Barriers for Health Promotion & Disease Prevention in Fiji

1. Health Risk Factors

Prejudice in Health

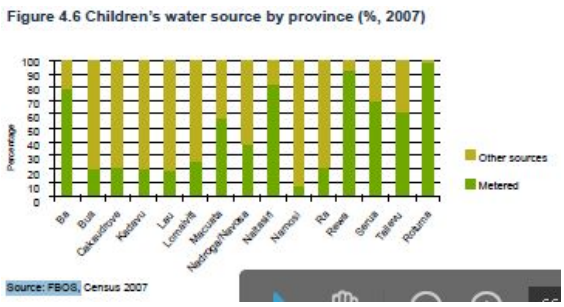
- Prejudice against Indo-Fijians; Under British rule, Indians were brought to Fiji to provide labour in sugar cane plantations. The Indo-Fijian population is now well-established, forming ~30% of the population, and has had a significant influence on the political stage even leading one of the 4 coups, post-british-independence and occupying multiple seats in parliament.
    - Up until recently, by law, Indo-Fijians were subject to restrictions on citizenship, property, business ownership and inheritance. Despite the lifting of restrictions prejudice still remains
- HIV/AIDS patients; much prejudice remains against individuals with AIDS. It is considered a homosexual disease and the largely Christian nation condemns such behaviour.

Public Health

Public health services are handled by the Ministry of Health, with the advantage/disadvantage of being co-located alongside the medical system. This is an advantage in that the financial and human resources decisions that impact the allocation of resources for both public health and medical services are made by the same key stakeholders; while at the same time, in a country and region where non-communicable diseases (NCD) threaten to overwhelm response capabilities, public health is often seen as secondary in the face of meeting the immediate medical needs of patients who require care for type 2 diabetes, cancer, and so forth. While it would seem apparent that greater public health interventions would lead to lower rates of NCDs, the Ministry of Health is in the difficult situation of meeting the acute needs of a population while also planning for long-term care and prevention in a resource-limited environment.

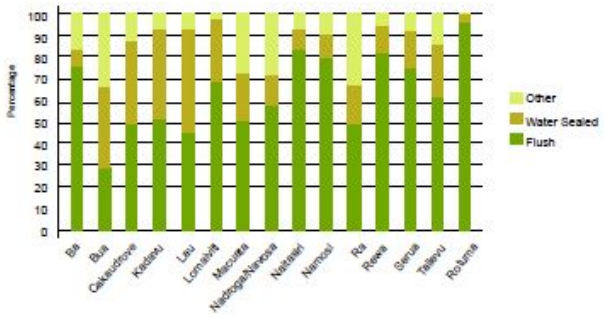
Water & Sanitation

Equitable access to adequate water supply and sanitation is of fundamental importance to health and will speed the achievement of all eight MDGs. Lack of adequate water contributes to diarrheal diseases and illness, especially in children.



In 2007, 65 percent of children had access to metered water in their households. There are, however, important differences between urban and rural areas and provinces. Only 37 percent of the rural population had access to metered water compared to 95 percent of the urban population. Children's access to metered water ranged from a low of 8 percent in Namosi to nearly 100 percent in Rotuma. (Source: FBOS)

Figure 4.7 Children's access to toilet facilities by province (2007)



Nationwide, 70 percent of children had access to a flush toilet in their household in 2007. There was, again, important disparities across provinces. Access to a flush toilet ranges from a low of 29 percent in Bua to a high of 98 percent in Rotuma. An increasing number of rural households are constructing flush toilets, but the functioning of these depends on local conditions, water availability and resources.

Nutrition

Under-five malnutrition exists as an "indicator of poverty and hunger" (MoH, 2008b:7). The rate of undernourished children in Fiji has declined from 15 percent in 1980, to 6 percent in 2009. Reducing the prevalence of under-five malnutrition continues to be a priority of the Government through its poverty and hunger eradication policy. Specific policies aimed at addressing underweight among children include the Fiji Nutrition Policy for Schools 2006 and the Fiji Food and Nutrition Policy 2008 (MoH, 2008b).

