



KURIA ISLAND



2008

SOCIO-ECONOMIC PROFILE

PRODUCED BY THE MINISTRY OF INTERNAL AND SOCIAL AFFAIRS,
WITH FINANCIAL SUPPORT FROM THE UNITED NATION DEVELOPMENT PROGRAM,
AND TECHNICAL ASSISTANCE FROM THE SECRETARIAT OF THE PACIFIC COMMUNITY.



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KURIA ANTHEM

KURIA ABARA AE TANGIRAKI

Kuria abara ae tangiraki
Tiaki kona ni mwaninga taekana
Bwa bon nnera rikiara mangkoa
Are ti mameka iai
Uoua atimakorona aika manguroro
Teuana te rawa imarenaia
E bon niku akea n aiarona
Iaoni Kiribati

Tina tabekia rake
Kuria ae tangiraki
Ba ena bura i moa
N aroaronanako
N te katei ma te rau

Abara ae bon tei iaan te aoi
E mwaitoro aona e kakamaiu,
E kareke kangkangin ikana
Iaoni Kiribati
Norauea, Buariki ma Tabontebike
Bouatoa, Marenaua ma Oneeke
Bane mai tina mauanakoa
Te nano ae te nano n aba

KURIA OUR BELOVED

Kuria our beloved island
We can never forget it
Willed to us from long ago
Have dwelled on it ever
Two islets always evergreen
A passage dividing them
Wide as can be amongst all
In Kiribati

We will raise it up
Kuria our beloved
To stand proudly in front
In everything
Tradition and peace

Stands proudly in the morning dew
Always cool and pleasurable
Delicious fish that can become a habitual
fondness, In Kiribati
Norauea, Buariki and Tabontebike
Bouatoa, Marenaua and Oneeke
Let us all come together and
Instill everlasting patriotism

FOREWORD

*By the Honourable Amberoti Nikora,
Minister of Internal and Social Affairs, July, 2007*

I am honored to have this opportunity to introduce this revised and updated socio-economic profile for Kuria Island. The completion of this profile is the culmination of months of hard-work and collaborative effort of many people, Government agencies and development partners particularly those who have provided direct financial and technical assistance towards this important exercise.

The socio-economic profiles contain specific data and information about individual islands that are not only interesting to read, but also more importantly, useful for education, planning and decision making. The profile is meant to be used as a reference material for leaders at both the island and national level, to enable them to make informed decisions that are founded on accurate and easily accessible statistics. With our limited natural and financial resources, it is very important that our leaders are in a position to make wise decisions regarding the use of these limited resources, so that they are targeted at the most urgent needs and produce maximum impact.

In addition, this profile will act as reference material that could be used for educational purposes, at the secondary and tertiary levels. This is one of the intentions when the revision exercise was conceived in the first place. In its new format, the profile contains valuable information on the history, geography, demography, commerce and trade, natural resources, the environment, and many other important facts about the islands. The vision to make the island profile important reference material will be further enhanced with the launching of the Ministry's website. This is indeed a revolutionary step in the sense that such valuable information will be made accessible on the internet, for everyone to use in and outside Kiribati.

The profiles have potential economic value because they provide the kind of information that local and foreign investors need. This aspect of the profiles will be improved with time, as better information on marine and land resources becomes available and incorporated in the book.

The island profiles are useful development documents for individual islands and the nation as a whole. Whether they are used by students, businesspersons, tourists, politicians, or planners, I can say with conviction that it will prove a useful resource on Kiribati.

Te Mauri, Te Raoi and Te Tabomoa to everyone.

ACKNOWLEDGEMENTS

The preparation of this profile involved the hard work and commitment of various individuals, Government ministries and external development agencies. At the outset, the initiative and financial support of the United Nations Development Program (UNDP) must be acknowledged with deep appreciation. UNDP financed the revision of the profiles through a joint UNDP-GoK project known as *Strengthening Decentralized Governance in Kiribati (SDGiK)*.

