This indicator measures the percentage of electricity which is generated from renewable energy. This assesses progress towards the national energy target of 100% by 2020.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status
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						& trend
Result	14.2% Rarotonga	100% Northern group 19.2% Rarotonga	100% Northern group 19.2% Rarotonga Southern Group 0%	Northern group 100% <i>Target: Southern Group 80%</i>	100% 100% 2020 by	
Date	2015	2016	2017	2018		
Source	TAU (for Rarotonga), and REDD-OPM (for northern group)					

Comments on methodology

The information from TAU (Te Aponga Uira o Tumutevarovaro) for Rarotonga refers to electricity fed into the national grid which is generated from renewable sources. It does not take into account stand-alone solar panels that some households have, particularly since TAU does not currently have storage capacity to link any additional solar panels to the national grid.

The SDG Indicator 7.2.1 measures the renewable energy share in the total final energy consumption; and is relatively aligned to this NSDP indicator. Census 2016 and HIES 2016 will provide additional information on this indicator once it is made available.

Analysis

For the northern group, 100 per cent of electricity generated is from renewable energy. For the Southern Group, Mitiaro, Atiu, Mauke and Mangaia will be 100 per cent renewable by the end of 2018 and Aitutaki will achieve 20 percent renewable energy by March 2019³¹.

The table below shows progressive increases for Rarotonga in the percentage of the electricity fed through the national grid which is generated from renewable sources.

Year	% of electricity from the national grid generated from renewable energy sources (Rarotonga only)
2014	5.3%
2015	14.2%
2016	19.2%
2017	19.2% (until storage capacity for RE is installed)

Table: Percentage of electricity generated from renewable sources for the national grid in Rarotonga (Source: TAU)

³¹ Note: Aitutaki is a two phase approach due to capacity building and financial constraints.


The lack of an Energy Storage System (ESS) is currently delaying the switch to renewable electricity sources on Rarotonga. The Renewable Energy Development Division (REDD-OPM) is working closely with TAU and development partners to secure additional storage that will come online in the next two years. One Battery Energy Storage System (BESS) will be online by end 2018 and two more will be online before end of 2019. This will allow more renewable installations. It is anticipated that by the end of 2018, 80 per cent of electricity generated for the Southern Group will be from renewable sources. The status of this indicator is assessed as 'on track' with a positive trend for the Southern Group Islands.

Indicator 6.2 Annual amount of fossil fuels imported

Introduction

This indicator measures the annual amount of petrol, diesel and LPG imported in order to monitor reliance on fossil fuels.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	14.7M litres (petrol, diesel, LPG) 19.5% change Year over Year	13.2M litres (petrol, diesel, LPG) -10.2% change Year over Year	5.7M litres (petrol, diesel, LPG) -56.8% change Year over Year	1.8M litres (petrol, diesel, LPG)	>2% annual decrease	
Date	2015	2016	2017	Jan - Jun 2018 (Provisional figures)		
Source	NSO-MFEM					

Comments on methodology

This indicator does not include aviation fuel.

Analysis

The findings are set out in the table below:

Total amount of imported petrol, diesel and LPG gases	2014	2015	2016	2017	Jan - Jun 2018(p)
litres (million)	11.5	14.7	13.2	5.7	1.8
% change (Year over Year)	-	19.5%	-10.2%	-56.8%	—
NZD (million) (CIF - cost, insurance and freight)	NZD\$17.7	NZD\$14.7	NZD\$10.7	NZD\$5.6	NZD\$1.8

Table: Total amount of imported petrol, diesel and LPG gases, 2014 to 2017 (Source: NSO-MFEM)


There was a significant decline of 56.8 per cent between 2016 and 2017 in the amount of petrol, diesel and LPG imported. This trend followed on from a sizeable 10.2 per cent decline between 2015 and 2016. Further analysis would be required to determine the reason for the decline including the extent to which it is related to increased use of renewable energy sources for electricity generation. In view of this decline, the status of the indicator has been assessed as 'on track' with a positive trend.

Indicator 6.3 Percentage of median income spent on electricity

Introduction

This indicator measures the proportion of income that is spent on electricity at the household level to assess the affordability of electricity.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	-	8.1%	7.8%		<5%	
Date	-	2016	2017(p)			
Source	Income tax data: RMD-MFEM; Electricity prices: TAU					

Comments on methodology

This indicator measures the percentage of real median income that would be spent on purchasing 200 kWh of electricity per month. This is assumed in the NSDP to be the average household consumption of electricity. TAU has provided the domestic energy tariff³². The methodology used for calculating real median income, and its limitations, is set out under Indicator 2.1 Real median income. There is some mismatch within the methodology, as real median income is individual income and the electricity consumption is household based.

Analysis

For 2017, real median income for individuals has been calculated as NZD\$21,504 (refer to Indicator 2.1). A household which is purchasing 200 kWh per month would be paying NZD\$139.60 per month, or NZD\$1,675.20 per year for that electricity. That equates to 7.8 per cent of real median income. The status of this indicator has been assessed as 'off track' but improving based on the suggestion in the NSDP that less than 5 per cent of median

³² First 60 units each month - NZD\$0.53 per unit; from 61-300 units each month - NZD\$0.77 per unit.





income should be spent on electricity. However, these conclusions should be re-evaluated once information is available from the HIES 2016.


Indicator 6.4 Transport connectivity index

Introduction

This indicator measures the frequency of domestic shipping and air services to the Pa Enua. This is used to assess the extent to which there is adequate transport between the islands.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result						
Domestic flights (avg inward flights / week)	Southern Group (overall)				3 flights per week	
	33.6 Aitutaki	30.1 Aitutaki	38.0 Aitutaki		3 flights per week	
	5.1 Atiu	6.3 Atiu	7.7 Atiu		3 flights per week	
	4.7 Mangaia	4.6 Mangaia	5.1 Mangaia		3 flights per week	
	3.1 Mauke	3.3 Mauke	3.8 Mauke		3 flights per week	
	2.0 Mitiaro	2.3 Mitiaro	3.8 Mitiaro		3 flights per week	
	Northern group (overall)				0.5 flights per week	
	0.1 Manihiki	1.2 Manihiki	0.8 Manihiki		0.5 flights per week	
	0.0 Penrhyn	0.6 Penrhyn	0.5 Penrhyn		0.5 flights per week	
	0.0 Pukapuka	0.4 Pukapuka	0.4 Pukapuka		0.5 flights per week	
Result Domestic shipping trips	45 Southern Group (21-26 per island excl. Rarotonga & Aitutaki)	44 Southern Group (18-22 per island excl. Rarotonga & Aitutaki)	124 Southern Group (29-37 per island excl. Rarotonga & Aitutaki)		≥11 per island	

	21 Northern group (10-15 per island)	17 Northern group (6-11 per island)	93 Northern group (10-19 per island)		≥11 per island	
Date	2015	2016	2017			
Source	Domestic shipping and Air: MOT					

Comments on methodology

Air transport

The MOT provided information from their database, showing the number of domestic flights from the various aerodromes for 2017.

Shipping

The NSDP indicator seeks information about the average number of shipping services per annum to the Pa Enea. The limitations of this approach is that it does not consider full information about the adequacy of domestic shipping services such as regularity, reliability, appropriate frequency and transport capability.

Information about the number of domestic shipping trips to the Pa Enea has been provided by Taio Shipping Ltd and Cook Islands Towage. An additional domestic shipping vessel, SV Kwai, was provided license in 2017 to service the Northern Group Islands and Aitutaki that will improve transport connectivity for these islands.

Analysis

Air transport

The table below shows the number of domestic flights³³ in the 2015 and 2016 calendar years to and from the Pa Enea.

To Aerodrome	2015 Average inward flights per week from		2016 Average inward flights per week from		2017 ³⁴ Average inward flights per week from	
	Rarotonga	All islands	Rarotonga	All islands	Rarotonga	All islands
Sthn group						
Aitutaki	29.0	33.6	35.6	30.1	36.2	38.0
Atiu	4.7	5.1	7.4	6.3	4.8	7.0
Mangaia	4.6	4.7	4.7	4.6	5.0	5.1

³³ There are occasional international flights to and from the Pa Enea, particularly from Aitutaki, which is not included in this information.

³⁴ Raw disaggregated data provided by MOT, however, it will require more analysis and interpretation from MOT. If not reported in this Report, then will be reported in the Year 3 Indicator Report.

Mauke	2.9	3.1	3.8	3.3	3.5	3.8
Mitiaro	1.4	2.0	3.5	2.3	2.3	3.8
Nthn group						
Manihiki	0.1	0.1	1.0	1.2	0.02	0.8
Penrhyn	0.2	0.0	0.4	0.6	0.09	0.5
Pukapuka	0.0	0.0	0.3	0.4	0.13	0.4

Table: Average number of domestic flights per week to Pa Enua in 2017 (Source: Airport Authority)

The NSDP suggests that benchmarks for aviation will be established subsequent to a study on transport services. This study has not been undertaken due to resourcing constraints. However, in lieu of the study, the following targets have been adopted for this indicator:

- the Southern Group - 3 flights per week
- the Northern Group - 0.5 flight per week (one flight per fortnight).

Based on these targets and the results for 2017, the frequency of the service is 'of concern' for Mitiaro and the Northern Group, and especially for Pukapuka.

Shipping

The table below shows the number of domestic shipping trips to the various Pa Enua as from 2015 to 2017.

Island	2015 # of trips	2016 # of trips	2017 # of trips
Southern Group	45	44	124
Aitutaki	2	-	2
Atiu	23	21	34
Mauke	21	18	32
Mitiaro	21	22	37
Mangaia	26	22	29
Northern group	21	17	93
Palmerston	12	6	10
Nassau	10	6	14
Pukapuka	10	6	15
Manihiki	15	11	19
Rakahanga	14	8	18
Penrhyn	13	7	17

Table: Domestic shipping trips to Pa Enua (by island), 2015 - 2017 (Source: Ministry of Transport)

Aitutaki continues to be serviced directly by international shipping, and is not dependent on domestic shipping for supplies.

Domestic shipping for both the Northern and Southern Group Islands improved. The high number of voyages to the Pa Enea is mostly attributed to capital projects in particular the setting up of the renewable energy solar project. In addition, Government had also set up a shipping subsidy programme in 2017 to address transport connectivity to the Pa Enea. The number of shipping trips for the Southern Group Islands ranged from 29 to 37 trips and 10 to 19 trips for the Northern Group Islands.

The status for the shipping component of this indicator is therefore assessed as 'on track' exceeding the shipping target for this indicator.

Goal 7: Improve health and promote healthy lifestyles



This goal looks to promote healthy lifestyles by examining health care services, the general health of Cook Islanders and their lifestyles including engagement through exercise and sports. The average results for Goal 7 indicators is 'of concern' with a downward trend and requires attention. The rate of premature deaths from non-communicable diseases ('NCDs') remains 'off track', however there are signs of improvement. Health spending is below the levels recommended in the NSDP relative to overall Government expenditure. The decline in the prevalence of confirmed sexually transmitted infections ('STIs') is 'off track' and requires attention. The percentage of school aged youth involved in physical activity remains an area 'of concern', as it is below the recommended level of 4 hours per week. Life expectancy for females has improved whilst there is a decline for males which is 'of concern' with the prevalence of NCDs being a challenge. There is an increase in mental health disorder cases which is an area 'of concern' that also requires attention.

Health is an area that is performing well, however this sector requires time to effectively monitor the impacts on a population as preventative measures implemented now will show results in 10 to 20 years' time and so, although results may not look so good now the true picture will not be realised till much longer than the time of the 2016-2020 NSDP.

Indicator 7.1 Rate of premature deaths from Non Communicable Diseases (NCDs)




SDG Indicator 3.4.1: Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease

Introduction

This indicator measures the rate of premature deaths from NCDs and monitors the rate of annual change with the intent to reduce this rate over time. The four main NCDs are cardiovascular disease, diabetes, chronic respiratory diseases, and cancer.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	23.1%	23.9%	22%		>2.5% annual decrease or consecutive yrs of decr.	
Date	2015	2016	2017(p)			
Source	National Health Information Bulletin & MOH advice: MOH					

Comments on methodology

MOH defines premature deaths as 'deaths that occur before a person reaches 70 years'. This is based on a WHO outcome indicator which measures the probability of deaths that occur before a person reaches 70 years. The data for this indicator is sourced from the National Health Information Bulletin which is published annually. This bulletin does not include information about the deaths of patients referred overseas, or information about non Cook Islanders.

The rate of premature deaths from NCDs is calculated using the life table methods, entering in the number of deaths by five year age group from selected NCDs among males and females aged 30-69. Due to the small number of deaths in a year, a five year period was selected to avoid as much as possible zero values within five year age groups.

The SDG Indicator 3.4.1 measures the Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease; and is relatively aligned to this NSDP indicator.

Analysis

The table below sets out the rate of premature deaths from NCDs for 2015 to 2017. This indicates that in 2017 a 30 year adult had a 22 per cent probability of dying from the selected NCDs before reaching their 70th birthday.

Description	2015	2016(p)	2017(p)
Rate of premature deaths from NCDs	23.1%	23.9%	22.0%
	29% - for males 17% - for females	30.2% - for males 17.6% - for females	n/a% - for males n/a% - for females

Table: Rate of premature deaths from NCDs (Source: Annual National Health Information Bulletin/ MOH advice 2017))

The table below provides a further analysis of the causes of those deaths. In 2016, 78.2 per cent of all deaths of Cook Islanders in the Cook Islands were caused by an NCD.

The table below shows the increase in NCD related deaths between 2011 and 2016.

Cause of	2011	2012	2013	2014	2015	2016(p)	2017
----------	------	------	------	------	------	---------	------

death							
NCD	64.8%	74.3%	72.3%	74.8%	83.9%	78.2%	n/a
Other	32.4%	25.7%	27.7%	25.2%	16.1%	21.8%	n/a

Table: Causes of death (Source: Annual National Health Information Bulletin, MOH)

Cardiovascular (heart) disease remains as the main cause of death for Cook Islanders over the past five years despite the slight and steady decline since 2012 with the same downward trend showing for hypertension and chronic obstructive pulmonary (respiratory) diseases. In contrast, diabetes and cancer deaths have risen steadily in the same period with many of these NCD related deaths being preventable and premature.

Cause of death		% of all deaths		
		2015	2016(p)	2017
NCDs	Cardiovascular (heart) disease	35%	28%	n/a
	Diabetes	19%	22%	n/a
	Cancer	14%	17%	n/a
	Hypertension	13%	7%	n/a
	Chronic obstructive pulmonary (respiratory) diseases	8%	7%	n/a
Non-NCD	Injuries and others	11%	19%	n/a

Table: Percentage distribution of main causes of death (Source: Annual National Health Information Bulletin, MOH)

The prevalence of NCDs recorded by MOH from 2014 to 2016 indicated cardiovascular diseases as the most common NCD, with an estimated 180 new cases per year. This is followed by diabetes with a steady upward trend to almost 150 cases.


The status of this indicator has been assessed as 'off track' but with data suggesting a slight improvement to the trend.

Indicator 7.2 Health spending as a percentage of Government expenditure

Introduction

This indicator looks at health spending as a percentage of Government expenditure.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	9.85% NZD\$13.0M	9.17% NZD\$13.6M	8.55% NZD\$13.8M		>15%	

Date	2014/15	2015/16	2016/17			
Source	Government Budgets: MFEM					

Comments on methodology

This indicator is calculated by taking the MOH annual budget appropriations as a percentage of the gross total appropriations of the local budget. Funding from external sources, including development partners, is not included in this calculation but their contribution is mentioned in the analysis.

Analysis

From 2014/15 to 2016/17, government funding to the MOH budget remained steady at eight to nine per cent of the total government annual budget appropriation.

In addition to the government appropriation, MOH received additional funding from development partners such as New Zealand, Australia and WHO. Development partner funds are targeted to assist programmes such as:

- health specialist visits (approximately NZD\$11,000 - Australia)
- NCD programmes (approximately NZD\$11,000 per annum – SPC)
- HIV/TB programmes (approximately NZD\$50,000 per annum – UNDP)
- health activities and capacity building for medical professionals (approximately NZD\$150,000 per annum – WHO)

Due to the special relationship with New Zealand, effective and efficient overseas medical referral mechanisms have been maintained for tertiary medical services.. Medical referral statistics for 2016 and 2017 were not available at the time of this report.


Despite the slight increase in Health's budget in 2016/17 compared to the previous year, the indicator has been assessed as 'of concern' with its regressing proportion of total government expenditure.

Indicator 7.3 Prevalence of sexually transmitted infections

Introduction

This indicator measures the percentage of tests annually that come back positive for a STI.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	-7.32%	26.32%	187.5%		> -2.5% annual decrease or consecutive yrs of decr.	
Date	2015	2016	2017			

Source	National Health Information Bulletin 2015: MOH
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Comments on methodology

The methodology calculates the number of laboratory confirmed STI cases as a percentage of the total STI tests performed for MOH annually.

Analysis

The table below shows the laboratory confirmed STI cases by disease between 2009 and 2016. STIs continued to decline during this period from a total of 330 cases in 2009 until 2016 where it started increase from 48 to 138 in 2017. Chlamydia continues to be the most prevalent type of STI in the Cook Islands since 2009 with females making over half of the total diagnosed. After Chlamydia, prevalence of STI type is followed by gonorrhoea, hepatitis B and syphilis.

STI	2009	2010	2011	2012	2013	2014	2015	2016	2017
Gonorrhoea	56	23	29	8	6	2	1	2	19
HIV	0	0	0	0	0	0	0	n/a	1 ³⁵
Syphilis	2	2	2	7	0	0	1	1	3
Candida	70	35	30	72	7	4	0	0	n/a
Non Specific Urethritis	22	32	20	55	6	0	0	0	n/a
Trichomonas Vaginalis	13	18	9	15	9	1	0	0	n/a
Chlamydia	161	117	104	89	39	28	30	37	115
Hepatitis B	6	23	13	23	5	6	6	8	n/a
Total	330	250	207	269	72	41	38	48	138
Annual change	5.77	-24.24	-17.20	29.95	-73.23	-43.06	-7.32	26.32	187.5

Table: Laboratory confirmed new STI cases by disease 2009-2017 (Source: MOH)

The status of the indicator has been assessed as 'off track' with a downward trend, with consecutive years of increase of positive STI tests in 2016 and 2017. It must be noted that STI rates have fluctuated through the years with mass campaigns for chlamydia being carried out in some years with a correlating downward trend in prevalence, however the trend picks back up.


³⁵ HIV positive case a visitor and not living in the Cook Islands

Indicator 7.4 Youth engagement in physical activity and sports

Introduction

This indicator measures the extent to which young people (13 to 18 year olds) engage in physical activity and sports.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	-	36% were active for \geq 60 mins / day on 5+ days over 7 days (13-18yrs)	(no change)		\geq 4 hrs per week avg participation	
Date	-	2016	2017			
Source	Global School Health Survey: MOH					

Comments on methodology

The information for measuring this indicator has been taken from a global school based health survey undertaken in 2016 (held every three years) to gain more information about youth behaviour including physical activity, nutrition, dental and general hygiene, and social issues. Around 701 students who were in the age range of 3-18 years were surveyed and the survey results included information about the weekly participation in vigorous physical activity. This survey is held every three years and is funded externally.