Stunting, or low height for age, is caused by long-term insufficient nutrient intake and frequent infections. Stunting generally occurs before age two, and effects are largely irreversible. These include delayed motor development, impaired cognitive function and poor school performance. Data from the Fiji National Nutrition Council (2008) shows that the prevalence of stunting is nearly twice as high in young girls than boys. Stunting is only slightly higher among Indo-Fijian than iTaukei children.

Micronutrient deficiencies are a serious public health problem and result primarily from diets lacking essential vitamins and minerals, such as iron, vitamin A, and zinc. Micronutrient deficiencies can occur even when people have enough to eat, but lack the resources to buy fresh fruits and vegetables, meat, milk products, and other foods rich in vitamins and minerals. Diets poor in micronutrients cause illness, blindness, premature death, impaired mental development, and susceptibility to infectious diseases, particularly among children. Anemia, usually caused by insufficient intake of iron, remains widespread among women and young children. Prevalence of anemia affected about half of all children under five (NFNC, 2007).

While there is no marked difference in the prevalence of Vitamin A deficiency by gender, there is a significant difference by age group showing a high prevalence (15 percent) in children 6 months to 2 years compared to 5 percent in children 2-5 years.

Physical & Environmental Health

Fiji is renowned for its cultural and physical closeness with the natural world.

E.g. *Vanua - the living soul or human manifestation of the physical environment which the members have since claimed to belong to them and to which they also belong. The land is the physical or geographical entity of the people, upon which their survival...as a group depends. Land is thus an extension of the self.*

Likewise the people are an extension of the land. Land becomes lifeless and useless without the people, and likewise the people are helpless and insecure without land to thrive upon.

However with increased urbanisation, occurrence and strength of adverse weather and climate catastrophes, this relationship with the natural world is becoming increasingly strained. This is having devastating effects on the health of the Fijian people.

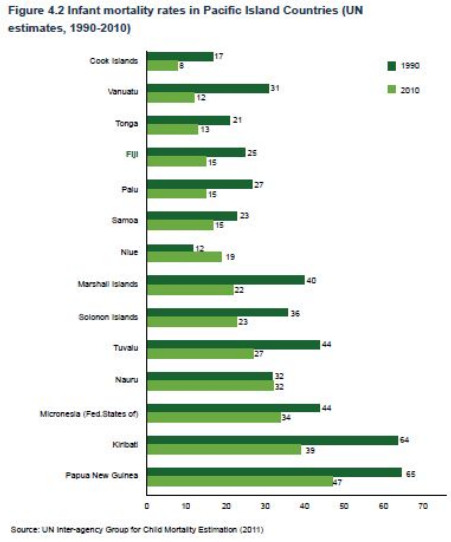
Climate Change

Unregulated economic growth has seen an increased density of busses, taxis and cars resulting in major pollution problems. These have resulted in increased rates of cardiovascular disease and some cancers.

An increased variation in the el nino and la nina weather systems is putting pressure on subsistence farmers. Rural communities are forced to choose to visit the urban market and buy other community's, manufactured, or imported foods, or they suffer a reduced variety in their diet, due to droughts, excess rain and crop-damaging winds. The increasing socioeconomic divide will only increase the likelihood of choosing the latter.

Maternal & Child Health

The data show that children who die in the first 28 days of life (neonatal mortality) account for 60 percent of children who die under one year of age (infant mortality rate) and 50 percent of children who die under five years of age. In order to improve the survival chances for newborns, pregnant women should attend ante-natal clinics that are staffed by health workers, with close follow up for the first 28 days of a baby's life and further contact during the first year of life. There needs to be broader coverage of preventive and curative interventions for newborns and infants. This should include a stronger focus on water and sanitation, the prevention of pneumonia, diarrhea and malnutrition, ensuring a high rate of Expanded Immunization Programme coverage.



Maternal mortality has shown substantial improvement since 1990. It has dropped from 41.1 maternal deaths per 100,000 live births in 1990 to 31.7 in 2008. A major contributing factor in this improvement could be the high proportion (99 percent) of births now attended to by trained personnel. While work continues in this area, the Government places equal emphasis on pregnancy-related illnesses linked to diabetes, anaemia and premature birth. Reporting of pregnancy-related illnesses is suggested as a way of accurately identifying causal factors and working towards solutions (MSPNDS, 2010).