Other regional organizations that have been very supportive to the profiling exercise include the South Pacific Geo-science Commission (SOPAC), who provided technical support in relation to the incorporation of GIS and CHARM in the project. The South Pacific Commission (SPC), who assisted in the establishment of POPGIS for use in data sourcing and analysis, provided input to the structure of the profiles, recommends the incorporation of valuable data and information, and generously offered to publish the profiles. The Kiribati Adaptation willingly came on board after the SDGiK ended, to continue funding completion of the outer island profiles and to incorporate Climate Change and Sea level rise information in the profiles that were otherwise non-existent. Without all the above assistance, the profiles as you see them now would not have attained such a high quality in terms of content and appearance. The Ministry of Internal and Social Affairs owes much gratitude to these organizations particularly their concerned staff, for their readiness to assist even if it was beyond their terms of engagement.

The project office of the Commonwealth Local Government Forum (CLGF) based in Fiji, through its Pacific Project, also contributed invaluable assistance to the project, in particular to Component 3, which focused on capacity development of local government bodies on the outer islands. Several of the activities under this component were jointly funded by CLGF, thereby absorbing much in terms of financial costs and time. For these contributions, we are very much thankful.

The various ministries of Government have helped in one way or another, especially in the furbishing of valuable data and information used in this profile. The project has been successful in maintaining the good relationship that had developed with other ministries and civil organizations. In addition, inter-agency committees were established for monitoring and technical support during the implementation phase of the project. The most important of these committees is the Outer Island Project Coordinating Committee (OIPCC), which serves as the overall steering body of SDGiK. Other technical working committees were also instrumental in getting some of the difficult tasks done. These working committees include the committee on the review of the Local Government Act, and the committee on the review of development procedures. One of the important lessons learned from the establishment of these committees is that it is possible to cut across borders to get the kind of commitment and cooperation that are reflected in the achievements of the project.

Hopefully the network of cooperation, which is necessary in sustaining and improving the profiles in future, is maintained between the various ministries of Government. As the leading agency in the production of this profile, the Ministry of Internal and Social Affairs must ensure that the linkages between the statistical units of various government departments remain intact.

Due to its multi-dimensional nature, far too many people are involved in the profiling exercise to allow acknowledgement on a personal level. It is hoped that by according merit to their respective agencies will somehow convey the deep sense of gratitude, which the project owes to these committed individuals. With this in mind, we would like to acknowledge the great contribution and support of the Ministry of Internal and Social Affairs (MISA), in particular the Rural Planning Division (RPD), the Local Government Division (LGD), the Community Development and Services Division (CDSD), and the Accounting Unit, who spearheaded the various activities related to their areas of expertise. The successes that have been achieved in the different project components are indeed the result of their

collective work.

Ultimately the greatest contribution and sacrifice in the production of these revised Island Profiles is offered by a few committed individuals, both within the Ministry as well as from outside who deserve to be acknowledged. Nei Terautete Tareti, the computer operator in the Rural Planning Division who collected the initial data, Nei Buraieta Tekabwaara who worked hard to collect and update data required for the profiles as well as the GIS data maps. Nei Ruta Ioata, who assisted in data collection, designed the graphic formats in the profiles, willingly assisted in collection of outer island data and pictures and had to work extra hours to complete her profile responsibilities.

Phil Bright and his colleagues at SPC in Noumea generously offered to edit and publish the profiles, besides arranging for a work attachment with SPC for two of MISA staff. The profiles will have not attained the very high quality in which you see them now without their assistance. In addition, the improved layout and presentation of information is also based on their professional views and guidance.

The strong support and leadership of the Minister of Internal and Social Affairs, Honorable Amberoti Nikora has been a significant factor in the successful undertaking and completion of the profiling exercise, and for the whole SDGiK project for that matter. His support would have not been that strong without the equally solid support and guidance of the former Secretary of MISA, Karib'aiti Taoaba, and Rikiaua Takeke, the current Secretary.

The Deputy Secretary, Manikaoti Timeon spearheaded the profiling and completed the first prototype on Makin after which project staff continued drafting the other outer island profiles. His immense effort and guidance in the profiling is a major contribution to the completion of these profiles. The unwavering efforts and dedication of Nei Erimeta Barako in the completion of the profiles even after the SDGiK project had ended culminated in the completion of these outer island profiles. Tebwania Taateri came in later and assisted in data collection and compilation. Ultimately, the KAPII project under the directions of Kautuna Kaitara, the KAPII Coordinator, Kaiarake Taburuea, the Project Manager and Paul Craig, provided the required funds and support in the eventual completion of the profiles.

To everyone who have contributed in one way or another to the production of this useful document, including the many people and island councils on the outer islands, the Government of Kiribati is deeply indebted, and wish to thank you immensely for your useful contributions.

