



5. North Tarawa



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PHYSICAL FEATURES

Tarawa, the capital island of Kiribati, is one of two islands in Kiribati that is administered by two separate Island Councils, South and North. South Tarawa is the main urban centre of Kiribati and North Tarawa is generally regarded as another of the outer islands. However being so close to the main population of Kiribati has many influences on North Tarawa, and the southern villages of North Tarawa have more in common with South Tarawa than with the outer islands.

North Tarawa has a land area of 388.39 sq.km. It is made up of several islets with the Government station located in Abaokoro. The widest part of North Tarawa can be found in the village of Buariki and the narrowest width in the village of Tearinibai, next to Buariki. The large lagoon is naturally abundant with a variety of marine resources, but these resources are slowly being depleted due to overharvesting and pollution, mainly from the population in South Tarawa and Betio.

Abaokoro accommodates the main service infrastructures such as the Council offices, junior secondary school and medical centre amongst other services. With the rapid growth of population in South Tarawa, people are choosing to settle in North Tarawa in greater numbers, especially in Abatao and Buota, the nearest two villages that can easily access South Tarawa by walking to Tanaea or traveling by vehicles. Where there is not yet a bridge or causeway from Abatao to Buota, the channel is shallow and can be walked across at low tide. The gap between Buota and South Tarawa was bridged in 1995 when a bridge was built between the two villages of Buota and Tanaea. For people in Abatao and Buota, it is much easier to access schools, clinics and other services on South Tarawa than to travel to the Government Station in Abaokoro.

Apart from the bridge from Buota to Tanaea, small causeways connect the villages of Tebwangoroi and Taratai, Tebwangoroi and Nuatabu. Not counting the islets, there are 15 villages in North Tarawa, from North to South these are: Buariki, Tearinibai, Nuatabu, Tebwangoroi, Taratai, Nootoue, Abaokoro, Marenanuka, Tabonibara, Kainaba, Nabeina, Tabiteuea, Abatao and Buota.

POPULATION

The 2010 census recorded a total population of 6,102 people in North Tarawa, this is 5.9% of Kiribati's total population. The land area of North Tarawa is 15.26 square kilometers and the population (in 2010) was 6,102 so the population density is 400 people per square kilometer. North Tarawa is the 2nd most densely populated island in Kiribati after South Tarawa.

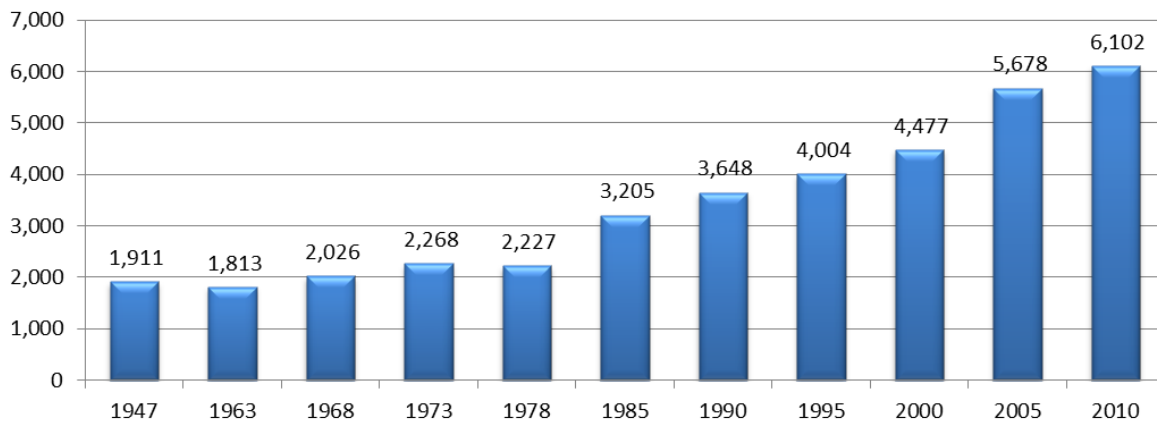
The population trend of North Tarawa is one that is increasing by each passing year. This should not come as a surprise considering that it adjoins South Tarawa where the country's population is concentrated. To relieve congestion and in search for permanent settlements, people from South Tarawa are buying land and slowly migrating up north to the nearest villages of Buota and Abatao where jobs and other services can still be accessed without too much difficulty. With the increasing availability of boats and ferries, some government workers now travel to work from North Tarawa.