As the survey is of school students, it does not consider youth older than 16 who are not attending school. This is a limitation as the National Youth Policy 2015 defines youth as being aged between 15-24 years. There is a need to consider expanding the collection of data about physical activity to include those aged 17-24 years. Physical activity has been identified as a priority area of the National Youth Policy 2015-2020 for 'Improving wellbeing and welfare'. Additional information about youth from the Census 2016 will provide appropriate data to inform this indicator

Analysis











Of the 701 students surveyed, results showed that 36 per cent of the 13-18 year old students were physically active for a total of at least 60 minutes per day on five or more days during the past seven days. Less than half of those surveyed indicated being engaged in physical activities for more than four hours per week. School programmes in the Cook Islands incorporate physical activities from early childhood levels to secondary. The status of this indicator is assessed as 'of concern'.

Indicator 7.5 Average life expectancy

Introduction

This indicator measures life expectancy at birth (LE0) - that is the average number of years that a new born could expect to live, if they experienced mortality conditions prevailing at the time.

Results





	Earlier year	Year 1	Year 2	Yr 3	Target	Current status & trend
Result	Male LE0: 71.5yrs  3.6 mths Female LE0: 76.8yrs  62.4 mths Both LE0: 74.1yrs  33.6 mths	Male LE0: 69.6 yrs  22.8 months Female LE0: 77.6 yrs  9.6 months Both LE0: 73.6yrs  6 mths	Male LE0: 70.5 yrs  10.8 months Female LE0: 77.7 yrs  1.2 months Both LE0: 74.1 yrs  6 mths		>6 months incr. or consecutive yrs of incr.	
Date	2015	2016	2017			
Source	Annual National Health Information Bulletin: MOH					

Comments on methodology

This measure is conventionally calculated using life tables and is based on current age death rates in a given population. Separate calculations are given for male and female. The resulting values are used to estimate the likelihood of someone in a hypothetical population dying before their next birthday. These estimates are considered to be ceiling figures (maximum estimates), because if deaths of Cook Islands residents who die overseas were to be included in the calculations, life expectancies would be lower. Progress for this indicator is monitored by an annual assessment of changes in life expectancy at birth by the MOH and published in the annual National Health Information Bulletin.

Analysis

As shown in the table below, the life expectancy at birth for the Cook Islands in 2017 was 70.5 years for males and 77.7 years for females. Women continue to live longer than men by 8 years. Data from the previous two years has been relatively constant with fluctuations for both male and female life expectancy.

Sex	2013	2014	2015	2016	2017(p)
Male	71.7 years	71.8 years	71.5 years	69.6 years	70.5 years
LE0: Monthly change	-	 1.2 months	 3.6 months	 22.8 months	 10.8 months

Female	79.6 years	82.0 years	76.8 years	77.6 years	77.7 years
LE0: Monthly change	-	↑ 28.8 months	↓ 62.4 months	↑ 9.6 months	↑ 1.2 months
Both:	75.6 years	76.9 years	74.1 years	73.6 years	74.1 years

Table: Life expectancy at birth (Source: Annual National Health Bulletin, MOH Advice)


The prevalence of NCDs is a challenge to achieving further increases in life expectancy with heart disease being the main cause of premature deaths in the Cook Islands. The status for this indicator has been assessed as 'of concern' and regressing due to the further decline in the life expectancy of men between 2014 and 2016 with the average life expectancy of Cook Island persons residing in the Cook Islands also on a downward trend.

Indicator 7.6 Number of people diagnosed with mental health disorders annually

Introduction

This indicator measures the number of reported mental health cases in a year. This indicator been modified since the published NSDP to better match the information available and to be consistent with MOH reporting to WHO.³⁶

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	29 cases	86 cases	n/a		(yet to be determined)	
Date	2015	2016(p)	2017			
Source	Annual National Health Information Bulletin: MOH					

Comments on methodology

This indicator only reports on the prevalence of new mental disorder cases identified in a given year through the hospital system. Despite there being a Mental Health and Wellbeing Policy 2015 which provides guidance and definitions for this revised indicator, it is difficult to set a target to monitor progress appropriate in this important area. Data for this indicator is sourced from the National Health Information Bulletin on an annual basis. Further analysis is required for this indicator as the increased cases can correlate to a number of factors not yet identified i.e. increased awareness by health professionals and patients which may have led to more cases identified.

³⁶ The published NSDP Indicator was 'Percentage of mental health cases actively being treated'

Analysis

The National Health Information Bulletin reports that of the 86 mental disorder cases in 2016, 57 per cent were male patients compared to 41 per cent in 2015. Additional cases are also managed by non-government agencies such as Te Kainga O Pa Taunga and Te Vaerua Rehabilitation Incr. who are key partners in supporting mental health patients.

The implementation of the National Health Strategic Plan 2017-2021; the Mental Health and Wellbeing Strategy 2016-2020; and the Suicide Prevention Strategy 2016-2020 have identified actions for improving mental health outcomes. These strategies recognise the need to improve collection of data on mental health so as to improve mental health service delivery, promotion and prevention strategies.

The status of the indicator has been assessed as 'of concern' and static (no change), until systems are further established and resourced in improving the diagnosis and treatment for mental health disorders. The increased cases may be interpreted as more people being aware of mental health issues and presenting themselves and also health professionals more aware at referring and diagnosing certain mental health disorders. This interpretation needs to be looked into to validate if this is indeed the case.

Goal 8: Inclusive and equitable quality education and promote life-long learning opportunities



Improving education outcomes is the key to achieving sustainable development across all sectors, including health, technology, environment, and justice. The results for the Goal 8 indicators show that it is on track with its positive progress towards literacy and numeracy rates for year 11 students (which exceeded MOE targets of 83 per cent); the NCEA level 1 pass rates (also exceeded MOE targets of 72.5 per cent), with high enrolment rates in early childhood education at 92.5 per cent. However, the resident population who had vocational or tertiary qualifications is 'off track' at 27 per cent (Census 2011) although this is subject to change once the Census 2016 is available. Further, the education spending is below the levels sought in the NSDP relative to overall government expenditure despite MOE receiving the highest appropriation followed by MOH in comparison to other government agencies.

Indicator 8.1 Literacy and numeracy rates




SDG Indicator 4.1.1: Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex

Introduction

This indicator measures the numeracy and literacy rates of young people in year 11 undertaking the National Certificate of Educational Achievement ('NCEA') level 1. This recognises that the ability to read, write and use a range of mathematical strategies in everyday life are basic skills everyone needs to participate and interact with the world around them.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status
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						& trend
Result	Literacy 83% Numeracy 88% (NCEA Level 1)	Literacy 93% Numeracy 92.8% (NCEA Level 1)	Literacy 87% Numeracy 93% (NCEA Level 1)		83%	
Date	2015/16	2016/17	2017/18			
Source	MOE Annual Statistics Report					

Comments on methodology

The rates are based on three year averages and are assessed against the annual targets set by MOE. Literacy for this indicator focuses on the English language. The Cook Islands Maori literacy rate is assessed in indicator 14.1 Cook Island Maori literacy rates.

The SDG Indicator 4.1.1 measures the proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex; and is relatively aligned to this NSDP indicator, however limited to NCEA Level 1 data.

Analysis

The table below shows the results for 2015/16 through to 2017/18 compared with the targets set by MOE. The targets for subsequent years are also identified:

NCEA L1	2015/16		2016/17		2017/18		2018/19	2019/20
	Target ^[1]	Actual	Target	Actual	Target	Actual	Target	Target
Literacy	90%	83%	83.4%	93%	83.4%	87%	85.6%	86%
Numeracy	90%	88%	83%	92.8%	83%	93%	85%	86%

Table: NCEA Level 1 Literacy and Numeracy (Source: MOE)

Literacy rates are progressing and numeracy rates has seen a slight decrease for 2017/18 compared with the previous year. These slight variations are not too concerning at this stage but overall achievement will continue to be tracked and supported through the Ministry of Education and advisory support. Both literacy and numeracy rates continue to track above their annual targets as well as above the Education Master Plan target of 90 per cent by 2023. The status of this indicator has therefore been assessed as 'on track' with a positive trend.

Indicator 8.2 Early childhood education enrolment

^[1] The targets for 2015/16 were set in the MOE Statement of Intent 2011-2015. The targets were reset in the 2016-2019 Statement of Intent. This explains why the 2016/17 targets are lower than the 2015/16 targets.




SDG Indicator 4.2.2: Participation rate in organized learning (one year before the official primary entry age), by sex

Introduction

This indicator measures the proportion of children of eligible age that are enrolled in formal early childhood education programmes (preschool) from the age of eligibility (3 years). This recognises that involvement in early childhood education improves long term education outcomes.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	99% - gross enrolment rate 97% - net enrolment rate	98% - gross enrolment rate 97% - net enrolment rate	92.7% - gross enrolment rate 92.5% - net enrolment rate		85% 90%	
Date	2015	2016	2017			
Source	MOE Statistics Report					

Comments on methodology

This indicator assesses early childhood education enrolment against annual targets set by MOE. Rates are given as gross enrolment rates and net enrolment rates. The gross enrolment rate is the total early childhood education enrolment (regardless of age) as a percentage of the age eligible population (i.e. three and four year olds). Net enrolment rate is age eligible children enrolled (i.e. three and four year olds) as a percentage of age eligible population. An ideal result is a high net enrolment rate, with minimum difference between net enrolment rate and gross enrolment rate. It is possible for the gross enrolment rate to exceed 100 per cent, which would indicate that there are enrolled children older or younger than the target age of three and four years old.

The SDG Indicator 4.2.2 measures the participation rate in organized learning (one year before the official primary entry age), by sex; and is relatively aligned to this NSDP indicator. The Census 2016 will provide additional information on this indicator once it is made available.

Analysis

The table below shows the enrolment rates for 2015 to 2017, compared with the targets set by MOE.

Description	2015	2016	2017	Target
Gross enrolment rate	99%	98%	92.7%	85%
Net enrolment rate	97%	97%	92.5%	90%

Table: Enrolment rates for early childhood education, 2016 and 2017 (Source: MOE)


While providing two years of pre-primary education, the Cook Islands continue to experience high enrolment rates not by making it compulsory but by working with parents and communities so they see the value in their child's participation in ECE. The movement of gross enrolment rate towards the net enrolment rate suggests that the correct cohort of young people are participating in early childhood education. MOE advises that there are still some communities and locations where participation and regular attendance could improve. MOE are working with early childhood education advisors and communities to address this. The status of this indicator has been assessed as 'on track' with a positive trend.

Indicator 8.3 National Certification of Educational Achievement, level 1 pass rates

Introduction

This indicator measures the percentage (by enrolment) of all year 11 students achieving NCEA level 1. This acknowledges that NCEA Level 1 is an important academic milestone for young people as it is the first qualification at school. NCEA is recognised by employers, and used for selection by universities and polytechnics at higher levels, both in New Zealand and overseas. When NCEA was first developed as a qualification in the early 2000s, it was intended to be an achievable qualification for 70 per cent of the population.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	76.8%	82%	83%		72.5%	
Date	2015	2016	2017			
Source	MOE Statistics Report					

Comments on methodology

The indicator is measured against annual targets set by MOE. The Education Master Plan 2008-2023 sets a target for 75 per cent of students to achieve NCEA level 1 by 2023. The target for the New Zealand Qualifications Authority (NZQA) is for 70 per cent of students to achieve NCEA level 1.

Many students progress through the final years of secondary education taking programmes at multiple levels. They may achieve the qualification in a year that does not correlate to their cohort year at school.

Analysis

The indicator results for 2015 to 2017 are shown in the table below, together with the MOE targets.

2015		2016		2017	
Actual	Target	Actual	Target	Actual	Target
76.8%	70%	82%	72.5%	83%	72.5%

Table: Percentage (by enrolment) of all Year 11 students achieving NCEA level 1 (Source: MOE)


These results show that targets have been exceeded and achievement rates are steadily improving. The status of this indicator has been assessed as 'on track' with a positive trend.

Indicator 8.4 Percentage of population with vocational or tertiary qualifications

Introduction

This indicator measures the percentage of the resident population that has vocational or tertiary qualifications, including formal trade qualifications. This recognises the importance of appropriate qualifications in developing a skilled workforce.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	27% of resident population	(no change)	(no change)		>40%	
Date	2011	2016	2017			
Source	Census 2011					

Comments on methodology

The information for this indicator is sourced from the Census 2011, but this should be updated once the Census 2016 information is available. Additional information could also be collected via a labour force survey scheduled for 2019. A labour force survey has already been identified as an appropriate method of collecting information for other indicators (e.g. Indicators 2.5, 9.3 and 13.3). Such a survey should include questions about vocational or tertiary qualifications.

Analysis


The Census 2016 will provide more up to date information for this indicator once it is available. Status of indicator is assessed as 'off track' with no change since the previous year.

Indicator 8.5 Education spend as a percentage of Government expenditure

Introduction

This indicator measures education spending as a percentage of government expenditure.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	11% NZD\$14.5 M	13% NZD\$19.4 M	12% NZD\$19.3 M		>20%	
Date	2014/2015	2015/16	2016/17			
Source	Government Budget Book 1: MFEM					

Comments on methodology

This indicator is calculated by taking the MOE annual budget appropriations as a percentage of the gross total appropriations of the local budget. This includes budget support to MOE from the New Zealand Government. Funding from other external sources and development partners is not included in this calculation, but their contribution is mentioned in the analysis.

Analysis

From 2014/15 to 2016/17, funds have increased into the Education Sector. There was a one per cent decline in MOE's share of Government's total budget appropriations from 13 per cent (NZD\$19.4 M) 2015/2016 to 12 per cent (NZD\$19.3 M) 2016/2017. In addition to the Government appropriation, MOE managed approximately NZD\$ 300,000 (2015/16 to 2016/17 budgets) to support programme initiatives that impact on education outcomes. The status of the indicator has been assessed as 'of concern' with a downward trend since the previous year.

Goal 9: Accelerate gender equality, empower all women and girls, and advance the rights of youth, the elderly and disabled



This goal focuses on structural and societal barriers that inhibit gender equality. It also seeks to promote and protect the rights of people who are vulnerable i.e. youth, the elderly and those who live with disabilities. The results for the Goal 9 indicators has been assessed as 'of concern' and showed little progress towards the goal. Women remain underrepresented at the political level accounting for only 15 per cent of Members of Parliament and Islands Councillors. There has been a gender pay gap with men earning more than women but that gap has narrowed between the 2001 and 2011 censuses. The Census 2016 will provide more up to date information and may show a further closing of the gap as 2016 information for the public sector shows that on average women in that sector earn more than men. The indicator relating to youth wellbeing is of concern and requires attention. There is a continuing need to make public facilities such as community centres and commercial buildings more accessible to people with a disability or impaired mobility.

Indicator 9.1 Percentage of political representatives that are women




SDG Indicator 5.5.1: Proportion of seats held by women in (a) national parliaments and (b) local Governments.

Introduction

This indicator measures the percentage of Members of Parliament (MP) and Island Councillors that are women.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	15% of MPs and Island Councillors	15% of MPs and Island Councillors	(no change)	(general election year)	>45%	
Date	2014	2016	2017	2018		
Source	Cook Islands Parliament and Pa Enua Governance-OPM					

Comments on methodology

Seats in parliament or the island council are held for four years so progress can only be measured every four years unless there is a by-election.

The SDG Indicator 5.5.1 measures the proportion of seats held by women in (a) national parliaments and (b) local Governments; and is relatively aligned to this NSDP indicator.

Analysis

Since the general election in 2014 and the election for island councils, women has remain under represented in the political arena. The 2018 general election will determine the nation's progress towards achieving the target of this indicator.

The table below identifies the percentage of Members of Parliament and Island Councillors who were women as of 2017. The results have remained the same since the 2014 election. A useful consideration will be the number of women who stand for election at both the local and national election highlighting the extent to which Cook Island women are actively seeking election

Political Level	Percentage of women (2017)
Members of Parliament	17% (four of 24 seats)
Island Councillors	14% (eight of 56 seats)
Total	15% (12 out of 80 seats)

Table: Percentage of elected representatives who are women at 2017 (Source: Parliament and PEG-OPM)


The target set by the NSDP for women political representatives is greater than 45 per cent. The status of this indicator is assessed as 'off track' with no change from the previous year.

Indicator 9.2 Youth wellbeing index

Introduction

This indicator assesses the relative wellbeing of young people.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	14% youth contemplated suicide	n/a	n/a		60-100% (degree of wellbeing)	
Date	2012	2016	2017			
Source	Youth Survey Cook Islands, 2012: MOE Youth Suicide Prevention Report, 2015: INTAFF					

Comments on methodology

The intended methodology for this indicator is to measure youth wellbeing through a survey which asks youth about the following:

1. Optimism about future opportunities
2. Current self-perception of individual wellbeing
3. Engagement in the community.

The NSDP suggests the questions could be asked of youth through a school health survey. CPPO-OPM has had discussions with MOH and MOE about including appropriate questions in the design of the next school survey. One of the limitations of relying on a school based survey, is it would not include youth who are not attending school which includes most youth older than 16 years.

In the meantime, data referred to for this indicator (Year Two) is from a survey commissioned by the Ministry of Education in 2012 which was used to inform the Youth Suicide Prevention forum in 2012. The survey findings has been referenced for the purpose of this Report. The Survey was given out to 1,700 youth aged between 11 to 28 years. This is considered a limitation as the Cook Islands National Youth Policy 2015 defines youth as those who are aged between 15-24 years.

Analysis

In 2012, the Youth Survey Cook Islands was distributed to 1,700 Cook Island young people to gauge their responses around youth suicides and how youth perceived themselves. The survey response rate was 60 per cent. In addition, a Youth Forum was held in March 2012 with 160 young people aged between 11-24 years attending from Rarotonga, Aitutaki, Mangaia, Mitiaro, Atiu and Mauke

The Survey responses (and where appropriate feedback from the youth forum sessions) were identified to inform this indicator. From the 824 who responded to the survey, 114 (14 per cent) youth contemplated suicide with 66 responses ranging from 'sometimes' to 'all the time' with frequency of suicidal thoughts. Top five feelings the youth identified

with suicide were – anger (261), alone or loneliness (145), depressed (139), guilt (129) and a cluster of feelings with the near-same number of responses around rejection (118), shame (117) and hopelessness (115).

The responses from the Youth Survey was fairly pessimistic and the youth had a negative outlook on their individual wellbeing. Feedback from the youth forum sessions identified relationship break ups and depression as the major stressors or pressures impacting the youth. In addition, some commented that the Cook Islands had limited opportunities to offer in education and employment

Responses aligned to community engagement revealed the top three sports the youth would engage in are soccer (58.1 per cent), volleyball (45.0 per cent) and netball (39.4 per cent). Non-sport activity youth would engage will be cultural dancing (28.9 per cent), girl guides (23.0 per cent), boys' brigade and work part-time (19 per cent). Youth top three favourite past times will be – hanging out with friends (62 per cent), watching movies (51.7 per cent) and swimming (49.4 per cent).

A positive outcome of this work was the development of the National Youth policy endorsed in 2015 looking at reducing rates of negative social behaviour (including crime) and increasing positive youth involvement in the wider community. This is in collaboration with a number of government (i.e. INTAFF, MOE, Police, MOH) and non-government organisations (i.e. youth groups, sports, churches, mental health, sports and so forth).


This indicator will be assessed as 'of concern' with a static trend for the interim due to the negative perceptions expressed by the youth surveyed in 2012 and insufficient data to inform this indicator.