AMI BAU TE MAURI TE RAOI AO TE TABOMOA.

KAM BATI N RABWA.

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LIST OF ACRONYMS

SDGIK	Strengthening Decentralized Governance in Kiribati
MDGs	Millennium Development Goals
MOP	Ministry Operational Plan
NDS	National Development Strategy
UN	United Nations
GOK	Government of Kiribati
SOPAC	South Pacific Geo-Science Commission
CHARM	Comprehensive Hazard and Risk Management
GIS	Geographic Information System
CLGF	Commonwealth Local Government Forum
OIPCC	Outer Island Project Coordinating Committee
MISA	Ministry of Internal and Social Affairs
RPD	Rural Planning Division
LGD	Local Government Division
CDSD	Community Development and Services Division
SPC	Secretariat of the Pacific Community
MOH	Ministry of Health
MELAD	Ministry of Environment Land and Agricultural Development
MEYS	Ministry of Education Youth and Sport
MFED	Ministry of Finance and Economic Development
POPGIS	Population GIS
RC	Roman Catholic Church
KPC	Kiribati Protestant Church
SDA	Seventh Day Adventist Church
LDS	Church of Jesus Christ of Latter Day Saints
COG	Church of God
KHLP	Kiribati Handicraft and Local Produce Company
KSECL	Kiribati Solar Energy Company Limited

CHAPTER 1: INTRODUCTION

The first Island Profiles were published in 1991, about 20 years ago. Apart from being used as a resource book by project personnel in the Rural Planning Division, it remained largely unutilized, and the information quickly became obsolete as the years passed without any attempt to update a lot of the statistics contained in them. This is the first time that the profiles are being updated and upgraded to suit today's need for information. In addition to the upgrading exercise, the profiles will also be updated, annually if possible, depending on the regularity and availability of reliable statistics from other ministries, non-government organizations and the Kiribati community at large. The current revision is based on a mixture of methodologies including importation of data from different government ministries (MOH, MELAD, MEYS, and MFED), the use of PopGIS software to analyze and map data, face to face interviews, questionnaire surveys and the use of reference materials and the internet.

While the purpose of the profiles is to serve as the basic information tool for planners and decision makers, it can also be used to meet the needs of students, business people, politicians, tourists, planners, and the public in general. This is possible due to the fact that it contains unique and interesting information on the island's culture, economy, natural resources, environment, infrastructure, social services and various other features. With the incorporation of MDG indicators in this new version, the profiles will now serve a very useful purpose of becoming an important tool to monitor the country's performance in respect of achieving MDG targets. Island-level statistics enables more specific analysis of the situation faced by Kiribati in the different sectors of health, education, poverty reduction, gender equality, the environment, and HIV/AIDS. These are the issues embodied in the eight goals set by the United Nations which countries are expected to achieve by the year 2015.

Another new feature of the profiles is the introduction of a computerized back-up system, which is made up of an electronic copy of the profile, as well as a GIS program, which enables detailed analysis of statistics right down to the village and household levels. The ultimate objective of the whole exercise is to have an efficient and reliable source of information about the outer islands, that is not only available in hard copy, but better still one that could be accessed immediately by the push of a keyboard button. This will enable professionals and lay people alike to acquire information quickly, for whichever purpose they may have. The profiles will be made available on the Ministry's website – www.misa.com, or alternatively through PRISM. This will enable international access to the profiles for the use of traveling officials, overseas students, potential investors and visitors. Apparently the website will contain information other than the island profiles, from the various divisions of the Ministry and perhaps additional relevant information from other government ministries. Upon completion of the website two goals will be achieved, first, that the information will be available on line for the first time and, second, that such useful information will be accessible from anywhere in the world in electronic form. This is going to be a significant achievement in itself.

The continual usefulness of the profiles, and other information contained in both the hard and electronic versions, will depend to a great extent, on a reliable system of updating and upgrading. After all, information changes all the time, as do the technology upon which it depends. Finally, it is hoped that the profiles in their new format and accompanying electronic features will serve the purpose for which they are designed, and much more. We wish every user of this profile enjoyable reading, and trust that they find it interesting and rewarding.

