# Submission No. 6

(Pacific Health)

# FORUM FOR THE AUSTRALIAN HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON HEALTH AND AGEING

Solomon Islands Presentation, Friday 11<sup>th</sup> September 2009 His Excellency, Mr Victor Ngele High Commissioner

#### The Solomon Islands

The Solomon Islands is an archipelago of nine groups of islands (provinces) in the south west Pacific, located between latitudes 5°S and 12°S and longitudes 152°E and 170°E and lies east of Papua New Guinea and north of Vanuatu. The Solomon Islands has a land area of approximately 28,000 km² smaller and has approximately 900 smaller islets and atolls.

The Solomon Islands is a culturally diverse region composed of traditional societies with a complex integrated web of social hierarchy and traditions related to values, spiritual beliefs, and relationships with the environment. Connectivity, reciprocity, and mutual assistance are customary within strong extended family and community networks.

To understand the approaches necessary to protect the health of the people living in island communities, one must recognize the resilience of the Pacific peoples in upholding their cultural systems while navigating between indigenous and Western lifestyles, political and spiritual ideologies, and economic systems.

#### Population

Population 595,613 (July 2009 est.)

## Age structure:

0-14 years: 39.5% (male 119.875 / female 115.127) 15-64 years: 57.1% (male 171.792 / female 168,023)

65 years and over: 3.5% (male 9,849/female 10,947) (2009 est.)

## Median age:

Total: 19.7 yearsMale: 19.5 years

> Female: 19.8 years (2009 est.)

## Population growth rate:

> 2.392% (2009 est.)

#### Right rate:

> 27.69 births /1,000 population (2009 est.)

#### Death rate:

3.77 deaths /1,000 population (july 2009 est.)

#### Urbanisation

- > Urban population: 1.8% of total population (2008)
- Rate of urbanisation: 4.1% annual rate of change (2005-10 est.)

## Ethnic Groups

- Melanesian 94.5%, Polynesia 3%
- Micronesian 1.2%, other 1.1% unspecified 0.2% (1999 cenus)

## Sex ratio:

- > At birth: 1.05 male(s) / females
- Under 15 years: 1.04 male(s) / female
- > 15-64 years: 1.02 male(s) / female
- > 65 years and over: 0.9 male(s) / female
- Total population: 1.02 male(s) / female(2009 est.)

# Infant mortality rate:

- > Total: 19.03 deaths / 1,000 live births
- Male: 21.65 deaths / 1,000 live births
- Female: 16.28 deaths / 1,000 live births (2009 est.)

## Life expectancy at birth

- ➤ Total population: 73.69 years
- Male:71.14 years
- > Female: 76.37 years (2009 est.)

## Total fertility rate:

➤ 3.52 children born / woman (2009 est.)

# School life expectancy (at Primary-Tertiary education)

- Total: 8 years
- Male: 9 years
- > Female: 8 years (2005)

#### **Determinants of Health**

Rapid change in the social, cultural, environmental, technological, and global environments all affect the health of Solomon Islander. The social, cultural and economic factors that have been shown in a variety of settings to have the greatest influence on health include the following:

#### Income

The majority of the population depends on agriculture, fishing, and forestry for at least part of its livelihood. Most manufactured goods and petroleum products must be imported.

## GDP – per capita (3-p)

- > \$1,900 )2008 est. Data are in 2008 US dollars)
- > Health care free

- A total of 39 Nurses Aid Posts have been opened since 2006 to improve accessibility to health services
- Education incurs an enrolment fee. The rise in unemployment and falling wages may impact on female enrolment and participation in the education sector. Women's education status can have an impact on childhood morbidity and mortality.

#### Poverty

Falling commodity prices has resulted in an increase in unemployment and a lowering of wages. This may be linked to an increase in alcohol and drug abuse, domestic violence and a rise in the crime rate particularly in urban areas. Poverty may affect nutritional status.

## Employment and Occupation

Occupation	Men	Yannou "
Professional	13%	11%
Skilled Manual	22%	4%
Unskilled Manual	14%	30%
Domestic	.4%	7%
Agriculture	41%	33%

Data from unpublished DHS 2007

# Unemployment

Percentage of currently married women age 15-49 and men age 15 + who were employed at any time in the last 12 months from unpublished Solomon Islands DHS 2007.