According to the Ministry of Health & Medical Services, the major causes of infant mortalities "include perinatal conditions such as birth asphyxia (inadequate supply of oxygen to a baby at birth), congenital malformations (birth defects), sepsis (blood poisoning), being underweight and congenital syphilis (MoH, 2010:8). Geographic location is a critical factor in newborn survival rates as it determines how quickly

medical assistance can be reached when there are complications during pregnancy and childbirth. In order to reduce mortality further, there is a need for local skilled health workers who can attend to such emergencies quickly. Low-cost transport is needed in order for mothers and babies to easily access health services.

The Maternal Mortality Rate for Fiji has been declining steadily since 2005. In 2009, the percentage stood at 27.5 (per 100,000 births). Annually, the Ministry of Health aims to reduce the MMR by 6 percent, with the target for 2015 as 10.3 percent. Women who give birth in Fiji are well attended by trained health workers. The current investments in the health sector should see Fiji record a 100 percent attendance rate in the percentage of trained attendants at birth.

Immunisations

The Ministry of Health operates a child immunisation programme through primary health care clinics and rural nursing stations. There are, however, problems in maintaining the cold chain system, particularly in remote areas. Ministry of Health figures for 2010 – collected through the Public Health Information System (PHIS) – indicate that coverage rates for most vaccines at that time were well below the 90 percent rate needed for effective high population immunity. Only reported coverage for BCG, OPV and HBV was well above 90 percent. Coverage rates for all other vaccines hovered between 70-80 percent.

Table 4.4 Administrative data on immunisation coverage of infants 0-1 years by type of vaccine (2010)

Immunisation Coverage (%) 0-1yr	%
BCG	98.7
OPV0	98.6
HBV0	101.9
OPV1	80.7
Pentavalent 1	80.8
OPV2	80.3
Pentavalen 2	80.5
OPV3	76.7
Pentavalent 3	77.2
MR1	71.8

Source: Ministry of Health (2011) Annual Report 2010

Immunisation rates for measles reported through the PHIS have consistently been about 71% in 2009 and 2010. However, data collected through the National Immunisation Coverage Surveys suggest much higher coverage (e.g. 94 percent in 2008). The significant gaps between administrative data from the Ministry of Health and coverage detected through surveys point to an urgent need to improve routine reporting.

HIV & AIDS

According to the Fiji 2010 MDG Report, two age groups are most prominent in this increasing trend; 30-39 and 40-49 years (MSPNDS, 2010). Higher numbers of iTaukei are being diagnosed HIV-positive compared with other ethnic groups in the country (Republic of the Fiji, 2010). Reliable baseline data is lacking in Fiji and this presents a challenge to understanding HIV and its implications for children and pregnant women.

Fiji has been progressive in terms of developing a national response to HIV and AIDS. Preventative strategies have included community awareness campaigns, peer education and condom distribution. Voluntary testing and counselling services have also been increased (Republic of the Fiji, 2010). According to the UNGASS Fiji 2010 Country Progress Report, there are 95 centres where blood samples can be taken for HIV testing.

The Government's HIV and AIDS Decree passed in February 2011, ensures the confidentiality of those diagnosed and affected by HIV, allows for and encourages voluntary testing and related counselling and empowers affected individuals to seek compensation should their rights be violated (Ministry of Information, 2011).

Although Fiji is classified as a low HIV prevalence country, available data indicates that its population is vulnerable to HIV due to various risk factors. Specifically, surveys show low levels of HIV knowledge, high levels of commercial sex and multiple sexual partners, and low levels of condom use among those who engaged in higher-risk sex. Additional evidence of sexual risk is the repeatedly high prevalence of Sexually Transmitted Infections (STIs) found among antenatal care attendees at surveillance sites.

2. Socio-Economic Risk Factors

Demography & Geography

Fiji's population is concentrated in the provinces of Ba, Naitasiri and Rewa, which are also home to the main urban centres of Nadi, Lautoka, Nasinu, and Suva. The maritime provinces of Rotuma, Lau, Kadavu and Lomaiviti have lower populations than those on the two main islands, Viti Levu and Vanua Levu. In the remote, less populated areas, geographic barriers, limited and costly transportation and a lack of resources tend to reinforce deprivation and inequity.