Indicator 9.3 Income disparity between men and women

Introduction

This indicator measures the relative pay gap between men and women.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	0.79:1 female to male pay ratio 21% income disparity for women – using median income; Census 2011	(no change)	(no change)		>0.95:1	

Date	2011	2016	2017			
Source	Census 2011					

Comments on methodology

This indicator measures the relative pay gap as a male to female pay ratio³⁷. The Census 2011 has been used but this should be updated once the Census 2016 information becomes available. The gender pay ratios for the public service in 2016 have also been considered, as the public service is a significant employer. The public service information is based on 1847 total employees (939 female, 908 male), including heads of government agencies (10 female, 36 male) and Pa Enua employees (244 female, 376 male).

Additional information could also be collected via a labour force survey. A labour force survey has already been identified as an appropriate method of collecting information for other indicators (e.g. indicators 2.5, 8.4, 9.2 and 9.3).

Analysis

The table below compares the male and female incomes (both median and average) from the censuses in 2001, 2006 and 2011. This will be compared with the Census 2016 once it is available. The income gap between male and female pay remains, however the disparity has been narrowing from 2001 to 2011.

		2001	2006	2011
Median income (gross) - residents 15 years and over with an income	Male	10,152	12,763	11,845
	Female	7,201	10,441	9,362
	Male to female pay ratio	29%	18%	21%
Average income (gross) - residents 15 years and over with an income	Male	14,690	17,171	17,011
	Female	10,495	13,693	13,574
	Male to female pay ratio	29%	20%	20%

Table: Comparison of male and female incomes, 2001, 2006 and 2011 (Source: Censuses)

The 2016 gender pay information for the public sector shows that women on average are earning six per cent more than men across the sector. In the Pa Enua, women employed in the public sector earn on average 36 per cent more than the men. Although a third of the heads of agencies are women, on average, they are earning three per cent more than men. This shows that using average incomes, women have achieved of pay parity in the public sector.

³⁷ average (or median) male pay minus average (or median) female pay / average (or median) male pay * 100


In the absence of Census 2016 data, this indicator has been assessed as 'off track' with a no change, based on 2011 information. However the gender pay gap reduced between 2001 and 2011, and has already been closed for the public sector which accounts for one third of the labour force. It is therefore likely that the 21 per cent national gap will have narrowed further.

Indicator 9.4 Number of fit for purpose facilities for the infirm, elderly and disabled on each island

Introduction

This indicator assesses the number of public facilities such as community centres and commercial buildings that are considered appropriate or fit for purpose for the elderly, infirm and disabled on each island.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	Rarotonga: 7 Full access 76 Full/Partial access Pa Enea: 1 Full access (Pukapuka)	(no change)	26.8% (11/41) Rarotonga: 9 Full access 30 Full/Partial access Pa Enea: 2 Full access (Pukapuka & Mauke)		≥90% island & community centres with appropriate facilities	
Date	2012	2016	2017			
Source	Ministry of Internal Affairs (INTAFF)					

Comments on methodology

INTAFF has provided some information about the level of disability access to public community centres. The information provided does not consider the extent to which support programmes are provided to vulnerable people such as the elderly, infirm and disabled.

Analysis

In 2017/18, the Ministry of Internal Affairs (INTAFF) undertook an audit of 55 publicly accessible buildings on Rarotonga to determine their level of disability access. The results show that 16 per cent of the buildings audited have full disability access.

Location	Buildings audited	#	Services provided	Accessibility
Tupapa	National Auditorium	1	National functions	Full access
Nikao	TSA	1	National sports	Full access/Partial
Nikao	National Stadium	1	Sports Recreational	Full access/Partial
Tupapa	Red Cross	1	Multi-purpose	Full access
Arorangi	Hospital	1	Health services	Full access
Avarua (CBD)	Public Toilets	3	Public conveniences	Full access
Avatiu	Public Toilet	1	Tourist Conveniences	Partial
Rarotonga	Primary/Secondary	13	Primary/Secondary Schools	Full access/Partial
Tupapa	Island Hostels	8	Multi-community purposes	Full access/Partial
Rarotonga	Hotels/Resorts	8	Accommodation	Full access/Partial
Avarua	Banks	3	Commercial	Partial
Tupapa	Community Outpatients	1	Health consultations	Partial
Tupapa	Dental	1	Dental services	Partial
Tutakimoa	Bluesky	2	Communications	Partial
Avarua	Government Offices	10	Public Services	Partial/None
	Total number:	55		

Table: INTAFF audit of publically accessible buildings on Rarotonga 2017 (Source: INTAFF)

For the purposes of this audit, INTAFF has used the following definitions for determining full or partial access:

- **Full access** – The building is fully accessible to persons with disabilities or the elderly, particularly wheelchair users, from the door entry to the facilities in any public building. The building may have ramps at entrance, or the building is at ground level where a wheelchair user can manoeuvre into the building.
- **Partial access** – Part of the building is accessible e.g. the doorway has a ramp at the entrance of building but the convenience facility is not accessible.

INTAFF advise that for the Pa Enua only Pukapuka is considered to have a fit for purpose community centre for the infirm, elderly or disabled. The islands of Aitutaki, Mangaia and Mauke have partial access. Facilities on the other Pa Enua have significant access and egress challenges.

Island	Buildings	#	Services Provided	Accessibility
Mangaia	Community/Building	1	Elderly/Disability centre	Full Access/Partial
	School	1	School	Full Access/Partial

	Hospital	1	Health Services	Full Access/Partial
Mauke	Community/Building	1	Elderly/Disability centre	Full Access
	Church	1	Community attendance	Full Access/Partial
	Hospital	1	Health Services	Full Access/Partial
Aitutaki	Community/Building	1	Elderly/Disability centre	Partial
		7		

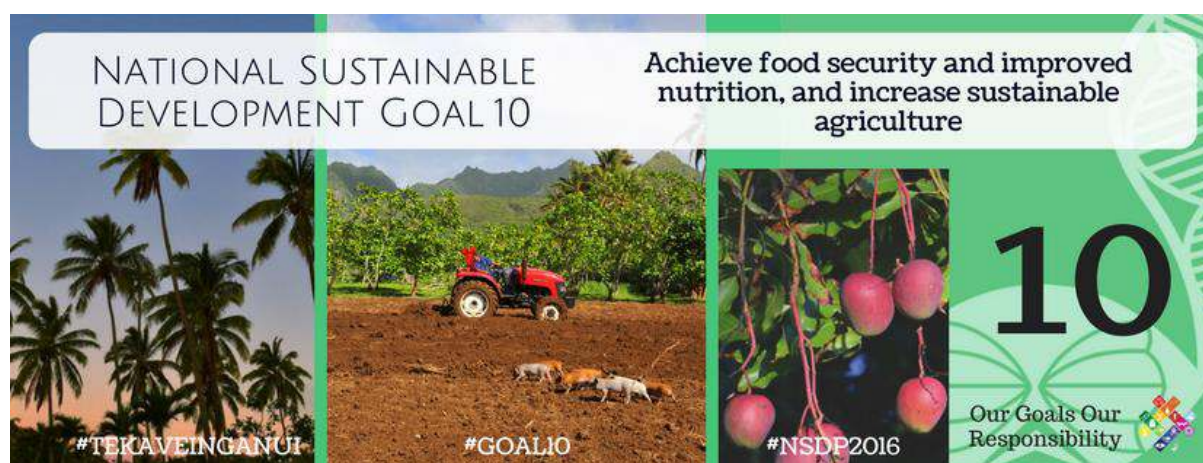
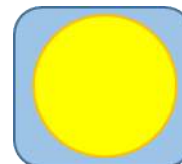
Table: INTAFF audit of publically accessible buildings on Rarotonga 2012 (Source: INTAFF)

The review into the Cook Islands Building Code is completed and awaiting endorsement from Government. It is expected the Code will improve disabled access for new public buildings.

As part of their 2017/18 audit, INTAFF assessed 10 Government offices in Avarua which provide public services and found that the disabled access was partial or none. This is probably reflective of the age of the buildings but is something that needs to be improved in the future to support progress towards this goal.

There is a lot of work required to ensure that public buildings provide adequate disability access. For this reason, the status of this indicator has been identified as 'off track, data suggest an improvement. However the situation is still 'critical'.

Goal 10: Achieve food security and improved nutrition, and increase sustainable agriculture



This goal recognises that agriculture is an important part of the future sustainability of the Cook Islands. Local food production supports improved food security and better nutrition. The results of Goal 10 indicators is overall 'of concern' with the continued concern of limited reliable data to measure the percentage of food purchased that is produced locally or total food production. Information on agricultural and food imports from 2011 indicates increased reliance on imported foods but more up to date data is needed. The use of land for agriculture has been declining due to building development, particularly on Rarotonga resulting in few local commercial farmers expanding their farms to Mangaia and Aitutaki. To date, the Cook Islands has been fortunate with no reported biosecurity outbreaks since 2013/14.


Indicator 10.1 Percentage of all food purchased that is produced locally

Introduction

This indicator measures how much of the food purchased in the Cook Islands (as a percentage) is produced locally rather than imported. This recognises the role of the agriculture in producing food for the local market thereby reducing the demand for imported food. Successfully producing more of the food we consume will help grow the agriculture industry, reduce expenditure on imports and improve food security.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend

Result	Local produce sold at PNM from 2012-2013: 4,300-5,000 kgs per month (approx.) Total food imports (2000-2011): 29% increase (incl. vege import 62% increase)	n/a	n/a		>2% annual increase, or consecutive yrs of incr. of local food production	
Date	2014	2016	2017			
Source	AgIntel (National Agricultural Database) & MOA advice (Source: MOA)					

Comments on methodology

This indicator looks at total food imported and sold, versus local food produced and sold. Records for food imports can be obtained from Customs. An indicative baseline for local produce sold at the Punanga Nui Market (PNM, “the Market”) on a weekly basis was based from 2012/13. This is subject to change once the data collection is extended to supermarkets, hotels, restaurants and surveys of growers’ sales. The HIES 2016, should provide more insight into food expenditure trends and the level of reliance on imported fruit, vegetables and meat products.

Analysis

According to the Agriculture Census Report 2014, total food imports have increased by 29 per cent from 2001 to 2011. This includes a 62 per cent increase in vegetable imports during the same period. It is likely that this was the result of increased tourist numbers creating greater demand that could not be met by domestic supply. From 2012 to 2013, MOA assessments revealed approximately 4,300 to 5,000 kilograms of local agriculture produce was sold on a weekly basis at the Market. There is insufficient data reported on market demand supply of certain food produce and the retail cost of imported produce sold compared to local produce sold.

The table below provides a snapshot of local agricultural produce and imported fresh and preserved food produce and products are provided in.

Food category	Local	Imported
Food crops	Bananas, watermelons, pumpkins, taro, breadfruit, drinking coconuts	Ginger, turmeric, capsicum, chilli, tomatoes, beans, snow peas, zucchinis, marrow, cucumber, rock melon, pumpkin, choco, watermelon, pineapples, carrots, radish, beetroot, parsnip, parsley, eggplant, leeks, onions, spring onions, garlic, garlic chives, shallots, sweet corn, herbs, honey
Leafy vegetables	Cabbages, lettuces, Bok choy, water cress, rukau	Lettuce, broccoli, cauliflower, cabbages, kale, okra,
Fruit	Mangoes, citrus, mandarins,	Apple, pear, plum, peach, nectarine,

	oranges, custard apple, soursop, abiu, rock melons, cucumbers, lychees, carambola, avocado, chestnuts, plantains (rukau, vei)	grapes, oranges, mandarin, tangelo, lime, grape fruit, custard apple, kiwifruit,
Root crops	Cassava, yams, kumara, tarua	Potato, kumara, yams,
Meat	n/a	Beef, lamb, pork, goat, chicken, duck, pigeon, fish, crabs, lobsters, prawns, aquatic molluscs/shell fish.
Other	n/a	Honey, tin food, frozen food, preserved food (fruit, meat, seafood)

Table: MOA audit of local produce and imported food 2012/13 (Source: MOA)

MOA is working closely with all growers, poultry and livestock farmers, including honey bee farmers to capture data on the Agriculture AgINTEL data system (Agriculture Holding Survey)³⁸. This will inform on priority local produce as below for Rarotonga and the Pa Enua. The Southern Group³⁹ have started the Survey since 2017 and is still progressing to improve the system to ensure consistency.

Food crops that grows well CONSISTENTLY ALL YEAR round	Those that grows better, During our COLDER MONTHS (late March to mid-September)	Those that grows better, During our WARMER to HOT and RAINY MONTHS (October to early March)
Coconut, pawpaw, taro, taro-rukau, banana, cucumber, watermelon, pumpkin, choco, pineapples, heat master lettuce and certain variety of lettuce, belle, amaranthus, Chinese cabbage, eggplant, sweet corn, hers, kumara, yam, tarua, cassava, breadfruit, hone, certain varieties of mangoes, carambola, and hydroponic vegetables	Capsicum, chilli, tomatoes, cherry tomatoes, French beans, zucchinis, cucumber, rock melon, pumpkin, choco, watermelon, pineapples, lettuce, broccoli, tropical cauliflower, Chinese and head cabbages, kale, okra, carrots, red and white radish, parsnip, parsley, eggplant, leeks, onions, red onions, spring onions, garlic chives, shallots, sweet corn and hydroponic vegetables and certain fruits	Ginger, turmeric, roma tomato, samoan cherry, tomato, long bean, cucumber, watermelon, pumpkin, choco, pineapples, heat master lettuce, Chinese cabbage, eggplant, sweet corn, herbs, kumara, yam, tarua, taro, taro-rukau, cassava, breadfruit, and hydroponic vegetables and herbs. Mangoes, litchis, rambutan, abiu, carambola, coffee, delicious cactai – dragon fruit, custard apple, soursop, etc.

³⁸ AgINTEL is a database designed to capture agriculture data within all areas of agriculture. It is designed to specifically capture detailed data on crops, livestock, agriculture land use, markets, value, and inputs. The database is within the MOA and will be controlled by the Ministry, however the survey is conducted by each Pa Enua Island Government Agriculture Department.

³⁹ Under a new Memorandum of Understanding (MOU) arrangement with each Pa Enua Island Government, MOA have assisted in developing their new business plan, and job descriptions to suit the new programmes that will support AgINTEL under the agriculture output aligned to the Agriculture Sector Policy and to the NSDP. This was to ensure that the AgINTEL survey is part of the agriculture department responsibility in the Pa Enua. The survey is conducted every quarter (3 months) and the completed survey forms are sent to the Ministry for analysis. The Ministry will be releasing the first quarterly report for the Pa Enua in the first quarter of 2019 in April and will continue to report on a quarterly basis. This will ensure and help the Ministry understand the agriculture status for Rarotonga and also the Pa Enua in order to support the Cook Islands Agricultural goals.

and herbs

Table: Lists of priority local produce (Source: MOA)


This indicator is assessed as 'of concern' but with indicative efforts in progressing towards this goal. MOA advised that the Agriculture Holding Survey has commenced in the Southern Group first (phase one) then on to Rarotonga (phase two) to inform indicators 10.1 to 10.4.

Indicator 10.2 Total food production

Introduction

This indicator measures total food production. This recognises the desirability of increasing food production to provide jobs and other economic opportunities to communities, provide quality nutritious foods for locals and tourists, reduce reliance on food imports, and support better health outcomes. This indicator is closely linked to the indicator 10.1, but also offers an insight into potential

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	Local produce sold at PNM from 2012-2013: 4,300-5,000 kgs per month (approx.)	n/a	n/a		>2% annual increase, or consecutive yrs of incr.	
Date	2014	2016	2017			
Source	AgIntel (National Agricultural Database) & MOA advice (Source: MOA)					

Comments on methodology

MOA has provided 2012/13 information about fresh produce sold at the Punanga Nui market and at roadside markets collected through fortnightly surveys. Crop data was collected for Rarotonga every six to eight weeks through a survey. This information has been reported through the Agriculture Bulletin, Agriculture Field Reports, and a bi-monthly crop survey. However, more recent data is needed for this indicator. MOA intend to use domestic market price and volume data to monitor food production trends for the next indicator report.

Analysis

In 2012/13 it was estimated that 4,300 to 5,000 kg of local food crops were bought and sold at Punanga Nui market weekly. These survey results showed a slight increase in local food production to meet local demand, particularly on Rarotonga. However, it is anticipated the Cook Islands will continue to rely on imported produce to supplement local food supply. This is further augmented with the significant decline of arable land suitable for agricultural

purposes, and slow interest of young people in this trade/vocation. The MOA continues to work on its educational programmes to increase awareness and interest.

This indicator is assessed as 'of concern' with no changes to previous year with the limited data available.

Indicator 10.3 Total land used for agriculture




SDG Indicator 2.4.1: Proportion of agricultural area under productive and sustainable agriculture

Introduction

This indicator measures the amount of land used for agriculture. This recognises that changing lifestyles and development pressures, particularly on Rarotonga, are resulting in the conversion of arable land to other purposes.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	12.6% of total land area	(no change)	(no change)		≥0% annual increase in consecutive years	
Date	2011	2016	2017			
Source	Agriculture Census 2011 (report dated 2014): MOA					

Comments on methodology

This indicator uses information from the last Agriculture Census, held in 2011 and reported on in 2014. The first such census was undertaken in 1988, and the second in 2000. It is therefore not expected that data on this indicator will be collected on an annual basis.

The SDG Indicator 2.4.1 measures the proportion of agricultural area under productive and sustainable agriculture; and is relatively aligned to this NSDP indicator.

Analysis

In 2011, approximately 1,953 ha or 12.6 per cent of the total land area of the Cook Islands⁴⁰ was being used for agricultural purposes (arable and permanent crops). MOA reported a significant decline in arable land suitable for agriculture with an approximate 0.21 per cent annual decrease. This is attributed to development with increase in private and commercial building constructions, sport fields and other recreational uses. It is likely that this trend will continue as more prime agricultural land is being developed for building and infrastructure purposes, particularly on Rarotonga. As a result, few local commercial growers have

⁴⁰ the total land area of the Cook Islands is 23,261 ha

expanded their farms to the Pa Enua specifically in Mangaia (fruit and vegetables) and Aitutaki (pineapples).


This indicator is assessed as 'of concern' with a negative trend as the total land used and reserved for agricultural purposes continues to decline. The initiative shown by both MOA and local commercial growers to access land in the Pa Enua for agriculture purposes will require further investment to grow this industry to achieve our goal of national food security.

Indicator 10.4 Number of reported biosecurity outbreaks

Introduction

This indicator tracks the annual occurrence of reported cases of biosecurity outbreaks for invasive species or diseases. This recognises that one of the main risks to agriculture is biosecurity threats, such as fruit fly, that come from abroad.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	1 outbreak (Oriental fruit fly)	zero	zero		Zero outbreaks	
Date	2013/14	2015/16	2016/17			
Source	Quarantine Office reports: MOA					

Comments on methodology

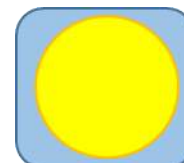
Data on fruit fly trapping is collected for Rarotonga and Aitutaki only. This information is provided in the Quarantine Office annual reports.