Figure 5.1: Map of North Tarawa



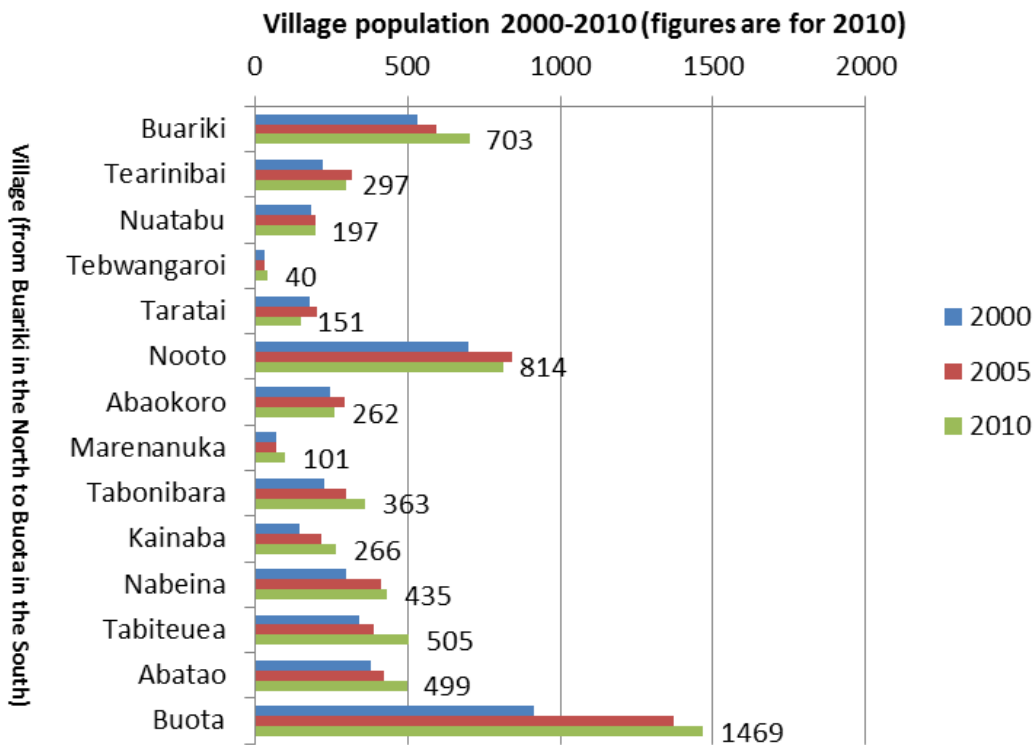
Note: Refer to North Tarawa Island Profile 2008 for problem areas and sites of significance.

Figure 5.2: North Tarawa population 1947-2010



Compared to the 2005 population of 5678, the population has grown by 424 people, an annual population growth of 1.5%, making North Tarawa the 6th fastest growing island in Kiribati. There is a definite pattern to North Tarawa’s growth, with the villages closest to South Tarawa having the highest population growth, while the Government station of Abaokoro and the villages to the North of Abaokoro have seen little change in population.