1.1 Summary of Main Socio-Economic Indicators

	NATIONAL			KURIA		
	Total	Males	Female	Total	Male	Female
Total population (November 2005)	92533	45612	46921	1082	526	556
Urban population	40311	19435	20876			
Percent of national population				1.2	1.2	1.2
Percent urban (%)	43.6					
Rate of Growth (%) of total population 2000-2005				2.4		
Population density	127			70		
South Tarawa population density	2558			2558		
% population younger than 15years	37	38	36	42	46	39
% population 15-24 years	21	21	20	14	14	13
% population 15-59 years	58	57	58	44	41	47
% population 60 years and older	5	5	6	7	5	8
Age dependency ratio	74			96	104	88
Households						
Number of private households	13999			202		
Number of persons in private households	88644	43749	44895	1082		
Average household size	6.3			5.4		
Number of institutions (non-private)	43					
Number of persons in institutions	3889					
Labor market activity	36969	20013	16956			
Employed population	34715	18883	15832	624	286	338
Cash workers	13133	8095	5038	103	60	43
Village workers	21582	10788	10794	380	190	190
Unemployed	2254	1130	1124	0	0	0
Non-labor market	21069	7926	13143			
Students	7323	3496	3827	38	22	16
Persons engaged in home duties	6077	793	5284	77	3	74
Inactive persons	3662	1996	1666	1	1	0
Retired persons	3227	1179	2048	18	7	11
Disabled or sick persons	709	398	311	2	2	0
Prisoners	71	64	7	1	1	0
Labor market participation ratio	63.6	71.5	56.3	77	87	69
Employment-population ratio	22.6	28.9	16.7			
Unemployment rate (%)	6.1	5.6	6.6	79		
Education						
School enrolment rates 6-15 year olds (%)	91.0	89.1	93.0			
Proportion of population 15 years and older with secondary or higher education	50.5	51.6	49.5			
Proportion of total population with secondary or tertiary qualification	19.4	18.2	20.5			

CHAPTER 2: GENERAL BACKGROUND

2.1 LOCALE

2.1.1 Location, Size and Land Area

Kuria is one of the three islands that form the central district of the Gilbert group besides Abemama and Aranuka. It is made up of two islands with the mainland Kuria connected to the islet of Oneeke by a bridge. Kuria is well known for its great width (4.26 km) from the lagoon to the ocean side of the mainland when compared to the rest of the islands in the country. It lies 139 kilometers southeast from the capital Tarawa. Aranuka lies 23.22 kilometres southeast of it while Abemama lies 54 kilometres further northeast than Aranuka.

Alternative Names:	Oneeke, Woodle Island
Area / Country:	Central Gilbert group, KIRIBATI
Coordinates:	Latitude (DMS): 0° 13' 51.66" N Longitude (DMS): 173° 24' 35.67" E (Degrees, minutes and seconds)
Area:	Total land area: 15.48 sq.km Widest width: 4.26 km Narrowest width: 0.06 km Length: 8.94 km

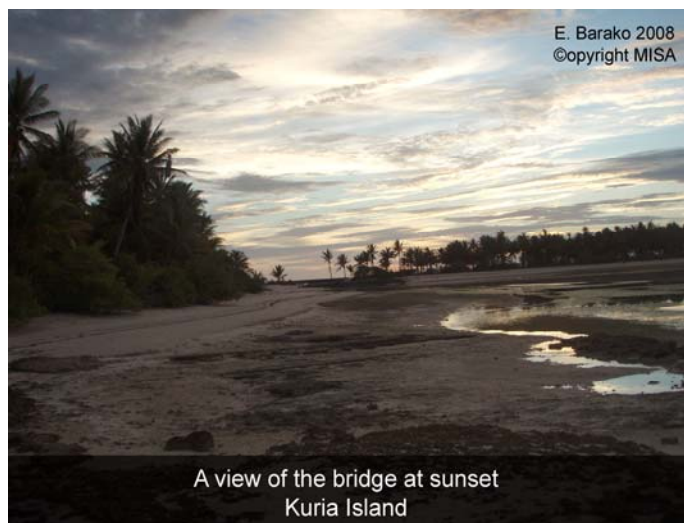
Kuria has two small ponds that can be found on the mainland Kuria and is the twelfth (12th) biggest island (in land area) in the country with Kiritimati island in the Line group coming first with a world record atoll land area of 388.39 sq. km and Tamana as the smallest island with a land area of 4.73 sq. km

2.1.2 Physical features

There are six known villages on the island of which five of them can be found on the mainland Kuria and Oneeke, stands separately as a connected islet. Norauea, Buariki, Tabontebike, Bouatoa and Marenaua are the other five villages of mainland Kuria. A bridge connects mainland Kuria to Oneeke that has been blamed for the disappearance of 'te anaa', the long billed garfish (*Euleptorhanphys viridis*) that used to frequent the island.