More than 180 squatter or informal settlements exist in Fiji and they are home to an estimated 125,000 people or about 15 percent of Fiji's population. The largest concentration of squatter settlements (about 100,000 people) can be found along the Suva-Nausori corridor. These settlements generally lack the basic amenities of clean water, electricity and sewerage systems. Poverty, inadequate housing, crime and related social issues are rife in these areas (NZAID, 2011).

The 2007 Census recorded that Fiji had a population of 322,639 children, which is close to 40 percent of the total population. Almost half of all children nationwide live in two provinces, Ba and Naitasiri, where Fiji's main urban centres are situated. The large population of children in these provinces presents the Government with a continuing challenge to meet the growing demand for education and health resources.

The relative size of the child population to the total population has declined both in urban and rural areas. Fiji is slowly going through a demographic transition with relatively low mortality rates while birth rates are coming down too. These changes in the country's age structure have important socioeconomic consequences. For example, a growing number of youth is entering the labour market every year.

Income & Human Development Scale

The success of Fiji's development initiatives is dependent on the country's economic performance. During the past two decades, Fiji shifted from an import-substitution approach to one of trade liberalisation yet this has not been translated into strong economic growth. In fact, the country recorded nine years of negative growth between 1970 and 2006. Economic growth over the past few years has fluctuated, ranging from 3.6 percent in 2006 to 2.5 percent in 2009 (MSPNDS, 2008). The poor economic growth has reduced income and work prospects and the resulting financial and emotional strains have

had an adverse effect on families. Fiji's lagging economy has been attributed to "intermittent political instability, poor economic and financial management and the expiry of land leases since 1997" (MSPNDS, 2010:2).

The Government is committed to stimulating the economy and meeting its social development obligations. Economic measures include encouraging foreign investment; reforming and supporting traditional sectors such as tourism, sugar, mining, textile production and agriculture, declaring tax-free regions in underdeveloped parts of Fiji and creating employment opportunities (Ministry of Finance and National Planning, 2008; Ministry of Strategic Planning, National Development & Statistics, 2010).

Table 2.3 Pacific Island Countries Human Development Index and rank

Pacific Island Countries	HDI	Rank
Tonga	0.704	90
Samoa	0.688	99
Fiji	0.688	100
Solomon Islands	0.510	142
Vanuatu	0.617	125
PNG	0.466	153
Federated States of Micronesia	0.636	116

Source: UNDP Human Development Report 2011

Fiji was ranked 100th of 187 countries on the 2011 Human Development Index – ahead of Solomon Islands, Vanuatu, Papua New Guinea (PNG) and Federated Stated of Micronesia (FSM), but below Tonga and Samoa. Fiji's HDI value is 0.688, which places it in the 'medium human development' category.

Wealth Distribution

Fiji is considered a middle-income country, based on its GDP however the bulk of the population are living below the poverty line, or making less than $8000 FJD per year. Tourism provides 60% of the income (2006) and is responsible for 30% of jobs.

In run up to, and in response to, the return of a democratically elected government Fiji has received increased investment from China and Australia. The control of western-style economic development projects is under the responsibility of a minority upper class and is contributing to increased class division. Aside from the rich upper class, there is the middle class of merchants, professionals and small business owners, whilst a large lower class operate a variety of service industry occupations, such as tourism, sales and domestic work or their responsibilities are purely at a community level. FNDP lays out plans to bridge this socioeconomic gap.

Household Income / Poverty

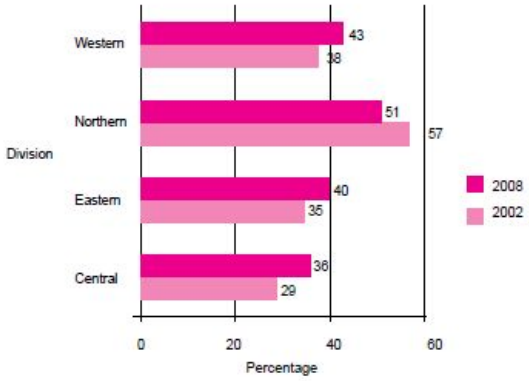
Poverty in Fiji is measured using a Basic Needs Poverty Line (BNPL), estimated to be about $175 per week for a household of four (FBOS, 2010:10). Based on this threshold, 31 per cent of the national population was classified as being poor in 2008/09, down from 35 per cent in 2002/03.