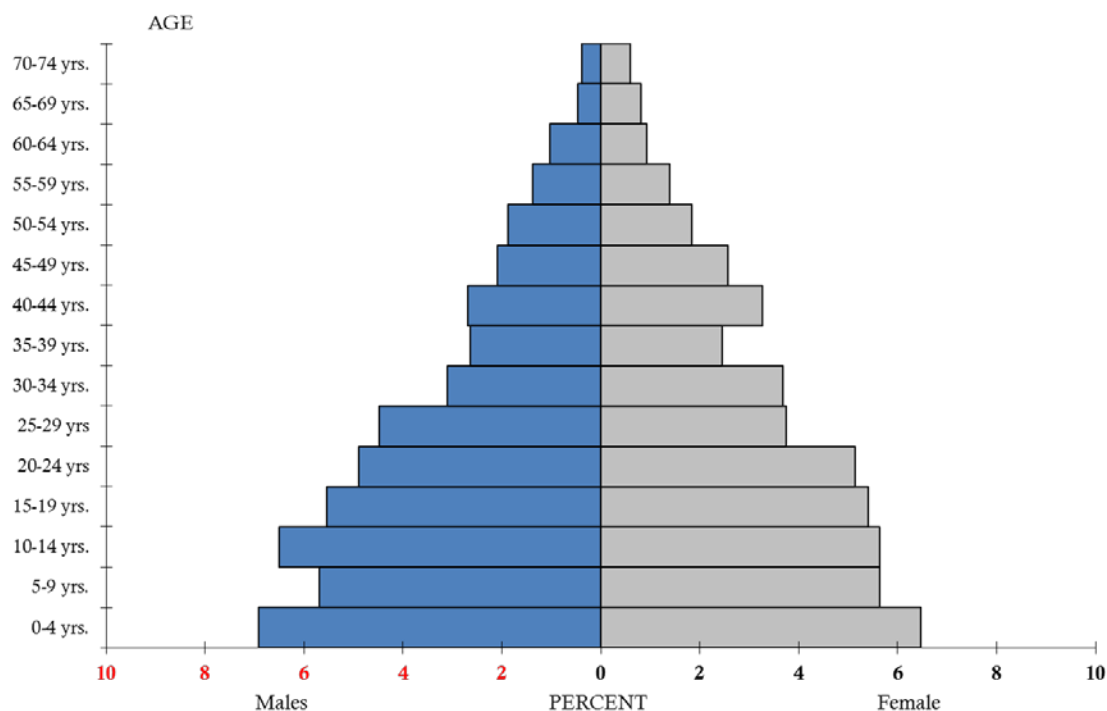
Figure 5.3: North Tarawa population growth by village



There are 1002 households in North Tarawa, and the average household size is 5.9 people.

In North Tarawa, 37% of the population is aged under 15, and the national “baby boom” is also apparent, with the population aged 0-5 outnumbering all other age groups as shown in Figure 5-3.

Figure 5.4: North Tarawa Population by age and sex, 2010



LAND AND MARINE RESOURCES

In contrast to the more Northern islands which have a rich bio-diversity, North Tarawa land resources are generally the same as those on the other islands that is to say, limited. As with the rest of the islands in Kiribati, the most common resource trees on the island are coconuts and pandanus.

North Tarawa shares with South Tarawa a large and productive reef and lagoon base that is naturally abundant with fish.

Table 5.1 Reef and lagoon areas

Island	Reef (sq/km)	Reef base (sq/km)	Lagoon (sq/km)	Land (sq/km)
Tarawa	129.03	375	533.91	31.2

North Tarawa fisherman also have the option of selling their catch in South Tarawa, either fresh or using local preservation methods of salting and drying. However sharing the lagoon area with South Tarawa has its disadvantages as many marine resources in the lagoon and ocean are being depleted due to overharvesting, and the lagoon water is polluted through mass use of the beaches as a waste area.

ENVIRONMENT

The most threatening environmental issue on the island is coastal erosion, and flooding of land during high sea surges. Other issues also exist in the form of unsafe dumping of rubbish and lack of proper sanitation facilities, leading to pollution of the water lens.

Because of extended droughts environmental issues are always arising such as increased salinity of wells, dying of tree crops, dusty roads that give rise to other health issues such as coughing and conjunctivitis etc. These are recurring issues on atoll islands located astride the equator and North Tarawa is no exception. Another disadvantage of it adjoining South Tarawa is the ease with which pests and diseases to reach the people and their tree crops. In the case of the bwabwai beetle, the last Agricultural record was that it had reached Nabeina but this was in the 1990s and no review has been carried out since then, so the beetle could have reached Buariki for all anyone knows.

WATER

The majority of households have open wells as their main source of water. In the census of 2010, almost all households (96%) used wells as their main source of water are open wells, 20% (170) households use closed wells as their main source of water both for drinking and cooking. Only 3% of households on North Tarawa are served by the PUB system and only 1% use rainwater as their main source of drinking water.

Although North Tarawa is blessed with a broad island and a continuous supply of potable water, pit toilets on the island are creating a health hazard for many of the wells.