From above, Kuria looks something like a very out of proportion figure eight (8) thus is made up of two islets joined together by a bridge.

Typically, coral islands and atolls are small, averaging 2 meters above sea-level, with sandy and porous soil. However, it also has a high annual rainfall compared to the southern group islands, thus vegetation grows well on Kuria, resulting in good fertile soil. Most of the important food crops such as coconut,



giant taro, pandanus and breadfruit grow well without much need of serious cultivation. A gravel road stretches across and around Kuria mainland and Oneeke and is used to access other villages and parts of the island. All the villages are located on the lagoon side of the island and are easily accessed by walking, bicycles, motorbikes and cars. Due to its width, walking the ocean side can be time consuming and is better accessed using bicycles, motorbikes and trucks. Kuria has a lagoon that is not so rich in shellfish when compared to other lagoon islands such as Tarawa or Abemama but then the lagoon opens straight out to sea while other lagoons such as in Tarawa are encompassed by islets. However, it is rich in other marine resources and is actually locally famous for the scrumptious humped back red snapper (*Lutjanus gibbus*) and black trevally (*Caranx lugubris*) that are incomparable in taste to the same kind of fish found in other parts of Kiribati. Locals have attributed the deliciousness of their fish to a kind of reddish/orangish algae that is found in the sea of Kuria at certain times of the year. At such times when the reddish algae is seen, the locals call it the 'oily season' as that is when all fish catches excel in oil content which according to locals is delicious.

2.1.3 Climate

With the exception of Tarawa that has its own meteorological office, the non-availability of rainfall measuring equipment on the outer islands has resulted in the lack of rainfall data for all the outer islands of Kiribati including those in the Phoenix and Line group and Arorae.

Kuria like the other islands in Kiribati are scattered astride the equator with a tropical climate. It is hot and humid all year round with east trade winds moderating the temperatures throughout the year. November to April is the rainy season, with high humidity and stronger winds.

Like most Kiribati islands, the strong influence of El Nino and La Nina events on the climate is prevalent throughout and Kuria is no exception. El Nino Southern Oscillation (ENSO) variability is defined by the Southern Oscillation Index (SOI) that measures the difference in pressure between Darwin, Australia and Tahiti. Simply defined, El Nino is the warming of the sea-surface temperatures in the equatorial Pacific Ocean that influences the atmospheric circulation and consequently rainfall and temperature in specific areas around world. Depending on this complex interplay of sea surface temperatures (SSTs) in the equatorial Pacific ocean, atmospheric circulation is affected which either then moves eastward or westward producing either of the two events, El Nino or La Nina which in turn either results in rain or drought on the islands depending on where the atmospheric circulation is headed.

(http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/nino_regions.html).

Drought spells in Kuria are also a common occurrence as prevalent throughout the southern islands and to a lesser extent the central and northern islands. Generally in Kiribati, the wet season, according to records, falls between the months of September to February, while the dry season begins in March and ends in August. The temperature ranges between 28° Celsius at dawn to 32° Celsius in the early afternoon but have been known to get hotter or warmer than 32° C. Cool ocean breezes play an important role in keeping the temperature down during hot days. Nevertheless, locals have experienced periods of very cold nights when even bottle-kept oil had frozen overnight. Whether this is an indication of climate change and impacts to the island is a phenomenon for the experts to make sense of.

2.1.4. Soil

Kiribati atoll soils are derived from the underlying coral reef and thereby consist mainly of calcium and magnesium carbonates (Town 1982). The soils tend to be shallow and highly alkaline with large soil (grain) particles rendering it highly permeable with low capacity to hold water, highly porous (J. Barr 1991). Because the soil is highly alkaline, fertility is dependent on organic matter for the concentration and recycling of plant nutrients and for soil water retention in such excessively well drained soil. Kiribati

soils especially those in the Gilbert group are classed as among the poorest in the world (Frank R. Thomas 2003).