While poverty in urban areas dropped dramatically from 28 to 18 per cent (a reduction of 34 per cent) over this period, poverty in rural areas increased by 6 per cent from 40 to 46 per cent. Moreover, children are disproportionally affected by poverty, with half of all families with two or more children living in poverty.

According to the Ministry of Strategic Planning, National Development & Statistics (2010), the high incidence of rural poverty is compounded by increasing rural-to-urban migration due to expiring land

leases and growth in the number of people living in squatter and informal settlements, about 45,000 people in 1999 to about 125,000 people in 2011(NZAID, 2011).

Figure 2.3 Percentage of population below the Basic Needs Poverty Line by rural division (%, 2002-2008)



Source: Fiji Bureau of Statistics, HIES Report 2010

Of the four divisions in Fiji, the Northern division is the poorest, with 48 percent of its population living below the BNPL. This is followed by the Eastern division with 38 percent and the Western and Central divisions on 33 and 21 percent respectively. There are also substantial differences in poverty rates across provinces. For instance, in the Central division, where the overall poverty rate is 24%, there are provinces with substantially higher poverty, such as Tailevu (30%) and Namosi (32%). The poverty rate ranges from 15% in Rotuma to 56% in Ra.

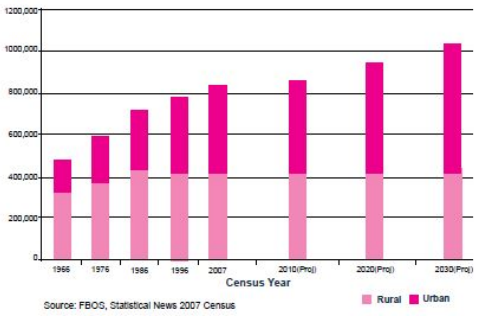
On the whole, rural children experience poverty more than their urban counterparts. Rural poverty in Fiji increased from 40 percent in 2002, to 43 percent in 2008. With the exception of the Northern division, all divisions experienced an increase in poverty.

Fijian households on average have two children and larger households with more children have higher poverty rates, which remains an important concern in the country. Almost half of households with two or more children are living below the basic needs poverty line. Households with both elderly and children are the poorest, with a poverty headcount of 52 percent,

Urbanisation & Housing Quality

Urbanization

Figure 2.1 Change in the rural-urban composition of the population between 1966 and 2007 and projected until 2030



Source: FBOS, Statistical News 2007 Census

Population projections to 2030 show continuing growth in urban areas. Fiji's urban population grew significantly between 1966 and 2007. Several factors contributed to this trend: rural-to-urban migration and a concomitant growth in squatter settlements; It will be vital to assess the impact of decreasing `personal space' on living conditions, in particular, access to water, proper sanitation and personal and food security for children. Lack of personal space for children can be detrimental to their development as well as increasing their vulnerability to a range of risks.

Huge variation in housing quality. Urban upper/middle class have access to western-style sanitation, electricity, clean water. Although these depend on limited infrastructure which are subject to extreme weather conditions and can often be switched off.

Urban lower class/squatter settlements are often low resourced, poorly constructed housing. Shortage of space affects quality of sanitation infrastructure. Electricity and water supply is often tapped from government supply to avoid charges

Rural Communities; wooden and corrugated iron houses form the majority of residences with concrete bases, or full concrete houses, being reserved for the richer community members. Access to clean water is usually from traditional sources i.e. rivers and wells. This comes with challenges of water quality, particularly during adverse weather. Electricity access is improving (figures on FNDP) however it is on a pay-as-you-go basis and so not always viable for the communities.

Food Security

Rural communities have ample land available for planting of crops i.e. Dalo, Cassava, fruits and vegetables; however the diet is increasingly becoming westernised by the introduction of noodles, sausage and rice

Meat quality can be poor. NZ are a large provider of Fiji's meat supplies selling offcuts and meat that doesn't meet NZ regulatory standards. 17% of all imports are food.