ENERGY

Firewood is abundant on the island and the people have also been known to sell firewood to the people in South Tarawa where firewood is a problem. But people also rely on fossil fuel for their energy.

The amount of petrol shipped to North Tarawa in 2011 was 184,800 litres, along with 26,400 litres of diesel. There were also 36,000 litres of kerosene sent to North Tarawa by boat. However actual fuel use in the area will be much higher, because for many in Buota and other villages at the Southern end of North Tarawa it is easier to travel by road and purchase fuel in South Tarawa.

EDUCATION

North Tarawa has a literacy rate of 89%. Of the adult population (those over 15), 11% have not attended school at all. 31% of the adult population have a Primary leaving certificate, 21% have a Form 3 certificate, 35% have a Senior Secondary certificate, and 2% hold a Post-Secondary qualification.

North Tarawa has ten primary schools, a junior secondary school and one senior high school. The primary schools are strategically located at the most convenient locations for villages to each share a primary school where necessary. On the islets where it is a problem walking the reef passages or channels, schools are located on individual islets.

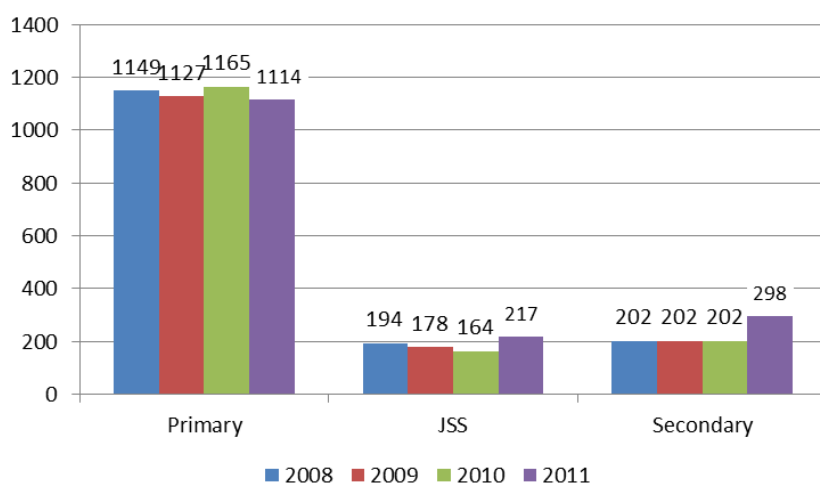
Table 5.2: North Tarawa primary school enrollments

North Tarawa	No. of Pupils			No. of Teachers		
	2011		Total	2011		Total
	F	M		F	M	
B.T. Uekera Primary School	89	84	173	5	1	6
Nein Tebwara Primary School	37	31	68	3	0	3
Ueen Nooto	44	38	82	3	1	4
Bwaan Nei Kanna Primary School	26	17	43	3	0	3
Nangintokato Primary School	24	31	55	2	1	3
Amoange Primary School	51	54	105	4	0	4
Nunteweia Primary School	40	33	73	3	0	3
Raweitina Primary School	44	56	100	5	0	5
Mamatannana Primary School	39	48	87	3	0	3
Aratokotoko Primary School	147	181	328	10	3	13
Total	541	573	1114	41	6	47

Source: Kiribati Education Digest 2011

Although the population of North Tarawa is growing, the number of enrolled students at primary school level has been fairly constant since 2008. This is consistent with the age data above which shows that much of the population increase is due to the youngest age group, 0-5 years, who are not yet at school, but will need to start school over the coming few years. At the secondary level, the Immaculate Heart College at Taborio has expanded its student roll to 298 in 2011.

Figure 5.5: School Enrollments 2008-2011, North Tarawa



Data source: Kiribati Education Digest 2011

In 2011, 168 teenaged children (75 girls and 93 boys) attended Eutan Tarawaieta JSS. The JSS truck transports JSS school children from the northern end village of Buariki and southern village of Tabonibara daily during school days. JSS students from the rest of the island, especially those living on the islets have to stay over at the mainland Abaokoro to attend the JSS as the islets cannot only be accessed by the JSS truck, but they are also too far and risky with tides for children to walk. A further 49 students attended the JSS years at