Analysis

There was no seriously economical pest outbreaks since the last major pest outbreak of the Oriental Fruit Fly in 2013 to 2014. MOA reports the pest surveillance being on track including Protein Bait Spraying to control female fruit flies especially during the hot summer and rainy months (November to April). Fruit fly population increases due to warm weather and many fruit are in season. Programmes activities in strengthening biosecurity and border protection of invasive species is currently being strengthened including – training in pest diagnostics for Biosecurity Officers and border protection for Pa Enua Officers; produce inspections at ports of entry and importers biosecurity sites; and pest surveillance.

This indicator is assessed as 'on track' with no changes from previous year. However funding needs to be directed in the prevention and surveillance areas so as to maintain this zero outbreak status, especially for the island of Aitutaki.

Goal 11: Promote sustainable land use, management of terrestrial ecosystems, and protect biodiversity




This goal recognises the importance of sustainable land management practices, and the conservation and protection of biodiversity. The Goal 11 indicators generally show a lack of progress towards the goal. The status and trend for wetlands on Rarotonga is 'off track'. The spatial extent of protected land is 'of concern'. All three species considered for the biodiversity indicator are 'of concern' though there has been an improvement for Kākerōri. Achieving Goal 11 is a significant challenge, particularly on Rarotonga, where the development pressures are greatest.

Indicator 11.1 Changes in wetland areas

Introduction

This indicator measures the spatial extent of wetland areas. This recognises the importance of these areas to the natural environment, and their vulnerability to development.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	1.16% 114.4 Ha wetlands 190.9 Ha swamps Rarotonga only	(no change)	(no change)		≥0% annual increase in consecutive years	
Date	not specified	2016	2017			

Source	SOE Report (Draft), 2018: SPREP
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Comments on methodology

The information for this indicator is from the draft Cook Islands State of the Environment Report ('SOE Report'), 2018. Wetlands in the Cook Islands include freshwater marshes and swamps, freshwater lakes, mountain streams and tidal salt marshes.

The date for the information about wetlands is not clear from the SOE Report. The information is for Rarotonga only, but these are the wetlands which are under most pressure from development. The data provides information about the spatial extent of wetland areas and the environmental quality of those wetlands.

Analysis

Wetlands provide important ecosystem services from water filtering, to providing habitats for crop cultivation (taro) and rich freshwater biodiversity. The SOE reports Rarotonga with 114.4 hectares of wetlands and 190.9 hectares of swamps. The four main types of wetlands in the Cook Islands include⁴¹:

1. Freshwater marshes and swamps on Rarotonga, Mangaia, Atiu, Mitiaro and Mauke;
2. Permanent freshwater lakes with Lake Tiriara on Mangaia, Lake Tiroto on Atiu, and Lake Rotonui and Rotoiti on Mitiaro;
3. A tidal salt marsh at Ngatangia Harbour on Rarotonga; and,
4. Mountain streams on Rarotonga.

Wetlands are limited in number and under threat from development pressures, invasive species, climate change pressures (saltwater inundation and cyclone-caused flooding) and illegal solid waste disposal⁴². Development and human activity require better controls and oversight that might have adverse impacts in the case of flooding. With the focussed stewardship, more information about wetlands for the Pa Enua is required.

The SOE Report, identifies the status for Rarotonga as poor with a deteriorating trend for wetlands⁴³: Based on this, the indicator has been assessed as 'off track' with a negative trend.

Indicator 11.2 Areas of land protected



SDG Indicator 15.1.2: Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type

⁴¹ Cook Islands State of the Environment Report (Draft), Apia, Samoa (p75) SPREP, 2016.


⁴² *ibid*, p66

⁴³ *ibid*, p66

Introduction

This indicator measures the spatial extent of land which is protected. It recognises that there are areas of land which warrant specific protection from inappropriate use or development due to their significant environmental or cultural values.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	6% of the land area of the Cook Islands	(no change)	(no change)		≥0.5% annual increase, or consecutive yrs of incr. Aichi target >17%	
Date	2011					
Source	SOE Report (Draft), 2018: SPREP					

Comments on methodology

This indicator focuses on the spatial extent of land protected. There is also a need to consider whether the areas are effectively managed for conservation. The information for this indicator is from the draft SOE Report, 2018.

The SDG Indicator 15.1.2 measures the proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type; and is relatively aligned to this NSDP indicator.

Analysis

The SOE reports on 14 terrestrial protected areas (PAs), which total at least 1,407.2 hectares (five PAs are uncalculated). This is equivalent to about six per cent of the Cook Islands' total land mass (240 km² or 23,261 ha). Terrestrial PA are concentrated in a few locations which includes private nature reserves, conservation areas, entire Island and motu PAs, a wildlife sanctuary (Takutea Wildlife Sanctuary), National Parks and Reserves, and community managed areas. Three of the 15 islands in Cook Islands are wildlife reserves (Suvarrow, Takutea and Manuae). Almost 40 per cent of the terrestrial PAs are represented by four motu on Pukapuka and three of Rarotonga's four PAs make up 36% of total terrestrial PAs.

The SOE Report further notes that only three of the 14 terrestrial protected areas are covered by formal Government legislation and regulations. They are Suvarrow National Park Declaration, Takutea Island Regulations and Takuvaiane Water Catchment Regulations.

The SOE Report, identifies the status for terrestrial protected areas as fair with an improving trend. The Aichi target established under the Convention on Biological Diversity is to have 17 per cent of the land mass protected by 2020. A further 11 per cent would need to be





declared as protected areas to meet this target. Based on this, the indicator has been assessed as 'off track' with no changes to data from the previous year.

Indicator 11.3 Biodiversity loss

Introduction

This indicator monitors key endangered species which are valued for their contribution to biodiversity.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result						
Kākerōri ⁴⁴	Fair status Improving trend 414+ Rarotonga 156 Atiu	(no change)	(no change)		Incr. or no change in prevalence of endangered species	
Tamanu ⁴⁵	Unknown status Deteriorating trend	(no change)	(no change)		As above	
Pa'ua ⁴⁶	Fair status Mixed trend	(no change)	(no change)		As above	
Date	2015	2016	2017			
Source	SOE Report (Draft), 2016: SPREP (Data for Kākerōri is based on a 2015 count)					

Comments on methodology

The information for this indicator is from the draft SOE Report, 2018. The SOE Report notes that the Cook Islands has many endangered and endemic species, and chooses three threatened species as case studies - Kākerōri, Tamanu, and Pa'ua.

Analysis

There is no change to the status of these three species. For this Report, this component of the indicator has been assessed as 'of concern' with no change from the previous year.

⁴⁴ Rarotongan Flycatcher, *Pomarea dimidiata*

⁴⁵ Polynesian mahogany, *Calophyllum inophyllum*

⁴⁶ Small giant-clam

Kākerōri - the latest count in 2015 of the Kākerōri showed 414+ individuals on Rarotonga and 156 individuals on Atiu. The trend was described as 'improving' due to conservation efforts from the Takitumu Conservation Area and its introduction to Atiu. Threats remain and continued management for both species and habitat is needed to maintain and increase population numbers.⁴⁷

Tamanu - the current population of Tamanu is improving and described as 'uncommon to common'. Continued management will be required to ensure that the numbers stabilise.⁴⁸

Pa'ua - the current population of pa'ua still remains 'unknown' as the population varies in the different islands. It is assumed that the population in the northern group is improving, and that in the Southern Group it is either deteriorating or stable. Focussed management is essential to recover and maintain numbers of this species⁴⁹.

Additional information

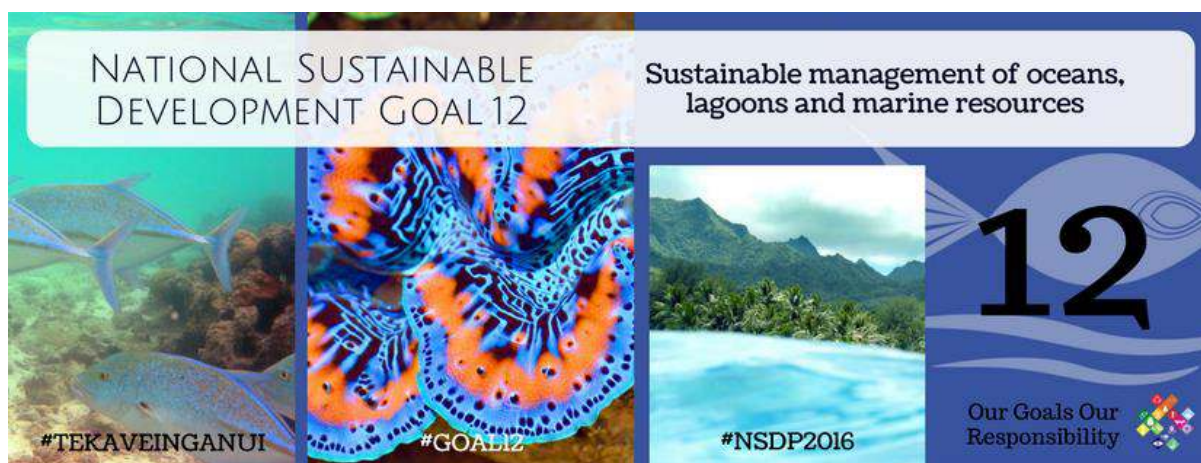
More detailed evaluations and recommendations for these three key endangered species are found in the SOE Report.

⁴⁷ *op cit*, SPREP, 2016. p123

⁴⁸ *ibid*, p124

⁴⁹ *ibid*, p125

Goal 12: Sustainable management of oceans, lagoons and marine resources




This goal reflects a commitment to ensure our oceans, lagoons and marine resources are protected, managed effectively, and sustainably used for future generations. The results for these Goal 12 indicators shows mixed progress towards the goal. The state of the reef, as measured by coral coverage, is 'of concern' with a negative trend. The extent of the marine protected areas as a percentage of the Exclusive Economic Zone is 'on track' with work progressing in developing marine spatial plans to better manage and monitor marine activities. The tuna catch is well below maximum sustainable yields and therefore 'on track'. Lagoon water quality remains 'of concern'. Economic returns from oceanic and lagoon resources are also 'of concern' with a negative trend.

Indicator 12.1 State of the reef

Introduction

This indicator measures the percentage of live coral cover as a sign of reef health.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	27% avg coral cover for Southern Group Islands	26% coral cover for Rarotonga	17% for six Southern Group Islands		Statistically significant improvement; or consecutive yrs of	

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
					improvement	
Date	2013	2016	2017			
Source	1. Coral Reef Survey of Aitutaki, Manuae, Mitiaro, Takutea and Atiu in the Southern Cook Islands 2013 2. Rarotonga Fore Reef Community Survey 2016. 3. Ridge to Reef Project: Coral Survey of Aitutaki, Mangaia, Manuae, Mitiaro, Takutea and Atiu 2017.					

Comments on methodology

Information for this indicator is gained from surveys of selected sites on various islands - Atiu, Manuae, Mitiaro, Takutea, Aitutaki (surveyed in 2013); Rarotonga (surveyed in 2016); Mangaia and a re-survey of Atiu, Manuae, Mitiaro, Takutea, Aitutaki (2017). While there is no previous data on coral cover for the remaining islands of Mauke, Palmerston, Pukapuka, Nassau, Manihiki, Rakahanga, and Suvarrow to assess changes over time, MMR has noted that the cover of live hard coral at Penrhyn⁵⁰ was generally higher than that recorded using comparable methods elsewhere in the region^[2].

The table below shows the Coral Reef Health Criteria developed by Chou *et al*^[3], 1994, which can be adopted to Cook Islands reefs. It is a simple method of assessment, however, MMR also uses other more comprehensive methods such as surveys of invertebrate, finfish and benthic habitats.

Percentage of live coral cover	Rating
0-25 %	Poor
26-50%	Fair
51-75%	Good

⁵⁰Reef Resources Assessment and Feasibility Study of Penrhyn Lagoon 2015

^[2] e.g. 27.7±2.0 percent cover at Abemama Atoll, Kiribati (Kiareti et al. 2015); 19.1±2.1 per cent cover at Majuro Atoll, Marshall Islands (Moore et al. 2014a); and 48.6±2.9 % cover at Funafuti Atoll, Tuvalu (Moore et al. 2014b).

^[3] Chou, L.M., C.R. Wilkinson, W.R.Y. Licuanan, P.M. Aliño, A.C. Cheshire, M.G.K. Loo, S. Tangjaitrong, A.R.Ridzwan and Soekarno, 1994. Status of coral reefs in the ASEAN region. p. 1-10. In : Wilkinson, C.R., S. Sudara and L.M. Chou (eds.) Proceedings Third ASEAN-Australia Symposium on Living Coastal Resources. Vol. 1: Status Review. Chulalongkorn University, Bangkok, Thailand.

76-100%	Excellent
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Table: Rating for percentage coral cover (Source: Chout et al, 1994)

Analysis

Reefs play an important role in protecting islands and communities from the impacts of climate change. Reefs are an important habitat for local biodiversity and also a protective buffer against ocean currents and waves. They provide food and medicinal products, support recreational activities, and are a major attraction for tourists.

Rarotonga

The reef around Rarotonga suffered an invasion of COTS from 1995 to 2001. A coral reef survey conducted in 2016 by the Climate Change Division of OPM reported an improvement in mean coral coverage since the early 2000s from one per cent in 2006 to 26 per cent in 2016^[5]. In addition, it was reported that the coral size class data showed a significant increase of larger colonies in 2016 compared to 2006, indicating recovery occurring. This may be partially due to people refraining from fishing due to fears of ciguatera poisoning, allowing herbivorous fish species that are normally targeted for food to facilitate the recovery of reefs.

Southern Group Islands

In 2017, MMR through the Ridge to Reef (R2R) project was able to conduct marine baseline assessments between five islands which includes the identification of areas of high abundance and diversity; assess areas of distribution and abundance of species of interest; compare current populations with historical records; and compare population densities and species populations. The table below shows the results island coral reef health cover:

Island	Percentage of coral cover 2013	Percentage of coral cover 2017	Rating	Percentage of coral cover rating
Mitiaro	34%	27%	Fair	26-50%
Manuae	33%	23%	Poor	0-25 %
Atiu	21%	19%	Poor	0-25 %
Aitutaki	poor	16%	Poor	0-25 %
Mangaia	n/a	12%	Poor	0-25 %
Takutea	7%	7%	Poor	0-25 %

Table: Percentage of coral reef health cover for Southern Group islands

Five of the islands were rated 'poor' with only Mitiaro rating its coral cover as fair. From the survey conducted in the Southern Group in 2013^[4], the average coral cover showed a significant decline in coral health ('Poor') since the last survey conducted, particularly on the

^[5] Rarotonga fore reef community survey 2016, Rongo et.al

^[4] Coral reef survey of Aitutaki, Manuae, Mitiaro, Takutea, and Atiu in the southern Cook Islands.

fore reef. Crown of thorns starfish ('COTS') outbreaks are a contributing factor to the decline in reef health in Aitutaki. Further, a severe warming of the region from November 2016 to May 2017 resulted in a severe bleaching event noted from Palmerston to Mangaia. Although the impact of this bleaching event is yet to be determined, it is likely that current reef health in the southern Cook Islands has been compromised.

Northern Group Islands

Similarly, a severe bleaching event associated with the 2015/16 El Niño event was noted throughout the northern Cook Islands. While there is no previous data on coral cover on many of the northern group islands, MMR was collecting data for Penrhyn and Pukapuka for species on the reefs⁵¹. MMR has noted that the cover of live hard coral at Penrhyn was generally higher than that recorded using comparable methods elsewhere in the region⁵².

Overall, the live coral coverage average for these islands is assessed as 'poor', thus, reefs throughout the Cook Islands are likely degraded at present. This indicator has been assessed as 'of concern' with a negative trend.

Indicator 12.2 Areas of protected Exclusive Economic Zone




SDG Indicator 14.5.1: Coverage of protected areas in relation to marine areas

Introduction

This indicator measures the extent of marine protected areas as a percentage of the Exclusive Economic Zone (EEZ).

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	-	Marine protected areas of EEZ 16%	(no change)		10%	
Date	-	2016	2017			
Source	Marae Moana Office					

⁵¹ For Penrhyn (2015), assessments of the status and cover of benthic habitats were conducted using a photo-quadrat approach at the same locations and transects as the finfish assessments, and were conducted immediately after the finfish surveys. The habitat photographs were analysed using SPC software, which is similar to the Coral Point Count (CPC) analysis software by Kohler and Gill (2006). Using this software, five randomly generated points were created on the downloaded photographs. The substrate under each point was identified based on the following 11 substrate categories.

⁵² e.g. 27.7±2.0 percent cover at Abemama Atoll, Kiribati (Kiareti et al. 2015); 19.1±2.1 per cent cover at Majuro Atoll, Marshall Islands (Moore et al. 2014a); and 48.6±2.9 % cover at Funafuti Atoll, Tuvalu (Moore et al. 2014b).

Comments on methodology

This indicator assesses the extent of the areas established beyond each island that are fully protected by law under the Marae Moana Act 2017 ('the Act'). The Act defines 'marine protected areas' as areas where "seabed minerals activities and large scale commercial fishing in the area are prohibited, but other ecologically sustainable uses are permitted."

The global benchmark is Aichi Biodiversity Target 11 which requires that by 2020, 10 per cent of marine areas are conserved through 'effectively and equitably managed, ecologically representative and well connected systems of protected areas and other area based conservation measures and integrated into the wider landscape and seascape'. This will be used as the NSDP benchmark going forward.

The SDG Indicator 14.5.1 measures the coverage of protected areas in relation to marine areas; and is relatively aligned to this NSDP indicator.

Analysis

The total area of the Cook Islands EEZ is 1,997,000km². Marine protected areas around each island extend 50 nautical miles (nm) from the Mean Low Water Mark and total 324,000 km² in area. This accounts for 16 per cent of Cook Islands marine space that is fully protected exceeding the 10 percent global benchmark. The Act has established the entire Cook Islands territorial waters and Exclusive Economic Zone ('EEZ') as a multiple-use marine protected area, work around marine spatial planning is in development whilst systematic monitoring is ongoing to ensure compliance across the Cook Islands EEZ especially in the North West region (around Pukapuka) where commercial fishing activity is concentrated. The indicator has been assessed as 'on track' with static trend.

Indicator 12.3 Percentage of yield against sustainable benchmarks




SDG Indicator 14.4.1: Proportion of fish stocks within biologically sustainable levels

Introduction

This indicator measures the reported catch of licensed fishing vessels against 'sustainable limits' established by the South Pacific Community ('SPC'). This acknowledges the use of ocean resources for economic benefits while recognising the need to ensure the sustainability of commercial fishing practices within Cook Island waters.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	-	Below Maximum	(no change)		Below Maximum	

		Sustainable Yields (tuna catch only)			Economic Yield ⁵³	
Date	-	2015/16	2016/17			
Source	Annual Offshore Fisheries Report 2017; Government Budget book 1 (2017/18); HYEPU 2017/18					

Comments on methodology

SPC establishes sustainable limits based on scientific research and updates them every two years. For the purpose of this indicator, only the catch of tuna species is considered. Catch estimates are generated using log sheet data from the fishing vessels. Reported catches are raised using Vessel Monitoring System (VMS) data where log sheet coverage is less than 100 per cent. In this instance, log sheet coverage for all trips undertaken in zone is 100 per cent for Cook Island flagged vessels and 89 per cent for foreign flagged vessels⁵⁴.