Squatter settlements in the urban areas are often seen to have lower food security due to limited access to land for farming and inflated urban prices, sometimes tripling the costs of locally available and traditional food. The residents here are mostly living below the poverty line and rely on tapped electricity and water sources to avoid charges.

Urbanisation and economic growth seems to be benefiting only a small percentage of the population as urban prices increases limiting rural community dwellers from accessing urban resources. The lower socioeconomic classes suffer under inflation.

Table 3. Food imports percentage from total imports and overall BMI means from countries from 1995 until 2016.

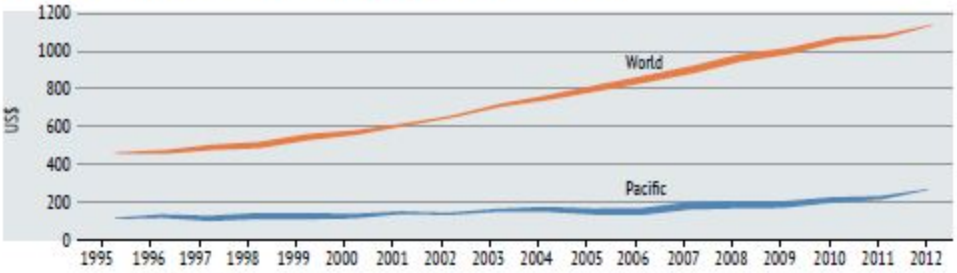
		1995	2000	2005	2010	2016	Average
Fiji Islands	Food imports %	15	11,2	13,3	16,8	16,6	**14,6**
	BMI	25,5	26,3	26,6	27,2	27,7	**26,6**
Samoa	Food imports %	21,7	23,2	22,7	23,7	25,9	**23,4**
	BMI	29,4	30,1	30,7	31,3	31,9	**30,7**
Solomon Islands	Food imports %	10	9	10	11	26	**13,2**
	BMI	24,4	24,8	25,3	25,7	26,2	**25,3**
Tonga	Food imports %	38	28,3	26,4	30,2	26	**29,8**
	BMI	30,5	30,9	31,3	31,6	31,9	**31,3**
Vanuatu	Food imports %	5	19,8	10,3	15	16,2	**13,3**
	BMI	24,8	25,2	25,5	25,7	26	**25,4**

(Sources of data: WB (2016) and WHO (2016).)

Government Expenditure

The required health expenditure to achieve the MDGs has been estimated at least US$ 66 per head, according to a 2014 report by the United Nations Economic Commission for Europe. This amount is a global average and seriously underestimates the likely costs in the Pacific, due to the dispersed and small populations. To meet the broader goals of Healthy Islands would require considerably more.

Figure 8. Total health expenditures per capita (purchase power parity)



Source: WHO Global Health Expenditure Database (http://apps.who.int/nha/database/ViewData/Indicators/en).

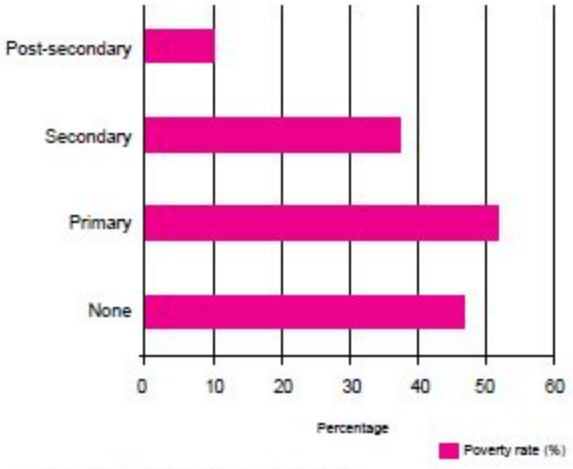
3. Education Risk Factors

Access to Education

According to Fiji's second MDG Report, there are many continuing challenges for children in the education system. One challenge relates to the reality of non-completion at the primary school level due to socio-economic challenges faced by many families. For example, families in the poorest 30 per cent of Fiji's population spend the least on children's education in comparison to expenditure on other items (Narsey, 2008). Moreover, a 2010 study on child labour in Fiji (ILO, 2010) found that the majority of the 170 children living on the street who were interviewed, had left school at Class 8. The main reason (44 percent) given for not completing school was lack of money for school fees.