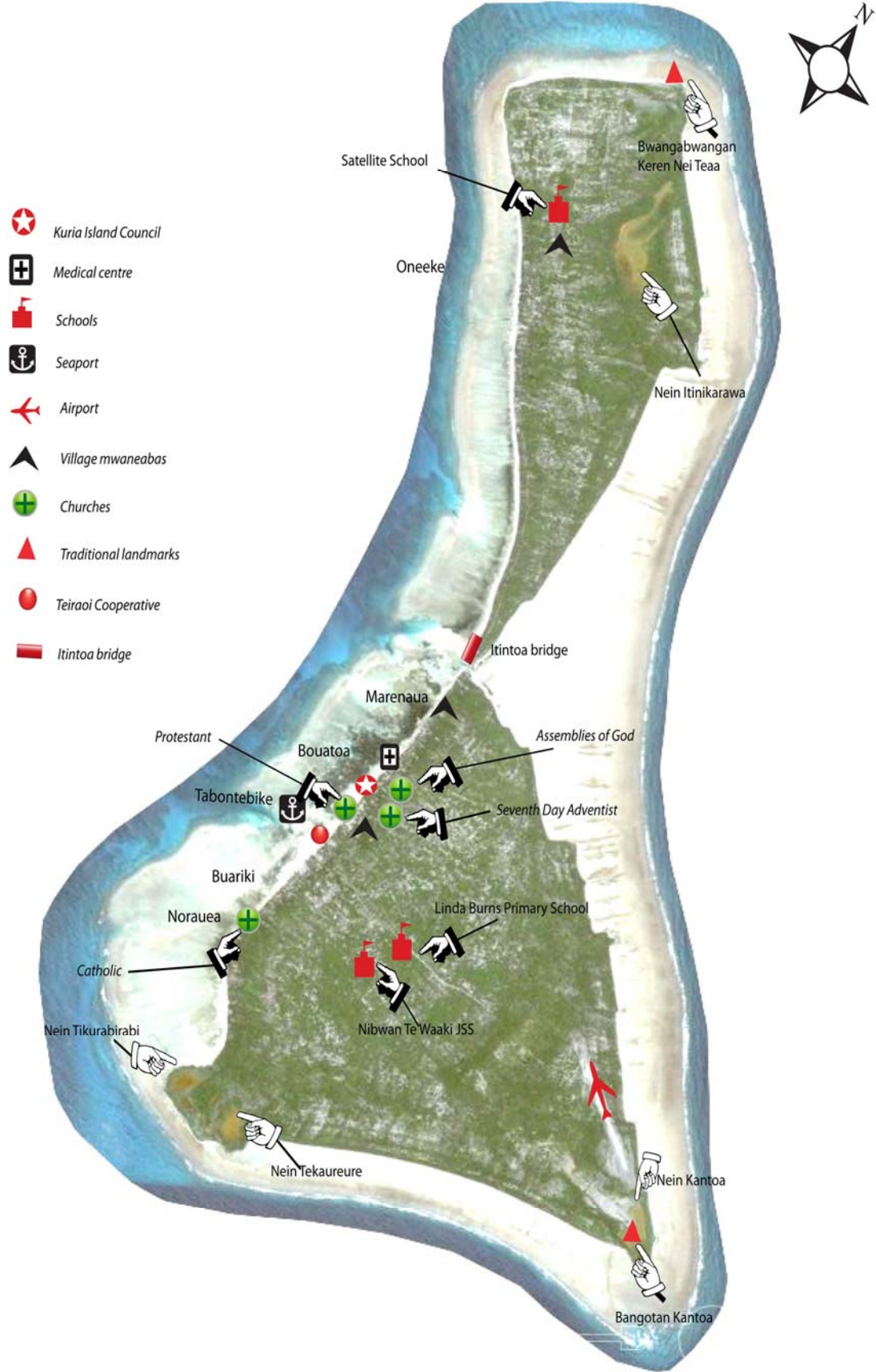


The soils encountered in Kiribati are described as having an AC type profile. The A-horizon consists of sand containing a variable quantity of humus. It is usually about 25 cm deep, has a pH of 7.6-8.0, and is dark greyish to black in colour. This rapidly gives way to coarse white and pink gravely sand of the C-horizon, which consists almost exclusively of calcium and magnesium carbonates and has a pH of 7.8-8.3. The soil type is one of coral sediment with varying topsoil that is poor in nutrients. The soil has a high amount of free calcium, locking up most of the necessary nutrients.