The maximum sustainable yield limits for the Western and Central Pacific Ocean ('WCPO') are taken from the 2015 Tuna Fisheries Status of Stock report. In June 2017, MMR established national total quota allocations for albacore and big eye tuna. This information is set out in the table below:

Species of tuna	Maximum sustainable yield for Western & Central Pacific Ocean (metric tonnes - mt)	National total quota allocation for Cook Islands - established 2017 by MMR (metric tonnes)
Albacore	76,800	9,750 (12% of the WCPO Maximum Sustainable Yield)
Big eye tuna	108,520	3,500 (3% of the WCPO Maximum Sustainable Yield)
Skipjack	1,891,600	-
Yellow fin	586,400	-
Total	2,663,320	

Table: Maximum Sustainable Yield for tuna in Western and Central Pacific Ocean compared with national quota for the Cook Islands (Source: 2015 Tuna Fisheries Status of Stock report, and MMR)

The SDG Indicator 14.4.1 measures the proportion of fish stocks within biologically sustainable levels; and is relatively aligned to this NSDP indicator.

⁵³ This target will need to be revised for the next indicator report.

⁵⁴ MMR, Cook Islands Offshore Fisheries Annual Report 2015, p4.

Analysis

Most of fishing activities occur mostly around the Northern fishery borders from Pukapuka in the west to Penrhyn to the east, and south to Suvarrow. The longline albacore fishery is transhipped in Apia or Pago Pago. However recent transhipment activities have been carried out in Pukapuka, and supervised by local fisheries officers.

The table below shows the fishery catches in the Cook Islands EEZ by species (tonnes) from 2014 to 2016.

Species	2014			2015			2016		
	Longline	Purse Seine	Local	Longline	Purse Seine	Local	Longline	Purse Seine	Local
Albacore	6,098	0	1	3,816	0	2	2,434	0	2
Big eye	534	217	<1	576	204	0	354	13	0
Yellow fin	1,025	431	180	1,190	823	71	808	533	117
Skipjack	85	5,479	10	134	11,874	12	123	12,431	14
Other	927	0	80	541	0	57	363	21	30
Total	8,669	6,127	271	6,257	12,901	142	4,082	12,998	163

Table: Fishery catches in the Cook Islands EEZ by species (tonnes) (Source: HYEPU 2017/18)

In 2016, with the exception of skipjack (which had a five per cent marginal increase in 2016 compared with 2015), the overall fishery catch showed a gradual decline in primary tuna species and other species (by catches) compared to 2015. In 2014, the total albacore catch was 6,098mt which decreased to 2,436mt in 2016. The same was accorded to the big eye tuna with a 752mt catch in 2014 which decreased to 367mt in 2016 – this was just below half the 2014 total.

The national catches recorded are below the quota mark for albacore (9,750mt) and big eye tuna (3,500mt for). This can be attributed to the decrease in total fishing effort in 2016 at 90 vessels compared with 2015 (108), and declining further in 2017 (79). This is the same trend for local artisanal and game fishery vessels.

The table below shows the number of active fishing vessels for the same period.

Licensed & active vessels	2012	2013	2014	2015	2016	2017
Long liner	60	45	36	38	47	55
Purse seiner	16	17	18	65	33	16
Other commercial (Bunkers, Trawlers)	4	4	5	5	10	8
Total	80	66	59	108	90	79

Local artisanal and game fishery	-	223	302	301	285	195
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Table: Number of active fishing vessels (Source: HYEPU 2017/18)

From a regional perspective, the Cook Islands overall tuna catches in 2014 to 2016 make a minimal contribution to the total tuna catch for the WCPO. The highest yield of fishery catches for the Cook Islands against regional and national benchmarks has consistently been albacore and skipjack tuna.

The introduction of a quota system for the Cook Islands will provide greater control on the aggregate amount of fish caught and ensure it does not exceed the maximum sustainable yields.


The status of this indicator has been assessed as 'on track' and the trend is static (no change).

Indicator 12.4 Lagoon water quality

Introduction

This indicator assesses lagoon water quality. This recognises that lagoon health is at risk from unsustainable land use practices and poor management of lagoon areas.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result		Average C-D grade for bacteria levels and water clarity (Rarotonga, Aitutaki and Manihiki)	Average D grade for bacteria levels and water clarity (Rarotonga, Aitutaki and Manihiki)		Average A-B grade for bacteria levels, water clarity and nutrient levels	
Date		2016	2017			
Source	MMR Water Quality Reports					

Comments on methodology

MMR assesses the lagoon water on Rarotonga, Aitutaki and Manihiki based on three main variables - bacteria levels (count per 100 ml), water clarity (total suspended solids in mg/l) and nutrient levels (score out of 100). The indicator is an average of the grades given to the variables across the test sites. Average grades are assessed based on the pre-defined grading system set out by MMR using a six level scale with 'A' the best score and best outcome, and 'F' the worst. MMR tests on the three islands (Rarotonga, Aitutaki and Manihiki) due mainly to tourism on Rarotonga and Aitutaki, and the pearl industry in Manihiki.

The data provided by MMR for this Report does not currently include nutrient levels. MMR is working towards providing this information in future to give a more accurate summary of water quality on Rarotonga, Aitutaki and Manihiki.

Analysis

The table below shows the results provided by MMR. The average grade is based on bacteria levels and water clarity.

Test site	Average grade	Status
Rarotonga marine	C-D	Of concern
Rarotonga stream	C-F	Of concern
Aitutaki marine	C-D	Of concern
Aitutaki stream	E-F	Off track
Manihiki	A-C	On track
Overall grade average	D	Of concern

Table: Grades for water quality at test sites (Source: MMR Water quality reports 2017)

The information in the above table shows that the Manihiki is in the best condition, while Rarotonga marine and stream and Aitutaki marine are 'of concern'. Aitutaki stream is 'off track'. This indicates that the marine and streams at the test sites are being polluted by human activity and/or development. The status of this indicator has been assessed as 'of concern' and the trend is static (no change) as the results are similar with the exception of Rarotonga marine, in comparison to previous years (2016).

Indicator 12.5 Economic returns from oceanic and lagoon resources


Introduction

This indicator measures the returns on investments from marine exports including fisheries⁵⁵, black pearl farming and deep sea mining.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status
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⁵⁵ Fisheries export data reported in this indicator looks at fish that are exported by Cook Islands based companies through a port based in the Cook Islands. Data excludes fish captured outside of the Cook Islands by Cook Islands flagged vessels.

						& trend
Result	NZD\$19.8M	NZD\$19.1M	NZD\$18.7M ⁵⁶		>2.5% annual increase or consecutive yrs of incr.	
Date	2014/15	2015/16	2016/17			
Source	Government Budget Book 1 ; HYEPU 2017/18					

Comments on methodology

There are no comments on the methodology.

Analysis

The value of marine exports is gradually declining annually with fishing activities being the major revenue earner. Other marine exports include live fish for aquarium trade, black pearls and pearl shells.

In 2016/17, total revenue from marine exports decreased to NZD\$16.7 million compared to NZD\$19.1 million in 2016. In 2016/17 fishery activities brought in the bulk of the revenue with NZD\$16.5 million, followed by black pearls at NZD\$169,000, pearl shells at NZD\$42,000 and trade of live fish at NZD\$22,000. The main benefit to the economy from fishing activities continues to be the revenue from access (treaty) arrangements, licenses, fines and settlements; and the sale of catch quotas of (approximately NZD\$2 million). In total, revenue from 2016/17 fisheries activities totalled NZD\$18.7 million.

Figure 7.12 Marine exports 2010/11 to 2016/17, (\$m)

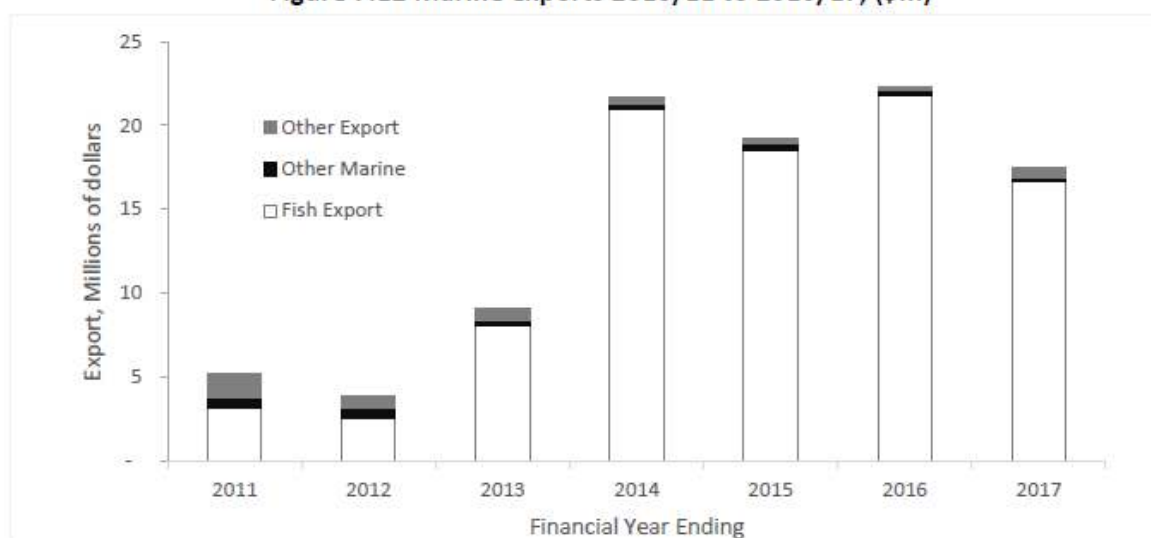


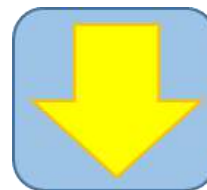
Figure: Marine exports 2011 to 2017 (Source: Budget book 1 2017/18, p64)

⁵⁶ 2016/17 amount, \$18.7M includes total marine exports at \$16.7M plus \$2M revenue from access (treaty) arrangements, licenses, fines and settlements; and the sale of catch quotas.

Revenue from purse seine fishery is likely to remain the largest source of marine and fish related revenue; with the Cook Islands allocated 1,250 fishing days by the calendar year since 2015 by the Western and Central Pacific Fisheries Commission. For the 2017 calendar year, the average price for a fishing day is expected to be between NZD\$11,500 to NZD\$13,500, depending on the exchange rates which affect the United States treaty (350 days committed) and European Union agreement (125 days)⁵⁷. Based on data for 2017 in comparison to previous years, this indicator has been assessed as 'of concern' with indicative signs of declining estimated revenue from this industry in the next year.

⁵⁷ Cook Islands Government Budget Book 1, 2017/18, p53.

Goal 13: Strengthen resilience to combat the impacts of climate change and natural disasters





This goal acknowledges the vulnerability of the Cook Islands to the impacts of climate change and natural disasters. The interim results for recognising the need to build resilience into people and infrastructure and to ensure an appropriate level of protection from cyclones are 'of concern' with more work needed to be done. The results for access to protection from cyclones are 'on track' though the northern group still has some vulnerabilities which will be addressed with the planned construction of cyclone shelters for Nassau, Rakahanga, and Penrhyn. However, lack of data on the resilience of public buildings and infrastructure built to appropriate standards to withstand cyclones has been assessed as 'off track' with no change from the previous year. This goal requires attention.




Indicator 13.1 Resilience index

Introduction

This indicator seeks to assess the overall resilience of the Cook Islands and its people using an index which considers economic, environmental, infrastructural, and social resilience.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result		-				
Economic resilience (Net debt)	4.2%	4.9%	6.0%		≤5%	

servicing to revenue)						
Date	2014/15	2015/16	2016/17			
Source	HYEFU 2016/17 & Economic Division Advice-MFEM					
Environmental resilience (Coral coverage)	27% average for Southern Group	26% Rarotonga	17% for six Southern Group Islands		Statistically significant improvement; or consecutive yrs of incr.	
Date	2013	2016	2017			
Source	Coral reef survey of Aitutaki, Manuae, Mitiaro, Takutea and Atiu in the southern Cook Islands 2013; Rarotonga fore reef community survey 2016; R2Rproject coral survey 2017					
Infrastructural resilience	Assetfinda established	n/a	n/a		>75%	
Source	CIIC Advice (2017)					
Social resilience	> 90% of resident population affiliated to a Christian church	n/a	n/a		>2 hrs/week community and church engagement	
Source	Census 2011					

Comments on methodology

This indicator includes four components that need to be averaged into one indicator:

1. Economic resilience (net debt servicing to revenue - also forms part of Indicator 16.6 Financial responsibility index)
2. Environmental resilience (as per Indicator 12.1 State of the reef)
3. Infrastructural resilience (as per Indicator 13.3 Percentage of public buildings and infrastructure built to hurricane strength standards)
4. Social resilience (as per indicator 14.2 community and church engagement).

The economic and environmental resilience components are further outlined under Indicator 16.6 and Indicator 12.1 respectively. As explained under Indicator 13.3, the data for the infrastructure component is not available for this report. The social resilience component requires information which is not currently available about community and church engagement. Information available from the Census 2016 will be considered to inform this indicator.

Analysis


Due to the gaps in the required information, no further analysis is provided. Based on the available information, this indicator has been assessed as 'of concern' with an upward trend. Information from Census 2016 will further inform this indicator.

Indicator 13.2 Percentage of population that have access to protection from category 3 or higher cyclones

Introduction

This indicator measures the percentage of the population that can be accommodated by designated cyclone shelters built to recommended standards. This recognises the vulnerability of the Cook Islands to cyclones and the need to ensure that the community has adequate protection.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	-	97.25%	(no change)		>90%	
Date	-	2016	2017			
Source	EMCI-OPM, ICI Strategic Plan, (Census 2016 tbc)					

Comments on methodology

There are no comments about the methodology.

Analysis

The table below identifies which islands have existing or planned cyclone shelters (based on the EMCI and ICI information), together with the percentage of the Cook Islands population on each island in 2017/18.

Island	Percentage population (Census 2016)	of Cyclone shelter(s)
Rarotonga	72.25	Yes
Aitutaki	11.36	Yes
Mangaia	3.31	Yes
Atiu	2.86	Yes
Mauke	1.94	Yes
Mitiaro	1.04	Yes
Manuae	0.00	n/a
Palmerston	0.38	Currently under construction
Pukapuka	2.85	Yes
Nassau	0.52	Construction planned for 2018-19
Manihiki	1.43	Yes

Island	Percentage population (Census 2016)	of Cyclone shelter(s)
Rakahanga	0.53	Construction planned for 2018-19
Penrhyn	1.52	Construction planned for 2019-20
Suwarrow	0.00	n/a

Table: Cyclone shelters by island including percentage of population

These results show that the Southern Group is adequately provided with cyclone shelters. The northern group has some vulnerabilities but there are plans to address these with the construction of cyclone shelters in Palmerston, Nassau, Rakahanga, and Penrhyn from 2019.

EMCI has provided a preliminary copy of the report which reviews and assesses 43 current safety shelters on Rarotonga⁵⁸. The report records that 19 safety shelters had been identified as being in a low risk location, and meeting three other criteria relating to shelter structure, human factors and other factors. These are classified to be suitable as a primary shelter. Seven other safety shelters were assessed to be in a medium risk location, and to meet one or two of the other criteria. These are classified to be suitable as a secondary shelter.⁵⁹ EMCI notes that there is work required to upgrade the various facilities.


The status of this indicator is 'on track' with a static (no change) trend.

Indicator 13.3 Percentage of public buildings and infrastructure built to hurricane strength standards

Introduction

This indicator assesses resilience by measuring the percentage of public buildings and infrastructure which have been built to appropriate standards to withstand cyclones.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	AssetFinda established	n/a	n/a		75%	
Date	2014	2016	2017			
Source	CIIC Advice					

⁵⁸ Critical Path Cooperation Cook Islands, 2017, Review of Safety Shelters on Rarotonga (draft report dated 22 August 2017).

⁵⁹ *ibid* pp8,9

Comments on methodology

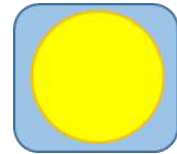
The data needed for this indicator is not currently available. The intended source is the Public Asset Register which is not currently complete or up to date. For future reporting there is a need to clarify what type of national infrastructure and public buildings will be assessed, and how it will be determined as 'fit for purpose'.

Analysis

In 2014 the Cook Islands Government invested in an asset management information system (AMIS) called AssetFinda to formally and comprehensively capture in one data base all fixed Public (or Crown) assets. To date the system's full potential has not been realized due to inadequate integration into individual agencies business as usual operations. Government effort is working towards improving integration support with government agencies that will allow for this indicator to be reported on.

The status of this indicator is assessed as 'off track' with no changes from previous year.

Goal 14: Preserve our heritage and history, protect our traditional knowledge, and develop our language, creative and cultural endeavours




This goal recognises the importance of the Cook Islands culture and its prevalence in all aspects of life. It seeks to promote Cook Islands languages and cultural engagement, and to archive and protect cultural heritage. The results for the Goal 14 indicators is 'of concern' with no changes from the previous year. The rates for Cook Island Maori literacy at NCEA level one are 'on track' with a positive trend, and have exceeded MOE targets. The Census 2011 information demonstrates a healthy level of engagement in cultural activities but subject to change once the Census 2016 information is made available. Digital archiving of cultural resources is in progress and the National Cultural Policy and Strategy will guide MOCDs efforts in achieving progress towards the goal.

Indicator 14.1 Cook Islands Maori literacy rates

Introduction

This indicator measures Cook Islands Maori literacy rates among students at year 11 (NCEA level 1). This recognises that language is a cornerstone of Cook Islands culture and identity.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	84% (NCEA level	90% (NCEA level	78% (NCEA level 1)		≥70%	

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
	1)	1)				
Date	2015	2016	2017			
Source	Education statistics: MOE					

Comments on methodology

The methodology has been modified from the NSDP to report on results at year 11 rather than year 9. This modification was recommended by MOE and aligns to the data collected for the annual educational statistics bulletin. Information has also been provided about the targets and actual results for grades four and eight to illustrate progress at various levels. It is noted that Maori is a compulsory subject at grades 4 and 8, but becomes an elective choice at year 11.

Analysis

The table below shows the results for 2015/16 to 2017/18 compared with the targets set by MOE. The targets for subsequent years are also identified.

Level	2015/16		2016/17		2017/18		2018/19	2019/20
	Target	Actual	Target	Actual	Target	Actual	Target	Target
Grade 4	65%	75%	68.75%	73%	72.5%	76%	76.25%	80%
Grade 8	70%	57%	73.75%	53%	77.5%	43%	81.25%	85%
Year 11 (NCEA L1)	70%	84%	70%	90%	72.5%	78%	75%	77.5%

Table: Maori literacy rates for Grades 4 and 8, and Year 11


In this second report, Maori literacy rates at grades 4 and year 11 continue to exceed the annual targets whilst grade eight outcomes remains a concern as it is below target and has continued to decrease from 2015/16 and 2017/18. This result is indicative of more schools placing emphasis on Cook Islands Maori in earlier years and as such the Year 8 data will be closely monitored to see the impact of language transition from Year 4. Based on the year 11 results, the status of this indicator has been assessed as 'on track', with a negative trend.

Indicator 14.2 Average engagement in cultural activities

Introduction

This indicator measures the average engagement of the population in cultural activities.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	-	n/a	n/a		>2 hrs/week	
Date	-	2016	2017			
Source	(Census 2016 tbc)					

Comments on methodology

The NSDP suggests using a labour force survey to collect information about engagement in cultural activities such as the arts, tradition and customs, community and church activities. As has been outlined elsewhere such a survey has not yet been undertaken. For this report, information remains the same and will be compared with the Census 2016 once this is available.