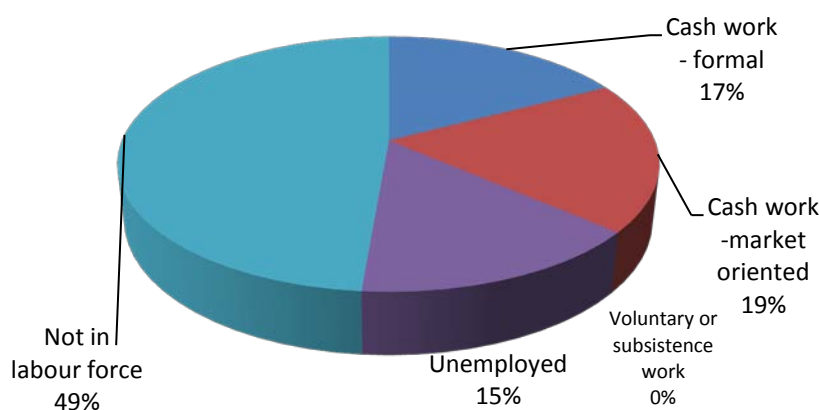
Immaculate Heart College at Taborio, bringing the total number of JSS students on North Tarawa to 217.

There were 347 students in total at Immaculate Heart College. Unlike Eutan Tarawaieta JSS, Immaculate Heart has more girls enrolled than boys; 194 girls and 153 boys. As well as the 49 JSS students there are 298 senior level students at Immaculate Heart College.

ISLAND ECONOMY

Relative to other outer islands, North Tarawa has a reasonably high level of cash employment. The proportion engaged in formal cash work, at 16%, is fairly typical of outer islands but the 17% engaged in market oriented activities is high. North Tarawa is the main source of many local products for the South Tarawa market, particularly building materials such as thatch and coconut matting (*te inaa*) as well as fish, cooked local food (*bekei, ibo, toddy, pandanus* etc), firewood, de-husked coconuts and handicrafts.

Figure 5.6: Labour Force Status, North Tarawa 2010

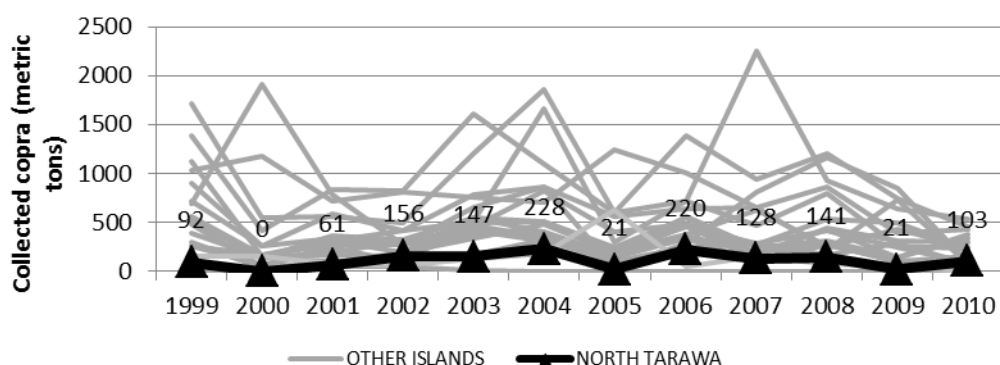


Data Source: Kiribati Census 2010

COPRA CUTTING

Where other islands are making a living out of copra, in North Tarawa copra production is very low. Even though there are copra sheds in most of the villages; in 2010 only 103 tonnes of copra was shipped out of North Tarawa bringing an income of \$61,800 which is only \$12 per person for the whole year.

Figure 5.7: Copra production, North Tarawa 1999-2010



Source: Copra Society

It is likely that the people of North Tarawa are not so interested in copra cutting as they have other means of generating income. There is a strong trade in local produce such as pandanus roof thatches, handicrafts and local food to South Tarawa which means that North Tarawa families can earn cash from land-based resources more easily than other outer islands.

EMPLOYMENT

The Eutan Tarawa Island Council is the biggest employer for the people of North Tarawa, employing 64 people in 2010 including as village wardens, village nurses, drivers, hotel keeper, and office (typing, treasurer, clerk) assistants etc.