The soils are very highly permeable and have a low moisture-retaining capacity. The topsoil may have clay-sized particles constituting up to 5 percent of the volume of soil but such particles are formed by the breakdown of the algae shells by carbonic acid in humus. Atoll soils are generally low in N and K, and P tends to be fixed. Deficiencies of micro-minerals (nutrients) such as Cu, Zn, Fe and Mn are

very common, however, the levels of sodium, boron and molybdenum are adequate, while sulphur may be borderline in some areas. <http://www.fao.org/ag/AGP/AGPC/doc/Counprof/southpacific/kiribati.htm>

Fig 1: A geographical map of Kuria



2.1.5 History and Culture

Abemama, Kuria and Aranuka were united under Karotu, the Uea of Abemama in the 1840s, after a number of battles. With an impending rebellion on hand, King Karotu had escaped to Aranuka where he lived in a sanctuary at Kauake. However, on arrival at Aranuka, the Aranukans regarded him as a captive and wanted to kill him. 'Ten' Temea, who ruled both Kuria and Aranuka at this time, gave the order to kill Karotu, but on the last day before Karotu was to be killed, Tekimai, Ten Tetabo's spy and closest advisor to King Karotu, told Karotu to send Nei Teaa, his beautiful wife, to collect firewood and give it to Ten Temea. Karotu sent his wife to do this, telling her to go with coconut oil and a mat. Temea saw Nei Teaa and instantly fell in love with her and later, he slept with her. This made Temea change his mind and the next morning, he called everyone to the 'mwaneaba' and said, "I have news for you. You will not kill Karotu". Consequently, Karotu's feet were washed, the club that he was going to be killed with was removed, a large heap of food was placed in front of him and a huge feast followed. The washing of a person's feet was an act which recognized greatness and high status.

Temea knew that Karotu would probably try to kill him when he found out that he had slept with Nei Teaa so he escaped to Maiana. However, before he left, he gave Karotu the right to rule Kuria and Aranuka which paved the way for the unification of these three central islands.

In 1878, Binoka became the King. There were opposition from outside the family and some from his own relatives, due to Binoka's cruelty and to his increasing demands for copra to pay off debts incurred when he bought a schooner. Binoka had a great interest in trade, firearms and the manufactured goods brought by traders. His needs for land increased accordingly and as his commercial plans developed, he bought a ship (schooner) which he could not have paid for easily unless Kuria and Aranuka were fully incorporated under his leadership. He therefore tightened his control over them and demanded that all produce be given to him. On all three islands, there were girls available for Binoka. No girl was allowed to marry until Binoka had seen her. The usual practice was for every girl to visit Binoka at the time of her first menstruation. He could do with them as he pleased. Binoka ruled with a firm hand and European technology until his death, before the arrival of Captain Davis of *Royalist* in 1892. He concentrated on trade and showed great interest in European visitors and the changes brought about by them including guns, clothes and food.

Kuria like several other islands in the Kiribati group of islands were first sighted in 1788 by Captain Gilbert and Marshall on their way to Singapore to pick up a cargo of tea before returning to the United Kingdom after dropping off convicts in Australia. Their traditions are similar to those of Abemama and Aranuka that is based on peace, respect and politeness contrasting to the cultures in the southern and northern. Like Abemama and Aranuka, heavy swear and dirty words that are normal in the southern Gilberts are rarely if at all heard on the island and instead what the southern island communities would deem dirty and taboo words are quite a common day language of the people on the island.