Analysis

The Census 2011 data indicates that the most active age group in cultural activities are those in the older working age group (40-54 years) in the following key activities that require years of training and commitment to reach this level of maturity – (41 per cent), choreography (39 per cent) and practising Maori medicine (39 per cent). The next most active age group are young people aged 15-24 years primarily engaged in performing arts (34 per cent), choreography (22 per cent) and carving (20 per cent). In addition, over 90 per cent of the residential population indicated having affiliations with church denominations, especially with the Cook Islands Christian Church and the Catholic Church.


The status for this indicator has been assessed as 'on track' but is subject to change once the Census 2016 information is available, this will allow participation rates to be compared across censuses.

Indicator 14.3 Number of Cook Island articles, artefacts, media and other cultural resources that are catalogued or developed, and digitally archived

Introduction

This indicator measures the progress in cataloguing, developing, and digitally archiving cultural resources.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	5,965 items	n/a (Baseline: 5,965 items to be digitized)	31% (Total items digitized: 1,841)		>3% annual increase in digital archives	
Date	2013	2016	2017			
Source	Ministry of Cultural Development (MOCD) Advise					

Comments on methodology

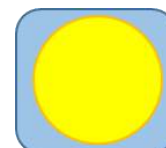
The NSDP (p61) describes the methodology for this indicator as being a simple count of the items digitally archived by MOCD.

Analysis

In 2013, about 5,965 Cook Islands items were sent to Nga Taonga Sound and Vision for digitizing. These items included Video (SVHS, VHS, Mini DVs, Film Reels) and audio (Vinyl Records, Mini Disks, Open Reel Tapes and Cassette Tapes). The total items digitized totalled 1,841 inclusive of 63 videos, 41 Audios and 1,743 items accessioned⁶⁰. This is a priority area that requires dedicated funding.

⁶⁰ Accessioned defined as “recording the addition of (a new item) to a library, museum, or other collection.” – *Oxford Dictionary*

Goal 15: Ensure a sustainable population engaged in development for Cook Islanders by Cook Islanders




The results for Goal 15 indicators give limited information about progress towards the goal, and several indicators have not been reported on hence the overall status will remain unchanged but 'of concern' until more data is available. Loss of population continues to be an issue in the Pa Enua, but the resident population in Rarotonga has increased by 2 per cent (Census 2016). Past census show whilst there is steady outward migration of Cook Islands Maori and part Cook Islands Maori, there is a steady in-ward migration of foreign persons into the Cook Islands. A population policy will need to be developed to ensure a sustainable population engaged in development for Cook Islanders for Cook Islanders and also manage the growing foreign migration into the Cook Islands. The Census 2016 result is not yet available to compare with Census 2011. Status of voter turnout has not changed from the last Report but subject to change in the 2018 General Election.









Indicator 15.1 Resident population of Cook Islanders

Introduction

This indicator measures the number of Cook Islanders that are resident in the Cook Islands and acknowledges the challenges that occur when there is population decline.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	-1.13%	(no change)	(no change)		>1% annual increase, or consecutive yrs of incr.	

Resident population of Cook Island Maori (including part Cook Island Maori)	8933 (84%) Rarotonga	n/a	n/a		as above	
	3174 (96%) Sthn islands	n/a	n/a		as above	
	1078 (97%) Nthn islands	n/a	n/a		as above	
	13185 (88%) Cook Islands	n/a	n/a		as above	
Date	2011	2016				
Source	Census 2011					
Resident population (total resident and % change since 2011)	10,572 Rarotonga	10,767 (2% change) Rarotonga	n/a		>1% annual increase, or consecutive yrs of incr.	
	3,290 Sthn Islands	3057 (-7% change) Sthn islands	n/a		as above	
	1,112 Nthn islands	1,078 (-3% change) Nthn islands	n/a		as above	
	14,974 Cook Islands	14,902 (-0.5% change) Cook Islands	n/a		as above	
Date	2011	2016(p)	2017			
Source	Census 2016 (preliminary results)					

Comments on methodology

Information has been sourced from the Census about both of the following:

- the number of Cook Island Maori resident in the Cook Islands
- the number of Cook Island residents.

Both sets of data are useful for this goal. While the goal focuses on 'development for Cook Islanders by Cook Islanders', the description of the indicator refers to any community or population being reliant on its population to provide a market, services and support to each other. It is therefore important to also consider the contribution of residents who are not Cook Islands Maori to the economy and the community.

Provisional results from the Census 2016 provide information about the total resident population but information about the ethnic makeup of that population is not yet available. Previous censuses have been used to show the resident population by ethnic origin.

The ability of a population to support a sustainable community and economy cannot be determined by absolute numbers. Other demographic characteristics need to be considered

including age, sex, education, and employment status. Information from the Census 2016 will provide a more comprehensive overview of population demographics.

Analysis

Ethnic composition

The table below shows the changes in ethnic composition as a percentage. Between 2001 and 2011 the proportion of the population identifying as Cook Island or part Cook Island Maori declined from 93 per cent of the population to 88 per cent of the population with the remaining of foreign descent. Most of the Non-Cook Islands Maori residents were located on Rarotonga and an estimated seven per cent were in the Pa Enua.⁶¹ This should be compared with the information from the Census 2016 once it is available.

Region / Islands	Cook Island Maori & Part Cook Island Maori residents (%, Number)				%age Other ethnic origin Residents (%, Number)			
	2001	2006	2011	2016	2001	2006	2011	2016
Rarotonga	91%	88%	84%	n/a	9%	12%	16%	n/a
Southern Group	98%	97%	96%	n/a	2%	3%	4%	n/a
Northern group	98%	98%	97%	n/a	2%	2%	3%	n/a
Cook Islands	93%	91%	88%	n/a	7%	9%	12%	n/a
Rarotonga	8,562	9,037	8,933	n/a	862	1,189	1,639	n/a
Southern Group	3,693	3,603	3,174	n/a	84	128	116	n/a
Northern group	1,754	1,337	1,078	n/a	35	32	34	n/a
Cook Islands	14,009	13,977	13,185	n/a	981	1,349	1,789	n/a

Table: Resident population by ethnic origin (Source: Census 2001, 2006, and 2011)

It is clear from form earlier census data that Cook Island Maori (inclusive of Part Cook Island Maori) resident numbers are declining at an increasing rate with a steady growth of Non-Cook Islands Maori residents. The table below shows the estimated average annual percentage change in the past decade.

Region / Islands	Cook Island Maori & Part Cook Island Maori			Other ethnic origin		
	2006	2011	2016	2006	2011	2016
Rarotonga	1.11	(0.23)	n/a	7.59	7.57	n/a
Southern Group	(0.49)	(2.38)	n/a	10.48	(1.88)	n/a
Northern group	(4.75)	(3.87)	n/a	(1.71)	1.25	n/a

⁶¹ MFEM, Cook Islands 2011 Census of Population and Dwellings, Main Report, p12

Cook Islands	(0.05)	(1.13)	n/a	7.50	6.52	n/a
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Table: Estimated average annual %age change (Source: Census 2001, 2006, and 2011)

This indicator has been assessed as 'of concern' with a downward trend, but this is subject to change once Census 2016 and HIES 2016 data is available.

Additional information - Resident population

As noted above, as well as knowing the numbers of Cook Island Maori resident in the Cook Islands, it is important to know the total number of residents of all ethnicities. The table below compares the resident population by location between 2011 and 2016. The 2016 figures are preliminary results from the Census 2016.

Location	2011	2016	# change	% change
Rarotonga	10,572	10,767	195	2%
Southern islands	3,290	3,057	-233	-7%
Aitutaki	1,771	1,693	-78	-4%
Mangaia	562	494	-68	-12%
Atiu	468	426	-42	-9%
Mauke	300	289	-11	-4%
Mitiaro	189	155	-34	-18%
Northern islands	1,112	1,078	-34	-3%
Palmerston	60	57	-3	-5%
Pukapuka	451	425	-26	-6%
Nassau	73	78	5	7%
Manihiki	238	213	-25	-11%
Rakahanga	77	79	2	3%
Penrhyn	213	226	13	6%
COOK ISLANDS	14,974	14,902	-72	-0.5%

Table: Resident population 2011 and 2016 by location (Source: NSO-MFEM)


There has been a slight overall decline in the Cook Islands resident population (-0.5 per cent) between 2011 and 2016. In that time period, Rarotonga had a two per cent increase; the southern islands (excluding Rarotonga) had a seven per cent decline; and the northern islands a three per cent decline.

Indicator 15.2 Percentage of Cook Islands investment (versus foreign investment) in the Cook Islands

Introduction

This indicator measures the percentage of investment in the country which is by Cook Islanders as compared with direct foreign investment. This recognises the importance of Cook Island ownership of the country's assets and equity in the economy.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	-	n/a	n/a		Not determined in NSDP	n/a 
Date	-	2016	2017			
Source	-					

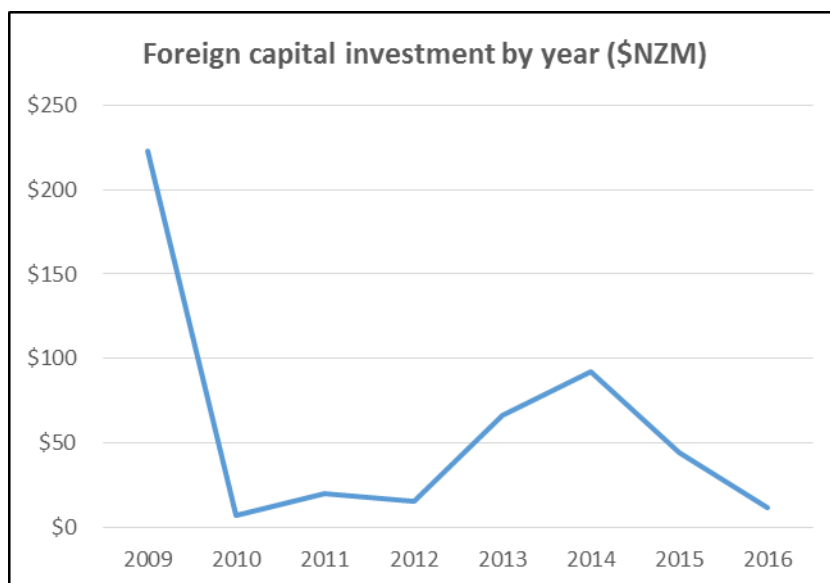
Comments on methodology

The methodology described in the NSDP requires a study to be undertaken to determine the level of foreign direct investment and local investment in the Cook Islands and estimate the percentage of assets and businesses owned by non-Cook Islanders. This information is currently not available. In the interim, BTIB has provided information about the total value of capital investment approved for foreign enterprises per year and per sector. BTIB has advised as follows:

- Foreign investment in the Cook Islands is regulated by the Development Investment Act 1995-96 and the associated Investment Code 2003
- Any business which has over 33 per cent non-Cook Islander shareholding is required to register with BTIB but there may be some non-compliance.
- Applications for foreign investment are considered by BTIB. If approved, the business then has to file annual returns with BTIB.
- As for local investments there are no records held by any authority except for tax records of registered local tax payers.

Analysis

The information provided by BTIB about foreign capital investment by year and economic sector could not be used to measure this indicator in the manner described in the NSDP. However, the data did provide an overview of the scale and type of foreign investment occurring. The level of foreign investment recorded by BTIB in 2016, was NZD\$11.87M, of which NZD\$6.58M was in the tourism sector. The table below shows levels of foreign investment by year since 2009. However, BTIB does advise that the data from earlier years is less reliable.



Source: BTIB

The issue of foreign investment has been considered in more detail in the following three reports:

- The Cook Islands - stronger investment climate for sustainable growth. ADB 2015
- Cook Islands Tourism Investment Strategy (draft August 2016). Prepared for the Cook Islands Tourism Corporation by The Stafford Group
- Cook Islands Trade Policy Framework. Cook Islands Government 2015


These documents include recommendations to review the role of foreign investment in the economy, its benefits and costs, and how it should be regulated. In its 2017/18 Business Plan, BTIB identified its intention to review the Development Investment Act and the associated Code and Regulations. One of the outcomes sought in the Business Plan, was to increase participation by Cook Islanders in joint ventures. The aim for 2017/18 was for 30 per cent of the total foreign enterprises registered to have a Cook Islander as a business partner.







Indicator 15.3 Quality of life index

Introduction

This indicator assesses quality of life using an index which takes into account median disposable income, leisure time, cultural engagement, youth wellbeing, and job satisfaction.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result						

Quality of Life index	n/a	n/a	n/a		≥60%	
Median disposable income	-NZD\$1027	NZD\$84	NZD\$962		>NZD\$2,500	
Date	2015	2016	2017			
Source	Annual income tax data: RMD-MFEM; & minimum living level from NSO-MFEM					
Leisure time	n/a	n/a	n/a		38.2 hrs pwk	
Cultural engagement	n/a	n/a	n/a		>2hrs pwk	
Youth wellbeing index	n/a	n/a	n/a		3-5 average score	
Job satisfaction	77% (degree of satisfaction)	77% (degree of satisfaction)	79% (degree of satisfaction)		>60%	
Date	2015	2016	2017			
Source	Public Service Employee Engagement Survey: OPSC					

Comments on methodology

This indicator includes five components that need to be averaged into one indicator:

1. Disposable income (median income less minimum cost of living)
2. Leisure time (median hours of work per week)
3. Cultural engagement (as per Indicator 14.2 Average engagement in cultural activities)
4. Youth wellbeing (as per Indicator 9.2 Youth wellbeing index)
5. Job satisfaction (as per Indicator 2.5 Employee wellbeing index).

Median disposable income has been determined by subtracting the minimum liveable income calculated in Indicator 1.1 from the real median income calculated in Indicator 2.1. The related methodologies and limitations are set out in Indicator 1.1 and 2.1.

The leisure time component depends on obtaining information from the proposed labour force survey. As has been previously explained, such a survey has not yet been undertaken. Information available from the Census 2011 has been considered but it does not provide the level of detail required.

The cultural engagement and youth wellbeing information required from Indicators 9.2 and 14.2, is not available for this report. The methodology used for the job satisfaction component is outlined under Indicator 2.5.

Analysis

The table below shows that the median disposable income for 2016 was NZD\$84, which was an improvement from the negative figures for the previous two years. This result is 'of

concern' though the trend is positive. However, there are limitations in the data used to calculate real median income and minimum liveable income. The calculation of real median income relies on income tax data which excludes some of the lowest income earners (for which there are no tax records), and which includes fewer taxpayers in the 2016 data pending the filing and processing of outstanding income tax returns. The results obtained for median disposable income should be considered further once more comprehensive data is available from the HIES 2016 and the Census 2016.

Description	2014	2015	2016	2017
Real median income	NZD\$18,219	NZD\$19,678	NZD\$20,645	NZD\$21,504
Minimum liveable income	NZD\$20,229	NZD\$20,705	NZD\$20,561	NZD\$20,542
Median disposable income	-NZD\$2010	-NZD\$1027	NZD\$84	NZD\$962

Table: Real median income, minimum liveable income and median disposable income (Source: Economic Division Advice-MFEM)

The analysis for the job satisfaction component is outlined under Indicator 2.5.


No conclusion is made about the overall status of this index, due to the gaps in information.

Indicator 15.4 Voter turnout

Introduction

This indicator measures voter turnout (or voting rate) which is the total number of voters as a percentage of total registered voters. Voter turnout rates help to show how people feel about Government. This includes the confidence they have in political institutions, the importance they attach to them, and whether they feel their participation can make a difference.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	80.5%	(no change)	(no change)	-	≥75%	
Date	2014 General Election	n/a	n/a	2018 General Election		
Source	NSO-MFEM and Chief Electoral Officer					

Comments on methodology

This indicator has been modified from the methodology described in the NSDP which envisaged using a moving average combining participation rates from the latest General and Local Government elections. NSO-MFEM advised against combining information from Local

Government and parliamentary elections due to the variations in voter eligibility and coverage.

Analysis

The voter turnout for the 2014 parliamentary general election was 80.5 per cent of those registered to vote. The Chief Electoral Officer considers this a high turnout, since voting is not compulsory and the population is very mobile.

The table below shows the voter turnout rates for the last three general elections. The 2014 turnout is 2.5 percentage points lower than highest turnout which was in 2006.

General Year	Election	Voter turnout
2018		n/a
2014		80.5%
2010		82.0%
2006		83.0%

Table: Voter turnout for general elections, 2006, 2010 and 2014 (Source: Chief Electoral Officer)


The NSDP suggests that the voter turnout needs to be over 90 per cent to be 'on track'. However, few countries can obtain such a high voter turnout without introducing compulsory voting. Based on the advice of the Chief Electoral Officer, the status of this indicator has been assessed as 'on track', and the 'on track' target has been amended to 75 per cent or over.

Indicator 15.5 Number of applications received for research and scholarship in the Cook Islands

Introduction

This indicator measures the number of research applications received annually by the Cook Islands Research Committee. This recognises the value of improving the amount of research being done on the Cook Islands.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	25 -	28 12% change Year over Year	44 57% change Year over Year		>5% increase, or consecutive yrs of incr.	
Date	2015	2016	2017			
Source	Research Register (CPPO-OPM)					

Comments on methodology

CPPO manages the Research Register that identifies the number of research applications received by the Committee. Although this approach provides a quantitative assessment it does not take into account the quality of the particular applications. In addition, it is likely that there is research undertaken in country without seeking approval from the Committee, so awareness needs to be strengthened. It is also envisaged that going into the future there will be a prioritisation of specific research areas that will be driven by the country priority areas.

Analysis

The following table sets out the number of research permits received:

Year	Research permits received	Annual change (%)
2017	44	57%
2016	28	12%
2015	25	(26%) ⁶²

Table: Number of research permits received by the Cook Islands Research Committee from (Source: CPPO-OPM)

The number of applications received in 2017 increased by 57% in comparison to 2016 - i.e. a 12 per cent increase. The permits were primarily for research in marine, social, education, cultural and climate change matters.

It is difficult to draw any meaningful conclusions from this data without a national research agenda to guide this process. However, the status of this indicator has been assessed as 'on track' with a positive trend.

⁶² 34 research permits received in 2014

Goal 16: Promote a peaceful and just society and practice good governance with transparency and accountability



To successfully achieve its potential as a nation, the Cook Islands needs to have a peaceful and just society with effective governance as well as a robust justice system that allows people to be safe and lead productive lives. The overall results for the Goal 16 indicators progress towards the goal is 'of concern' with a negative trend due to the limited data for some indicators, however some improvements are being made. The indicator measuring access to the justice system is 'off concern' with baseline data provided for criminal cases resolved. However, data for civil, land, complaints resolved, have not been reported on. In the absence of data from previous years, it is difficult to draw conclusions from the information provided for the indicator about domestic violence rates and is assessed as 'of concern'. The indicator measuring motor vehicle accidents resulting from reckless behaviour continues to be 'off track'.






The average performance of Government Ministries is 'of concern' when compared with previous years. Financial governance is generally within the agreed parameters and the overall results for the financial responsibility index are 'on track' however there are some signs of regression with the capital underspend and the growing proportion of tax revenue to GDP. Two fiscal ratios did not meet the Government benchmarks, and one of these exceeded the benchmark by only a small amount. The low number of Parliamentary sitting days means that this indicator is 'off track' but improving compared to the previous years.