Apart from a handful number of jobs offered by the Island Council in its limited service, opportunities for paid employment for the islanders is otherwise very limited. The Cooperative does not exist on the island and thus there are hardly any other means of employment on the island. The Immaculate Heart College at Taborio, adjoining Nootoue employs some islanders as cleaners, cooks, matron, master and watchman.

HEALTH

There is a Health Center in Abaokoro, the main administrative center for North Tarawa, and smaller clinics at Tearinibai, Buariki, Taratai, Tabiteuea and Nabeina.

Records of clinic visits in 2011 seem to show that the people of North Tarawa are the healthiest in Kiribati, making only 1.4 visits to the clinic each year, and with lower rates than Kiribati as a whole for all notifiable diseases with the one exception of night blindness (vitamin A deficiency). However a much more likely explanation is that for people in the villages of Abatao and Buota it is easier to travel to a clinic in South Tarawa than it is to access the southernmost North Tarawa clinic in Nabeina.

TRANSPORTATION

Land transportation on North Tarawa is made difficult by the many sea channels, some of which have no bridge or causeway and can only be walked at low tide. Boats are available to ferry people from Buota to Abatao, and the Eutan Tarawa Island Council has a truck. Some households have their own pushbikes or motorbikes but most do not. Only 3% of households have a car, and these are mainly in the southernmost village of Buota which is linked by road to South Tarawa.

Table 5.3: Environmental and Climate Change Issues and Impacts, North Tarawa

ISSUES	PROBABLE CAUSE/S	IMPACT on SOCIETY	REMEDIAL ACTION	SUSTAINABILITY (EFFECTIVENESS)
Coastal Erosion	<ul style="list-style-type: none"> -aggregate mining -seawall construction -causeway construction 	<ul style="list-style-type: none"> -reduction of landmasses at some areas -loss of bwabwai pits and fruit trees -water sources affected 	<ul style="list-style-type: none"> -mangrove planting -limit aggregate mining -Nooto village is keen to have its waters protected -properly designed seawalls -opening up of causeways 	<ul style="list-style-type: none"> -sustainable -questionable -can be sustainable -expensive but sustainable -costly but sustainable
Reduction in Marine Resources	<ul style="list-style-type: none"> -overfished by TUC/BTC fishermen -imaginary boundary at sea between North and South Tarawa did not eventuate -use of a variety of fishing gears by S/Trw fishermen -unregulated harvest of resources -gang and family fishing for cash revenue 	<ul style="list-style-type: none"> -discrepancy of islanders' attitude toward conservation with South Tarawans -limited marine resources for them to live and fish -lobsters and octopus declining in numbers -<i>te ibo</i> exploited for S/Trw market -bone fish and finfish decline from heavy and non-stop fishing 	<ul style="list-style-type: none"> -by-law to protect fishing grounds -identification of fishermen -a well constructed management plan and regulatory measures -draft bill for protected species and areas -demarcation of fishing zones 	<ul style="list-style-type: none"> -take time to effect -take time to effect -on the way, but questionable in terms of effectiveness -can work if all parties agree

ISSUES	PROBABLE CAUSE/S	IMPACT on SOCIETY	REMEDIAL ACTION	SUSTAINABILITY (EFFECTIVENESS)
		<ul style="list-style-type: none"> -shellfish – <i>te bun</i> depleted -cone shell – <i>te nouo</i> overharvested -sharks depleted -red snapper decline -flying fish heavily exploited -<i>te mania, te koikoi</i> decline -all sea cucumber species depleted 		
Water	drought	<ul style="list-style-type: none"> -less ground water -vegetation and fruit trees affected 	<ul style="list-style-type: none"> -concrete cisterns to be built to withstand long droughts -watering systems to be in place -aluminium roofing for residents for tanks 	-long term plan and costly but can be sustainable
Capacity building on Climate Change and Sea Level Rise	<ul style="list-style-type: none"> -no consultation previously conducted -no funding for training at island council level 	<ul style="list-style-type: none"> -islanders are unaware of Climate Change and Sea Level Rise -island council employees not familiar with training of village people 	<ul style="list-style-type: none"> -intensifying training and consultation -media training -contributions from respective govt. Ministries towards Climate Change and sea level Rise 	<ul style="list-style-type: none"> -sustainable through funding sources -must continue at paced intervals