- Men: 84% of which 24% were no paid
- Women: 42% of which 56% were not paid
- Gender roles of men and women influence the health of both groups.

#### Education

A low level of education can be associated with poor health status. Education is critical in determining peoples' social and economic position and thus their health.

Average school life expectancy is 8 years.

## Housing

Over recent years, there has been an increase in outpatient presentations from childhood diseases that are known to be associated overcrowding, including meningococcal disease, respiratory infections and tuberculosis.

Approximately 74% of households in rural areas have no sanitation facilities. Approximately 94% of households in rural areas have no electricity.

#### Water and Sanitation

Utilities such as water and sewerage reticulation contributed historically towards large improvements in population health. Improving access to and maintaining these services is essential to protecting population health and should be a high priority.

## Culture and ethnicity

Approximately 40% of the population still seek home remedies for gastroenteritis. There is a strong belief in the effectiveness of home remedies and village practioners and this affects health seeking behaviour.

## NCD

The prevalence of diabetes and other NCDs is increasing because of the ongoing transition from traditional ways of life (eg, communal farming and fishing) to Westernization eg, more consumerism, with increased reliance on imported convenience foods, less physical activity. This leads to a higher prevalence of obesity the most common predisposing factor for type 2 diabetes and cardio-vascular disease.

#### Tobacco Use

Building and sustaining links with tobacco control programs is vital to protecting the health of SI communities. Children exposed to tobacco smoke are at greater risk of developing asthma and complications from Acute Respiratory Infections and people with diabetes who use tobacco are at greater risk for developing complications.

Percentage of men and women age 15-49 who smoke cigarettes Solomon Islands DHS 2007 unpublished.

- Approximately12% of women smoke cigarettes
- Approximately 43% of men smoke cigarettes

## **Acute Respiratory Infections**

In 2008, more than half of the acute care contacts to outpatient clinics comprised of ARI (30%) clinical malaria and fever (22%).

Reducing the level of these diseases amongst the population particularly children under 5 years could have significant impact on the health status of the population.

#### HIV / AIDS

- Cross boarder issues with PNG
- The prevalence of STIs in Solomon Islands is very high and is an indicator of those at risk of HIV infection, and genital ulcer disease has long been implicated as a co-factor in the transmission of HIV.
- Conservative estimates from the World Health Organiszation (WHO) indicate that the HIV infection rate in Solomon Islands could rise to 350 by 2010.

## Antenatal Coverage

The 2008 HIS post natal coverage reached 81% with Guadalcanal Province demonstrating the highest rate of post natal coverage (83%).

The more remote province of Renbel demonstrated the lowest rate of post natal coverage (44%) for 2008.

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## Infant Mortality

The 2007 Demographic and Health Survey concluded that data on neonatal mortality and child mortality and under five mortality rates implies that all have increased over the past decade. For example, under-five mortality has increased from 30 deaths per 1,000 births 10-14 years before the survey to 37 for the 5-year period before the survey.

#### Nutrition

Malnutrition places children (5 years old) at increased risk of morbidity and mortality and has also been shown to be related to impaired mental development. Children who fall more than two standard deviations (SD) below the reference median are regarded as undernourished, while those who fall more than three standard deviations below the reference median are considered severely undernourished. Low birth weights affect 13 % of babies and 11% of children are considered to be under-weight. A third of Solomon Islands children are stunted with 9% being severely stunted.

There are larger proportions of children on Guadalcanal that are undernourished compared with children from other provinces and children from all rural households. This could be related to access to traditional foods and gardens.

Approximately 55% of all children are classified as having some degree of anomia.

#### EPI

The Demographic can Health Survey 2007 also provided data on overall vaccination coverage for children age 12-23 months, who should be fully vaccinated against the six preventable childhood illnesses. Overall, some 83% of children are fully vaccinated with BDG, measles and three doses of DPT and polio. However, only 78% of children on Guadalcanal have been fully vaccinated compared with 84% in Honiara and 94% in other provinces.