Indicator 16.1 Justice Accessibility index

Introduction

This indicator looks to measure access to the justice system. This recognises the need to have an accessible and effective justice system which progresses matters in a fair and timely manner.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result						
	Criminal – n/a	n/a	Criminal – 4.63 mths		<6 months median time to resolve cases	
	Civil – n/a		Civil – n/a			
	Land – n/a		Land – n/a			
	Complaints – n/a		Complaints – n/a		>85% of complaints	
Date	-	2016	2017			
Source	Registrar advice: MOJ					

Comments on methodology

This indicator is intended to measure access to justice based on four components of the justice system:

- Criminal (median time to resolve criminal cases)
- Civil (median time to resolve civil cases)
- Land (median time to resolve land cases)
- Court and legal processes (percentage of complaints that were received and how many went into the criminal justice system and onto Court).

The Ministry of Justice (MOJ) provided information for the number of criminal cases dealt with on a monthly basis for the 2017 calendar year. The criminal data is collected from the Criminal database with each case individually checked (through the database and paper record) whereby cases 'disposed' will require manual entry of 'disposed' date. The time variance between start and disposal date is calculated for which the median time variance is taken from this. 'Disposed' is the terminology used by MOJ when a criminal case comes to an end; NSDP defines this as 'resolved'.

Analysis

The table below shows the total number of criminal charges (i.e. information) that has been registered on the criminal database for the 2017 calendar year.

2017 (January to December)	Number
Total No of Information filed	666
Total No of Information disposed	578
Total No. of Information pending	88
Median days for cases disposed/'resolved'	92.53 days
Median months for cases disposed/'resolved'	4.63 months

Table: Criminal data, 2017 (source: MOJ Criminal database)

In 2017, 666 criminal charges were filed with 578 'disposed' in the same period. The results for criminal cases in 2017 sets the baseline for the median time to dispose these cases at 4.63 months. This component has achieved its target for the turnover of 'disposed' cases should be less than six months. For court cases (i.e. criminal, civil and land) that are more serious, more complicated, and more difficult take a longer amount of time to resolve than the less serious, less complicated and less difficult cases. This suggests that the Court general adhere to a norm of proportionality that states that the amount of attention that each case receives should be in proportion to the amount that it warrants. MOJ advised that cases disposed less than 50 days were mainly excess breath alcohol charges and minor traffic charges, whereas cases disposed greater than 50 days were for more serious cases such as theft, threaten to kill, assaults, sexual violation, reckless driving causing injury; and trials before Justice of Peace and/or Judge Courts.

The status of this indicator has been assessed as 'of concern' with a static (no change) trend. This status reflects both the lack of data for the three remaining components, and the widely recognised and ongoing problems with land cases. However work especially in the land section of MOJ is expected to progress with the improved capacity of stenographers to update Court records in the coming year.

Indicator 16.2 Rates of domestic violence




SDG Indicator 5.2.1: Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age

Introduction

This indicator measures the annual incidence of reported domestic violence.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	70 out of 232 (30%) domestic incidents reported to Police were of a violent nature	(no change)	(no change)		>2% annual decrease, or consecutive yrs of decr.	
Date	2015	2016	2017			
Source	Cook Islands Police					

Comments on methodology

This indicator considers reported domestic violence⁶³ incidents on an annual basis from Police reports. The following limitations have been identified with the data provided by the Police:

- most of the data is from Rarotonga, with minimal information from the Pa Enua
- inconsistencies in data entry and updating e.g. inconsistent identification of age, date of birth, causes and offenders
- only broad identification of the causes leading to the incident. Police are considering identifying more specific causes for the next indicator report
- information about emotional, mental or financial abuse is not captured. This type of information may be captured by support agencies such as NGOs, church groups, and counsellors during private sessions
- lack of information about follow up programmes such as counselling, and anger management programmes to track the progress of repeat victims.

The SDG Indicator 5.2.1 measures the proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age; and is relatively aligned to this NSDP indicator. The Census 2016 and HIES 2016 will provide additional information on this indicator once it is made available.

Analysis

Reporting is static for this indicator in 2017. The baseline data set in 2015 indicates 30 per cent of (70 out 232) domestic incidents reported to the Police were considered to be of a violent nature, specifically physical violence. In most cases victims of domestic violence are women with 45 per cent involved people in a marriage or partner relationship. Fifty seven per cent of violent incidents were against women, and 71 per cent of offenders were men. Approximately 28 per cent of violent offences were committed by repeat offenders.

It is difficult to estimate the prevalence of domestic violence in the Cook Islands, as there is no reliable and consistent data available. Anecdotal evidence indicates that domestic violence is widespread, but highly under-reported.

It is however noted that an initial increase in reported cases of domestic violence to the Police can show that victims of domestic violence are more aware of their rights, have greater trust in the Police and judiciary system, and that there is less tolerance in society of for domestic violence. The Family Protection and Support Act 2017 (effective as of 1st December 2017) is a significant milestone to ensure the safety and protection of adults and children in domestic relationships. The desired long term outcome is the reduction in cases of domestic violence; but the short term outcome of increased reporting can be positive.

⁶³ 'Domestic violence' is now defined in s91 of the Family Protection and Support Act 2017. Related terms are defined in ss92-96 of that Act.


The status of this indicator has been assessed as 'off track' with a static ((no change)) trend due to unavailable data at the time of this report. Data from subsequent years will indicate the trend.

Indicator 16.3 Rate of motor vehicle accidents (from reckless behaviour)

Introduction

This indicator measures the extent to which motor vehicle accidents are caused by reckless behaviour such as driving under the influence of alcohol or drugs, or speeding.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	41.6% Rarotonga only.	(no change)	(no change)		>2% annual decrease, or consecutive years of decrease	
Date	2015	2016	2017			
Source	Cook Islands Police					

Comments on methodology

The data used for this indicator relates to all motor vehicle crashes reported to Police on Rarotonga on an annual basis. There are no records of motor vehicle crashes in the Pa Enua. There are some limitations in the data due to inconsistencies and inaccuracies in data entry and updating, such as inconsistent identification of age, date of birth, gender, causes, and locations. The Police are improving their systems to ensure that more consistent and accurate data will be provided for the next indicator report.

Analysis

Reporting is static in this year for this indicator. The baseline data set in 2015 indicates 41.6 per cent (80 out of 192) of motor vehicle crashes reported to the Police were caused by reckless behaviour, primarily driving under the influence of drink and drugs.

Of these 80 motor vehicle crashes caused by reckless behaviour:

- 66 per cent of offenders were male, and 43 per cent were aged 16 to 26 years
- 71 per cent of crashes occurred within the Te Au O Tonga Vaka
- 3 per cent of crashes were fatal, and 16 per cent involved serious injuries
- 74 per cent of crashes involved a motorcycle


The high rate of motor vehicle crashes from reckless behaviour results in the status of this indicator being 'off track' with a static (no change) trend due to unavailable data at the time of this report. . Data from subsequent years will indicate the trend.

Indicator 16.4 Reoffending rates

Introduction

This indicator measures the rate of reoffending of previously convicted criminals. This is to track the effectiveness of the correction system and support services at rehabilitating offenders and successfully reintegrating them into the wider community.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result		-			(yet to be determined)	
Date		-				
Source	-					

Comments on methodology

For the purposes of this indicator, reoffending is considered to occur when an offender commits a further chargeable offence within a 12 month period. This would be based on all offences registered by the Police each year.

CPPO-OPM has held discussions with Police and MOJ about providing this information but it is not available this year. Currently there are inconsistencies in the way data is collected and recorded by the two agencies. Both agencies are working to improve the quality of their data including better recording of the progress of an offence from initial reporting, charging, and resolution through the court system as well as correct recording of names to mitigate the use of aliases.

Analysis


This indicator has not been reported on for Year Two. The status of this indicator has been assessed 'off track' and static due to no available data forthcoming at the time of this report.

Indicator 16.5 Average performance of Government ministries

Introduction

This indicator measures the average performance of the public service as determined by the Public Service Commissioner's Annual Report ('PSC Report') to Parliament.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	97% achievement of 68 outputs	100% achievement for all 67 outputs	89% of key deliverables across 62 outputs met expectations and above		Performance meets expectation	
Date	2014/15	2015/16	2016/17			
Source	Public Service Commissioner's Annual Report 2016					

Comments on methodology

The PSC Report for 2017 does not present results achieved by all of the public sector. It includes only the 13 Public Service Agencies⁶⁴ that report annually to OPSC. It does not include the 10 Island Governments (currently being managed under the Pa Enua Governance-OPM), the 15 Crown and Statutory Agencies, or the six State Owned Enterprises because data was not received from these Agencies. The 2016/17 PSC Report to Parliament showed a slight amendment to the recording of the public service performance which includes the measure of total key deliverables achieved (rating: above expectation, met expectation, need improvement) across the total outputs for the 13 Public Service Agencies.

Analysis

The PSC Report 2017 identified a total of 563 key deliverables monitored across 62 outputs and 13 public service agencies. A total of 68 per cent of the key deliverables were achieved with 21 per cent meeting expectations and 11 per cent that needed improvement. The total budget appropriation to the public service agencies totalled at NZD\$142M with 80 per cent of this funded through the national budget, and the rest through official development assistance (ODA). The majority of ODA funding was appropriated to infrastructure projects (e.g. Te Mato Vai, Renewable Energy and Sanitation upgrade). There was approximately 31 per cent of budget savings within this period, mainly due to infrastructure or capital underspend.

The Report highlighted concerns with capacity and systematic constraints of the public service agencies to deliver on organisational and national goals. There were difficulties in recruiting and retaining suitable employees, particularly in specialist positions requiring high level skills. This had inhibited efforts in addressing systematic gaps between the national planning, budgetary and performance accountability.

The Public Sector Strategy 2016-2025 provides the framework to promote good governance through transformed public servants, and better systems and structures. A key milestone was the introduction of a Government-wide Performance Management Policy to ensure

⁶⁴ 11 Ministries, OPM and OPSC. The public service is part of the broader public sector.

consistency in the performance ratings of employees across not only the public service, but for the broader public sector.

MOE and MOH remains the top two performing Ministries in 2016/17 with five Ministries meeting expectations and six in development. The PSC Report 2017 identified seven Ministries that have strategic plans in place, aligned to the national sustainable development goals and relevant legislative mandates. In addition, capacity assessments were also carried out on the Ministry of Justice, Ministry of Transport, Ministry of Cultural Development and Infrastructure Cook Islands to identify policy, legislative, organisational management and service delivery gaps. Plans to address these gaps were identified and will be addressed in the next financial year.


The status of this indicator is assessed as 'of concern' with a negative trend with the lack of a systematic approach and compliance for monitoring and reporting to Parliament the whole of the Public sector performance; especially of the 10 Island Governments and the 15 crown or statutory agencies.

Indicator 16.6 Financial responsibility index

Introduction

This indicator assesses the Government's financial management using a financial responsibility index consisting of eight financial responsibility ratios used by MFEM. This recognises the need for the Government to manage public funds in a prudent and financially sustainable manner.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	Six of eight fiscal responsibility ratios met	Six of eight fiscal responsibility ratios met	Five of eight fiscal responsibility ratios met		Eight fiscal responsibility ratios are met	
Date	2015/16	2016/17	2017/18			
Source	HYEFU and Economic Division Advice-MFEM					

Comments on methodology

This indicator has eight components that the NSDP suggests should be averaged into one index:





- Tax Revenue to GDP
- Personnel Expenditure to Revenue
- Personnel Expenditure to Structural Revenue (exclude grants, withholding tax, seabed and fishing revenue)
- Net Operating Balance
- Net Debt Servicing to Revenue

- f. Net Debt Servicing to Structural Revenue
- g. Overall Budget Balance to GDP
- h. Net Debt to GDP.

The Government has set benchmarks for all these components. These have been used for identifying the status. The targets set in the NSDP vary slightly from the Government benchmarks. However, the Government benchmarks have been preferred in this indicator report as this is consistent with the reporting in the budget process.

Analysis

The table below provides the figures for eight fiscal ratios. The second column identifies the benchmarks set by the Government in the 2016/17 budget.

Fiscal ratio	2015/16 Actual	2016/17 Actual	2017/18 Actual	Benchmark ⁶⁵ (2016/17 budget)	Current status & trend
Tax Revenue to GDP	27.2	29.6	32.4	≤ 25%	
Personnel Expenditure to Revenue (Personnel as percentage of Total Revenue)	33.9	31.2	30.8	≤ 40%	
Personnel Expenditure to Structural Revenue (Personnel as a percentage of Structural Revenue)	40.4	38.8	36.4	≤ 45%	
Net Operating Balance ⁶⁶ NZD\$m	NZD\$22.6M (5.4 as a percentage of GDP ⁶⁷)	NZD\$34.4M (8.1 as a percentage of GDP)	NZD\$29m (6.7% of GDP)	Maintain an operating surplus 0 (as a percentage of GDP)	

⁶⁵ These are the Fiscal Responsibility Ratios set by Government. These are derived from the 1998 Manila Agreement, facilitated by the ADB, and signed by the governments of Italy, Nauru and New Zealand as a condition of debt restructuring.

⁶⁶ For this fiscal ratio, expenditure from development partners has not been included. The Net Operating Balance information has been taken from the Government's fiscal update, rather than from the Government Financial Statistics (as this includes development partner expenditure).

⁶⁷ Nominal GDP: NZD\$427.9M (2015/16), NZD\$422.3M (2016/17)





Fiscal ratio	2015/16 Actual	2016/17 Actual	2017/18 Actual	Benchmark ⁶⁵ (2016/17 budget)	Current status & trend
Net Debt Servicing to Revenue (Net Debt Servicing as a percentage of Total Revenue)	4.9	4.2	5.8	≤ 5%	
Net Debt Servicing to Structural Revenue (Net Debt Servicing as a percentage of Structural Revenue)	5.8	5.2	6.8	≤ 7%	
Overall budget balance to GDP (Fiscal Balance as a percentage of GDP)	4.3	7.4	4.7	within -/+2%	
Net Debt to GDP (Debt as percentage of GDP)	18.3	18.1	19.6	≤ 30 and 35% ⁶⁸	

Table: Fiscal ratios for 2014/15 to 2016/17 (compared with benchmark) (Source: HYEPU, Economic Division Advice-MFEM)

The benchmarks, or fiscal responsibility ratios, were set to assist Government in maintaining strong financial management in accordance with the MFEM Act 1995-96. From 2014/15 through to 2016/17, the only fiscal ratios that did not meet the benchmarks set by the Government were Tax revenue to GDP, Net debt servicing to revenue, and Fiscal balance as a percentage of GDP.

The 25 per cent benchmark for the Tax Revenue to GDP is exceeded by a margin from 27.4 per cent in 2014/15, 27.2 per cent in 2015/16, and 29.6 per cent in 2016/17). The Government aims to keep Tax Revenue to GDP around the 25 per cent benchmark to ensure that it is not crowding out the private sector (by overly reducing after tax income / profits which can detract from economic growth) and to prevent over-reliance on tax revenue.

Net debt servicing to revenue exceeded the five per cent benchmark. This needs to be managed to ensure the country is able to service its national debt.

The benchmarks (within -/+2 per cent) for Fiscal Balance to GDP were not met, with a greater deficit (-4.4 per cent) in 2014/15, and a greater surplus in 2015/16 (+4.3 per cent) and 2016/17 (+7.4 per cent). This is attributed to underspend in infrastructure projects and the growing tourism numbers. The Government aims to keep the fiscal balance above the

⁶⁸ The Government is committed to staying within the 30% debt target so that there is at least 5% of GDP available in debt financing if there is a major natural or economic disaster before the Government breaches the voluntary debt limit.

benchmark to ensure that it is not spending beyond its means. Fiscal deficits must be funded by existing cash reserves or debt, which decreases the Government's flexibility in reacting to an economic or natural disaster.


Indicator 16.6, the fiscal responsibility index, is to be determined by averaging the results of the eight components, or fiscal ratios. As noted above, only two ratios did not meet the Government benchmarks, and one of these exceeded the benchmark by a small amount. Overall the status of the indicator has been assessed as 'on track' with a downward trend for the 2016/17 financial year.

Indicator 16.7 Number of parliamentary sitting days

Introduction

This indicator measures the number of sitting days that parliament meets annually.

Results

	Earlier year	Year 1	Year 2	Year 3	Target	Current status & trend
Result	10 sitting days	11 sitting days	26 sitting days		>80 sitting days ⁶⁹	
Date	2015	2016	2017			
Source	Parliament meetings register: Parliamentary Services					

Comments on methodology

The NSDP suggests that Parliament should sit more than 80 days annually for this indicator to be 'on track'. Article 29 of the Cook Islands Constitution 1965 requires Parliament to meet at least once every 12 months.

Parliamentary Services has advised that a sitting is normally for four hours unless:

1. An extension is requested to complete the debate or discussion. The extension (up to an hour or two) will then be included as part of one sitting
2. A suspension call is made when the meeting is continued at another time. This is still considered as part of one sitting.

Where a sitting has been adjourned, then the next meeting will be considered as a new sitting.

⁶⁹ Target for this indicator to be revised for the next indicator report.

Analysis

Parliament is currently in its 48th session, and has met seven times since the General Election in 2014. The table below sets out information about the number of sitting days between 2014 and 2017.

Meeting	Date	Number of sitting days	Calendar Year
First	8 Oct 2014	1	
Second	28 Oct to 6 Nov 2014	7	2014: 8
Third	10 to 19 June 2015	8	
Fourth	14 to 15 Dec 2015	2	2015:10
Fifth	7 to 17 June 2016	9	
Sixth	12 to 13 Sept 2016	2	2016:11
Seventh	19 June to 12 July 2017	18	
Eighth	27 Nov to 6 Dec 2017	8	2017:26
Total	8 Oct 2014 to 12 July 2017	55	55

Table: Number of sitting days for Parliament since 2014 election (Source: Parliamentary Services)

This shows of a steady increase of Parliamentary sitting days from eight in 2014 to 11 in 2016, and then more than doubled the sitting days in 2017 to 26. Parliamentary Services advised that as well as sittings, part of the work of Members of Parliament is taking part in Select Committee meetings, public consultations, seminars and workshops.

The role of the Select Committee is to receive a Bill or Issue after it has been tabled at Parliament and to review, consult and report its findings at the next sitting of Parliament. In 2017, there were eight Select Committee meetings and public consultations conducted on Rarotonga and nine Select Committee consultations run in the Pa Enua (Aitutaki 2; Mangaia 4; Mauke 1; Mitiaro 1; Atiu 1). A total of seven Reports on the investigations of the Public Accounts Committee into maladministration incidents in Government Agencies were tabled in Parliament.

While it is desirable for the Cook Islands Parliament to meet more regularly, there are financial constraints due to the high cost of transporting Members of Parliament from the Pa Enua to Rarotonga for Parliamentary sittings. However, the steady increase of sittings is encouraging and provides the public with confidence in Parliament's role in ensuring accountability, participation and transparency in Government.

The status of this indicator has been assessed as "off track" but improving with the increase of Parliamentary sitting days.

Conclusion

Production of this Report highlights some good progress but also considerable remaining challenges for the Cook Islands.