In recent years vast improvements have been made to access to education based on the socio-economic barriers highlighted, with school fees paid by the government since 2013. Previously, the burden of educating multiple children at school resulted in children missing entire years of schooling, but whilst fees are now paid, barriers remain in terms of costs of uniforms and school supplies still place a burden on families.

Figure 2.6 Poverty rates and head of household education level (2008/09)



Source: World Bank (2011) based on HIES 2008/09

Education is an important determinant of poverty, and health. The poverty rates in Fiji are higher for households where the head of the household does not have secondary education – at around 50 percent versus 35 percent overall poverty rate.
Fiji has a well-educated population and as such only 18 percent of the population lives in households where the household head has less than secondary education. However, in the most populous group of secondary education, poverty is still quite high, as 40 percent. Poverty is significantly lower for households with heads who have

attained post-secondary education (10 percent).

Children with disabilities belong to one of the most disadvantaged groups when it comes to access to formal education. Many do not attend schools because they are restricted by school management while others are kept at home by parents and guardians. In such cases where children with disabilities do attend school, many do not make it beyond the primary level because of inadequate support and the absence of teachers with experience in working with special needs children (Tavola and Whippy, 2010).

Tertiary education remains available through Fiji National University, which provides business, law, engineering, health science, dentistry, and medical education among other programs. The University of Fiji provides liberal arts schooling environment, including business, law, the arts, and recently a private medical school. The University of the South Pacific, which is the largest tertiary provider in Fiji and the South Pacific, provides a broad-based program of study at the undergraduate and graduate level, including arts, sciences, and law; noticeably, University of the South Pacific does not provide education in the health sciences or medicine.

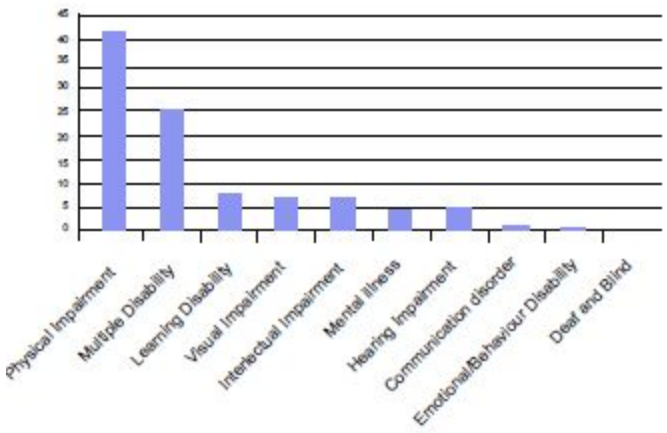
A student loan program has been introduced to subsidise tertiary education costs. There is a risk that a student loan issue could arise if equivalent improvements to social and economic improvements are not seen. This is further exacerbated by multiple educated students travelling overseas for work.

4. Disability Risk Factors

Challengers

While conditions and life opportunities for PWD in Fiji are far from adequate, particularly for people living in remote and rural areas, Government and Non-Governmental Organisations have been active in addressing their plight. Fiji has a national disability policy and signed the Convention on the Rights of Persons with Disabilities (CRPD) in June 2010. It is the only Pacific island country with disability-specific legislation – the 1994 Fiji National Council for Disabled Persons (FNCDP) Act. The FNCDP is the key co-ordinating body on disability matters. Its functions include formulating disability policies and plans, incorporating disability into Government functions and promoting disability prevention measures. The council shares its premises in Suva with vocational training and early intervention centres.

Figure 5.2 Percentage distribution of types of disability among people with reported disabilities (2010)



People with different types of disabilities generally need different types of specialised services (physical rehabilitation, assistive devices, etc.). Overall, disabilities related to physical impairment were most frequently reported, affecting 42 percent of all people with disabilities. Disabilities related to being deaf or blind were least frequently reported. In addition, around one in four people with disabilities are reported to have multiple disabilities. There are 17 special schools in the country for children with disabilities. In 2010, intellectual disability was the main type of disability among children in special

schools, followed by multiple disabilities and speech impairment.

More Information – 1) UNICEF Children in Fiji Report 2011