#### Tuberculosis

A total of 387 TB cases were notified in the Solomon Islands in 2008 giving the case notification rate of 75 cases / 100.000 population. The treatment outcome for 2007 cohort showed the cure rate fro SS+ve cases was 75% while the treatment successive rate (TSR) was relatively high at 92% at the national level while at provincial level there were variations with smaller provinces achieving 100% treatment successive rates because of their low caseloads.

## Malaria

The NVBDCP has been granted funding from the GFATM Rolling Continuous Channel for 2008-2014. AusAID, as part of the Pacific Malaria Initiative has provided a regional funding mechanism worth \$25m AUD over the next 4 years which assists Solomon Islands and Vanuatu to implement their malaria elimination program, as well as funding through the Health Sector Support Program to assist with operational activities.

The NVBDCP has developed Action Plans for the 2008 / 09 years, as well as a longer term strategic plan for 2008-2014. This identifies priority areas in which the program will aim to eliminate malaria from selected provinces (Temotu Province and Isabel Province)

The malaria program aims to strengthen malaria control and intensify these control programs into elimination programs in selected provinces. The key activities in these programs aimes to have close to 100% coverage of the population with Insecticide Treated Bednets, Indoor Residual Spraying identified 'hotspots', 100% uptake and rationale usage of artemeter-lumifantrine antimalarial drug, as well as improved diagnostic services with the provision of Rapid Diagnostic Test Kits to all health facilities.

Integrated health systems strengthening activities in-line with all donor partners and activities underway within the MHMS, including building of capacity in human resources, financial management and project management.

#### Climate Change

Climate change will intensify extreme weather events, such as storms, cyclones, floods, droughts and heat waves. Longer drought periods, and more marked rainy periods.

Tropical cyclones (its increase in frequency and intensity), irregular rainfall patterns, flooding in low lying and coastal areas, saline intrusion, coastal erosion and increased rates of coral bleaching mean higher demands and unstable levels of food production. This will affect diet, income generating activities for communities and economies. Impact on already existing poor nutritional standards and vulnerable communities.

Sea surge and heavy flooding

- Infrastructure: siting new health facilities away from the coastal fringe and building raised structures in flood-prone areas.
- Salt intrusion in to ground water and changing rainfall patterns
- Need to increase rainwater harvesting using individual household water tanks
- Disaster Response: geologically active region with frequent earthquakes, tremors, and volcanic activity; tsunamis
- IDPs: 5,400 (displaced by tsunami on 2 April 2007)

# Pandemic Preparedness

Climate change will affect the health of Solomon Islanders. The changes in the climate, and the effects of climate change such as the increases in temperature, flooding, and contaminated water, will increase the level of waterborne and vectorborne diseases, such cholera, typhoid, malaria and dengue.

- Epidemiology relationship between host, environment, again and if applicable vector.
- Changes to the environment from logging practices increases breeding grounds for mosquitoes and is likely to increase malarial transmission.
- Multi-Sectorial Pandemic Preparedness taskforce established
- 7 Syndromic Sentinel Surveillance sites established
- Event based surveillance
- Weekly surveillance reports
- Compliance to IHR 2005
- Weekly reports to WHO

## Closing Health Gaps

- Population-based programmes and environmental measures such as safe water supplies, have been important historically in reducing socioeconomic inequalities in health.
- Improvements in health often accompany community developments initiatives that may not specifically set out to improve health.
- By including a number of collaborating agencies, intersectoral health programmes are able to improve health where singly agencies might have limited effect.

# Forum on Regional Health Issues - Existing Cooperation

# Solomon Islands - MALARIA

"The Goal of the National Malaria Program 2008 – 2014 is effective control and progressive elimination of malaria in Solomon Islands by 2014"

Long standing support and improving coordination from:

- World Health Organisation
- AusAID PACMI & PACMISC
- SPC Global Fund RCC
- Health Sector Support Program

NGOs and FBOs

However, Fragmentation and overcrowding can be a threat....

- A "globalised" operating environment for health and development of national, single-donor, regional and global resources
- Technical agencies, donors and program managers all