The report also highlights that despite our ongoing challenges and limitations we have significant potential and opportunities for accelerating development in the Cook Islands through our Cook Islands specific know how, resilience, and our ability to adapt to changing situations

As is evidenced by this second iteration of the NSDP Indicator report, the NSDP requires the integration and balancing of economic, socio-cultural and environmental considerations that best serve the public interest of current and future generations. The 16 national sustainable development goals underpinned by the 66 national indicators, is a policy guide to implement positive change.








This evidence base has been and will continue to influence the annual Budget Policy Statements for prioritizing annual Budget Appropriations. It is envisioned that this Report will seamlessly feed into the Medium Term Budgetary Framework which is currently being developed and will be implemented in the 2019/2020 Budget round.

Collaborative partnerships need to be strengthened if we are to succeed in achieving our national goals. Working together with stakeholders (i.e. government agencies, private sector, tapere (village) communities on all islands, Cook Islanders living overseas, NGOs, donor partners, the media and the general public), bring wide and varying capacities to supporting our development process.











Appendix I: Quick Reference of Summary Goals and Indicators by status and trends

#	Goals/Indicators	Year 1 (2016) Results	Year 2 (2017) Results	NSDP Target	NSDP Status /Trend
1.0	Goal 1: Improve welfare, reduce inequity and economic hardship				
1.1	Percentage of people under minimum liveable income	14% NZD20,561	6% NZD20,542	<15%	
1.2	The Gini coefficient	0.446	0.359	<0.37 or consecutive yrs of decr.	
1.3	Real growth in the lowest 20 per cent of incomes	3.50% (0.54% annual incr)	4.93% (1.43% annual incr)	>1.5% annual incr or consecutive yrs of growth	
2.0	Goal 2: Expand economic opportunities, improve economic resilience and productive employment to ensure decent work for all				
2.1	Real median income	6.3% change Year over Year NZD20,669	4.0% Change Year over year NZD21,504	>1.5% annual incr	
2.2	Real GDP (aggregate)	6.8%	8.6%	>2% annual incr, or 2+ consecutive yrs of incr.	
2.3	Growth in tourism [numbers; length of stay]	146,473 visitors 10 days avg stay	161,362 8 days avg stay	(to be determined)	
2.4	Total Debt to GDP ratio	0.69:1 (69%)	0.725:1 (72.5%)	<1:1	
2.5	Employee wellbeing index ⁷⁰	77% (degree of satisfaction-PS)	79% (degree of satisfaction-PS)	>60%	









⁷⁰ Result is only for the public service; it does not include the private sector. Subject to change pending the Labour Force Survey to be conducted in 2019.















#	Goals/Indicators	Year 1 (2016) Results	Year 2 (2017) Results	NSDP Target	NSDP Status /Trend
2.6	Growth in non-tourist related industries	-1.46%	11.36%	>3% annual incr	
3.0	Goal 3: Promote sustainable practices and effectively manage solid and hazardous waste				
3.1	Recycling rate (percentage of total waste diverted to recycling) [Rarotonga and Aitutaki; other islands]	Rarotonga - 45% Aitutaki - 50% Other islands - 0%	Rarotonga 2% (plastic only) Aitutaki (n/a) Other islands 0%	>2% annual incr	
3.2	Percentage of hazardous waste that is accounted for and managed	4,317 E-waste items ⁷¹	2,303 E-waste items	>2% annual incr	
4.0	Goal 4: Sustainable management of water and sanitation				
4.1	Percentage of population with access to sufficient and safe water in their homes [Access: Rarotonga, Pa Enua; quality; sufficiency]	<u>Water supply</u> Rarotonga – 91% Pa Enua – 7 Pa Enua with piped water to inside of homes; 3 islands outstanding – Palmerston, Nassau and Rakahanga <u>Water quality</u> 63% (community) 93% (schools) Water outage - None	<u>Water supply</u> Rarotonga – (no change) Pa Enua – work in progress <u>Water quality</u> n/a (community) n/a (schools) Water outage None	>85%	
4.2	Percentage of properties using sanitation systems that meet approved standards	Rarotonga 8.9% Cook Is 12%	Rarotonga 20.7% Tourist accommodatio	>85%	












⁷¹ E-waste refers to electronic waste such as computers, printers/copiers/scanners, consumer electronics and household appliances.







#	Goals/Indicators	Year 1 (2016) Results	Year 2 (2017) Results	NSDP Target	NSDP Status /Trend
			ns 17% Cook Is 15%		
5.0	Goal 5: Build resilient infrastructure and ICT to improve our standard of living				
5.1	Broadband connectivity index [average speed, penetration]	Avg speed 42.7 kbps Penetration 28%	(no change)	>42.7kbps	
5.2	Percentage of average monthly income spent on broadband	8%	n/a	<5%	
5.3	Mobile connectivity index [data speed, penetration, usage]	n/a	Speed - 2G Pa Enua 4G Rarotonga & Aitutaki Penetration - 100% Data usage - 120MB	Speed - >2mbps minimum 4G Penetration >80% Data usage >3.5GB	
5.4	Percentage of national infrastructure and public buildings that are fit for purpose	n/a	n/a	>75%	
6.0	Goal 6: Improve access to affordable, reliable, sustainable, modern energy and transport				
6.1	Percentage of electricity generation from renewable energy	100% northern group 19.2% Rarotonga	100% Northern group 19.2% Rarotonga Southern Group 0% ⁷²	100% 100% by 2020	
6.2	Annual amount of fossil fuels imported	-10.2% 13.2M litres	-56.8% 5.7M litres	>2% annual decrease	
6.3	Percentage of median income spent on electricity	8.10%	7.8%	<5%	
6.4	Transport connectivity index [Southern Group; northern group]	<u>Southern grp</u> <i>Domestic</i>	<u>Southern grp</u> <i>Domestic</i>	<u>Southern grp</u> 3 flights pwk	











⁷² Renewable energy phase for Southern grp currently in progress; results to be reported in the next Indicator report











#	Goals/Indicators	Year 1 (2016) Results	Year 2 (2017) Results	NSDP Target	NSDP Status /Trend
		<i>flights avg pwk overall:</i> Aitutaki - 35.6 Atiu - 7.4 Mangaia - 4.7 Mauke - 3.8 Mitiaro - 3.5 <i>Shipping trips p.a.:44</i> 18-22 per island excl. Rarotonga & Aitutaki <u>Northern grp Domestic flights avg pwk overall:</u> Manihiki - 1.0 Penrhyn - 0.4 Pukapuka - 0.3 <i>Shipping trips p.a.:17</i> 6-11 per island	<i>flights avg pwk overall:</i> Aitutaki – 38.0 Atiu - 7.7 Mangaia – 5.1 Mauke - 3.8 Mitiaro - 3.8 <i>Shipping trips p.a.:124</i> 29-37 per island excl. Rarotonga & Aitutaki <u>Northern grp Domestic flights avg pwk overall:</u> Manihiki – 0.8 Penrhyn - 0.5 Pukapuka -0.4 <i>Shipping trips p.a: 93</i> 10-19 per island	≥11 shipping trips per island Northern grp 0.5 flights pwk ≥11 shipping trips per island	
7.0	Goal 7: Improve health and promote healthy lifestyles				
7.1	Rate of premature deaths from NCDs	23.90%	22%	>2.5% annual decrease or consecutive yrs of decr.	
7.2	Health spending as a percentage of Government expenditure	9.17% NZDS13.6M	8.55% NZD\$13.8M	>15%	
7.3	Prevalence of sexually transmitted infections	26.32%	187.5%	>-2.5% annual decrease or consecutive yrs of decr.	
7.4	Youth engagement in physical activity and sports	36% were active for ≥ 60 mins / day on 5+ days over 7 days (13-18yrs)	(no change)	≥4 hrs per week avg participation	
7.5	Average life expectancy	Male LE0: 69.6 yrs  22.8 months	Male LE0: 70.5 yrs  10.8 months	>6 months incr. or consecutive	

#	Goals/Indicators	Year 1 (2016) Results	Year 2 (2017) Results	NSDP Target	NSDP Status /Trend
		Female LE0: 77.6 yrs  9.6 months Both LE0: 73.6yrs	Female LE0: 77.7 yrs  1.2 months Both LE0: 74.1 yrs	yrs of incr.	
7.6	Number of people diagnosed with mental health disorders annually	86 cases	n/a	(to be determined)	
8.0	Goal 8: Inclusive and equitable quality education and promote life-long learning opportunities				
8.1	Literacy and numeracy rates	Literacy 93% Numeracy 92.8% (NCEA L1)	Literacy 87% Numeracy 93% (NCEA L1)	83%	
8.2	Early childhood education enrolment	98% - GER 97% - NER	92.7% - GER 92.5% - NER	85% - GER 90% - NER	
8.3	National Certificate of Educational Achievement, level 1 pass rate	82%	83%	72.50%	
8.4	Percentage of population with vocational or tertiary qualifications (Earlier year data 27%)	(no change)	(no change)	>40%	
8.5	Education spend as a percentage of Government expenditure	13% NZD19.4M	12% NZD19.3 M	>20%	
9.0	Goal 9: Accelerate gender equality, empower all women and girls, and advance the rights of youth, the elderly and disabled Indicator				
9.1	Percentage of political representatives that are women	15% of MPs and Island Councillors	(no change)	>45%	
9.2	Youth wellbeing index	n/a	n/a	60-100% (degree of wellbeing)	
9.3	Income disparity between men and women	(no change - 0.79:1 female to male pay ratio or 21% income disparity for women – Census 2011)	(no change)	>0.95:1	
9.4	Number of fit for purpose facilities and services for the infirm, elderly and disabled on each island	(no change)	26.8% (11/41) Rarotonga: 9 Full access 30 Full/ Partial	≥90% island & community centres with appropriate	

#	Goals/Indicators	Year 1 (2016) Results	Year 2 (2017) Results	NSDP Target	NSDP Status /Trend
			access Pa Enuu: 2 Full access (Pukapuka & Mauke)	facilities	
10.0	Goal 10: Achieve food security and improved nutrition, and incr sustainable agriculture				
10.1	Percentage of all food purchased that is produced locally	n/a	n/a	>2% annual incr, or consecutive yrs of incr.	
10.2	Total food production	n/a	n/a	>2% annual incr, or consecutive yrs of incr.	
10.3	Total land used for agriculture	12.6% (earlier year data)	(no change)	≥0% annual incr in consecutive years	
10.4	Number of reported biosecurity outbreaks	zero	zero	zero	
11.0	Goal 11: Promote sustainable land use, management of terrestrial ecosystems, and protect biodiversity				
11.1	Change in wetland areas (Earlier year data 1.16% includes swamps)	(no change)	(no change)	≥0% annual incr in consecutive years	
11.2	Areas of land protected (Earlier year data 6%)	(no change)	(no change)	≥0.5% annual incr, or consecutive yrs of incr.	
11.3	Biodiversity loss [Endangered: Kakerori, Tamanu, Pa'ua]	(no change)	(no change)	Incr. or no change in prevalence of endangered species	
12.0	Goal 12: Sustainable management of oceans, lagoons and marine resources				
12.1	State of the reef	26% coral cover for Rarotonga	17% for six Southern Group Islands	Statistically significant improvement ; or	











#	Goals/Indicators	Year 1 (2016) Results	Year 2 (2017) Results	NSDP Target	NSDP Status /Trend
				consecutive yrs of improvement	
12.2	Areas of protected exclusive economic zone	Marine protected areas of EEZ 16%	(no change)	10%	
12.3	Percentage of yield against sustainable benchmarks	Below Maximum Sustainable Yields (tuna catch only)	(no change)	Below Maximum Economic Yield (target to be revised)	
12.4	Lagoon water quality	Average C-D grade for bacteria levels and water clarity (Rarotonga, Aitutaki and Manihiki)	Average D grade for bacteria levels and water clarity (Rarotonga, Aitutaki and Manihiki)	Average A-B grade for bacteria levels, water clarity and nutrient levels	
12.5	Economic returns from oceanic and lagoon resources	-3.53% NZD19.1M	-3.14% NZD18.5M	>2.5% annual incr or consecutive yrs of incr.	
13.0	Goal 13: Strengthen resilience to combat the impacts of climate change and natural disasters				
13.1	Resilience index	Economic: 4.9% Environment: 26% (Raro only) Infrastructure & Social resilience: n/a	Economic: 6.0% Environment: 17% for six (Southern Group Islands) Infrastructure & Social resilience: n/a	Economic: ≤5% Environment: Statistically significant improvement; or consecutive yrs of incr. Infrastructure: >75% Social: >2 hrs/week community and church engagement	

#	Goals/Indicators	Year 1 (2016) Results	Year 2 (2017) Results	NSDP Target	NSDP Status /Trend
13.2	Percentage of population that have access to protection from category 3 or higher cyclones	97.25%	(no change)	>90%	
13.3	Percentage of public buildings and infrastructure built to hurricane strength standards	n/a	n/a	75%	
14.0	Goal 14: Preserve our heritage and history, protect our traditional knowledge, and develop our language, creative and cultural endeavours				
14.1	Cook Island Maori literacy rates	90% (NCEA level 1)	78% (NCEA level 1)	≥70%	
14.2	Average engagement in cultural activities	n/a	n/a	>2 hrs/week	
14.3	Number of Cook Island articles, artefacts, media and other cultural resources that are catalogued or developed, and digitally archived	n/a (Baseline: 5,965 items to be digitized)	Total items digitized: 1,841 or 31%	>3% annual incr in digital archives	
15.0	Goal 15: Ensure a sustainable population engaged in development for Cook Islanders for Cook Islanders				
15.1	Resident population of Cook Islanders (Earlier year data -1.13%)	(no change)	(no change)	>1% annual incr, or consecutive yrs of incr.	
15.2	Percentage of Cook Island investment (versus foreign investment) in the Cook Islands	n/a	n/a	(to be determined)	
15.3	Quality of life index	Median Disposable income (MDI): NZD\$84 Leisure: n/a Cultural: n/a Youth: n/a Job: 77%	MDI: NZD\$962 Leisure: n/a Cultural: n/a Youth: n/a Job: 79%	Overall Quality of Life score: ≥60% (grade 3) ≥NZD\$500p. a.(grade 3) ≥37.5hrs median working hours pwk (grade 3) ≥1.5hrs pwk (grade 3) ≥60% (grade 3)	

#	Goals/Indicators	Year 1 (2016) Results	Year 2 (2017) Results	NSDP Target	NSDP Status /Trend
15.4	Voter turnout (Earlier year data 80.5%)	(no change)	(no change)	≥75%	
15.5	Number of applications received for research and scholarship on the Cook Islands	28 (12% change Year over Year)	44 (57% change year over year)	>5% incr, or consecutive yrs of inc	
16.0	Goal 16: Promote a peaceful and just society and practice good governance with transparency and accountability				
16.1	Justice accessibility index	n/a	Criminal – 4.63 mths Civil – n/a Land – n/a Complaints – n/a	<6 months median time to resolve cases >85% of complaints processed	
16.2	Rates of domestic violence (Earlier year data 30% violent nature)	(no change)	(no change)	>2% annual decrease, or consecutive yrs of decr.	
16.3	Rate of motor vehicle accidents (from reckless behaviour) (Earlier year data 41.6%)	(no change)	(no change)	>2% annual decrease, or consecutive yrs of decr.	
16.4	Reoffending rates	n/a	n/a	(to be determined)	
16.5	Average performance of Government ministries	100% achievement for all 67 outputs (13 PS Depts only)	89% of key deliverables across 62 outputs met expectations and above	Performance meets expectation	
16.6	Financial responsibility index	6 out of 8 fiscal responsibility ratios met	5 out of 8 fiscal responsibility ratios met	8 out of 8 fiscal responsibility ratios met	
16.7	Number of parliamentary sitting days	11	26	>80 sitting days (to be revised)	

Appendix II: International and Regional Agenda alignments to the NSDP

















The Cook Islands have identified 18 national indicators that are relatively aligned to the SDG 2030 global agenda. In this section, the 16 national sustainable development goals have been linked to these international (SDG 2030) and regional agendas (i.e. the Framework for Pacific Regionalism and SAMOA pathway) as below.













 COOK ISLANDS NSDP (2016-2020)	 THE GLOBAL GOALS <small>For Sustainable Development</small> ⁷³	SAMOA Pathway priority areas⁷⁴	FPR objectives priority areas⁷⁵
 <small>WELFARE AND EQUITY</small>	 1 NO POVERTY	Sustainable, Inclusive and Equitable Economic Growth	Improve livelihoods and well-being
 <small>AGRICULTURE AND FOOD SECURITY</small>	 2 ZERO HUNGER	Food Security / Nutrition	Improve livelihoods and well-being
 <small>HEALTH</small>	 3 GOOD HEALTH AND WELL-BEING	Health and NCDs	Improve livelihoods and well-being (<i>cervical cancer</i>)
 <small>EDUCATION</small>	 4 QUALITY EDUCATION	Social Development: Education	Improve livelihoods and well-being

⁷³ Pacific Roadmap for sustainable Development as the integrated framework to guide response of the Pacific to the 2030 Agenda (reported by the Pacific Islands Forum Secretariat (PIFS)).

⁷⁴ United Nations Small Island Development States (SIDS) priority area. Monitored through the SIDS Partnership Framework

⁷⁵ PIFS agreed priorities

 <p>GENDER AND THE VULNERABLE</p>	 <p>5 GENDER EQUALITY</p>	Gender Equality and Women's Empowerment	Improve livelihoods and well-being / Stable and safe conditions for all
 <p>WATER AND SANITATION</p>	 <p>6 CLEAN WATER AND SANITATION</p>	Water & Sanitation	Improve livelihoods and well-being
 <p>TRANSPORT AND ENERGY</p>	 <p>7 AFFORDABLE AND CLEAN ENERGY</p>	Sustainable Energy	Improve livelihoods and well-being
 <p>ECONOMY AND EMPLOYMENT</p>	 <p>8 DECENT WORK AND ECONOMIC GROWTH</p>	Sustainable, Inclusive and Equitable Economic Growth	Economic growth that is inclusive and equitable <i>(regional mobility and harmonisation of business practices)</i>
 <p>INFRASTRUCTURE AND ICT</p>	 <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	Sustainable, Inclusive and Equitable Economic Growth / Sustainable Transport	Economic growth that is inclusive and equitable <i>(information communication technologies)</i>
 <p>WELFARE AND EQUITY</p>  <p>POPULATION</p>	 <p>10 REDUCED INEQUALITIES</p>	Social Development	Improve livelihoods and well-being / Sustainable, Inclusive and equitable <i>(persons with disabilities)</i>
 <p>RESILIENCE AND CLIMATE CHANGE</p>  <p>CULTURE</p>	 <p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	Social Development: Culture and Sport / Disaster Risk Reduction	Improve livelihoods and well-being

		Sustainable Consumption & Production / Management of chemicals and waste, including hazardous waste	Improve livelihoods and well-being / Use the environment sustainably
		Climate Change	Improve livelihoods and well-being / Use the environment sustainably (<i>climate change</i>)
		Oceans & Seas	Improve livelihoods and well-being / Use the environment sustainably (<i>oceans, fisheries, and maritime surveillance</i>)
		Biodiversity (Desertification, land degradation and drought; Forests) / Invasive Alien Species	Improve livelihoods and well-being / Use the environment sustainably
		Social Development: Promoting peaceful societies and safe communities	Strengthened governance, legal, financial, and administrative systems / Stable and safe conditions for all
		Means of Implementation / Partnerships, Financing, Trade, Capacity Building, Data – Statistics, Technology	Strengthened governance, legal, financial, and administrative system