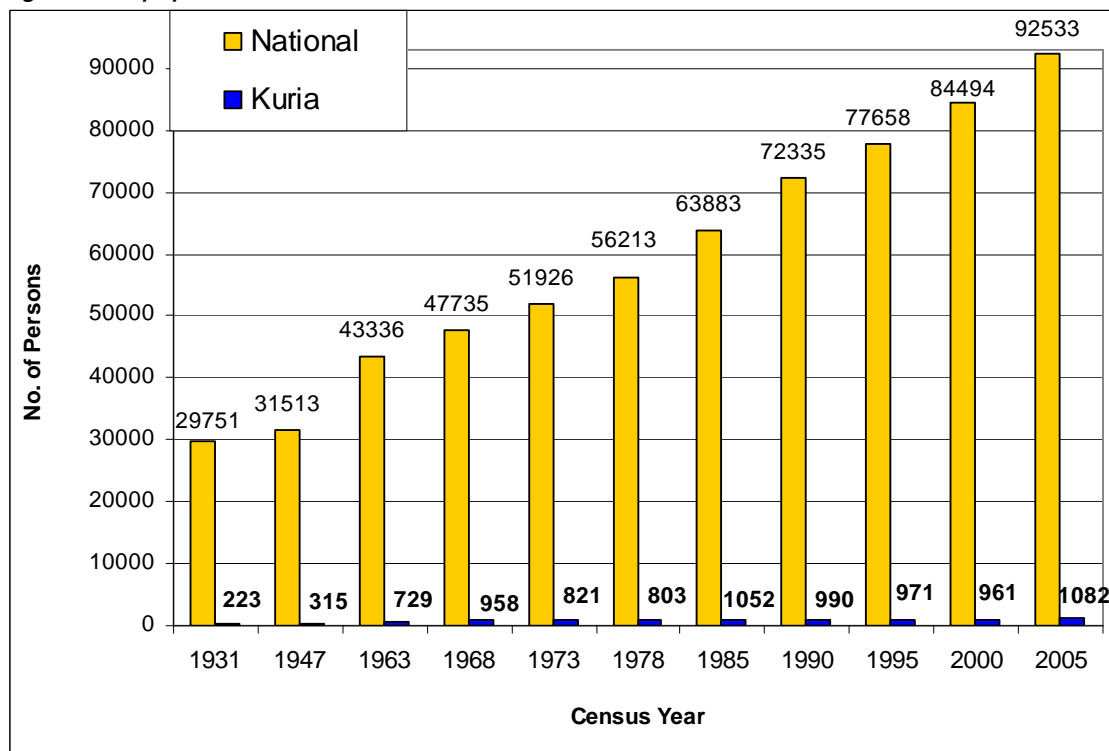
CHAPTER 3: TE MAURI – ENVIRONMENT, RESOURCES AND SOCIAL SERVICES

3.1 Demography

3.1.1 Total population

The 2005 census recorded a total population of 1082 people on the island, an increase of 121 people since the 2000 census when the population was 961. Of this 1082, there are 526 (49%) males and 556 (51%) females scattered throughout the island's 6 villages, as well as government employees working at the Kuria Island Council, schools and medical facilities on the island.

Fig 2: Kuria population trend since 1931-2005



The population of Abaiang represented 1.2% of the total 92,533 population of Kiribati with South Tarawa having the greatest number of people at 43.56%. As displayed in the above table from the 2005 census, the population of Kuria increased by 121 people since the 2000 census, a population change of nearly 13%. Its population trend has been fluctuating over the years with the population initially booming by 131% in 1963 which was around the time when the Island Councils were being established and the chiefly system abolished during colonial times. During these years, without the traditional support from the island communities in the central islands, the chief/king and family had pretty much started selling land to other islanders for income. To this day, the people from Kuria, Aranuka, Abemama and Butaritari in the northern group are more a mixed race of islanders than any other island in community in the Gilbert group, other than Tarawa of course. A lot of people from the southern islands purchased land during this time in Kuria, Aranuka and Abemama and also Butaritari. It should also be noted that the doubling of the population in 1963 took over a timeframe of 16 years since the 1947 census.

3.1.2 Growth rate

To date, statistics show that the populous year for the island was in the most recent census survey in 2005 when the population was at 1082, not a lot of difference from the 1985 population. The lowest population census record was 1931 when the population was at a mere 223. The population grew slowly over the years, more than doubled in 1963, and 22 years later, had increased by 30%. It had taken 16 years for the population to more than double in 1963 whereas 22 years later, the population had not increased to same extent as it had then.

Apart from lands being sold out and purchased in the mid 1990s, the changes in the school system over the years may have also played a big part in the decline and growth rate. However, there are other reasons for the changes such as decrease in birth rates or the increase of in and out migration from Kuria to the urban islands of South Tarawa and Kiritimati in the Line & Phoenix group which at this point cannot be supported due to lack of data. The decline can also be seen as a progress that supports or confirms the trend of out migration from the outer islands to search for better service opportunities in South Tarawa and the Line Islands. Not all the outer islands are however declining in growth but are actually increasing in outer islands such as in Kuria, Banaba, Makin, Arorae and Nikunau, to name a few.

Where Kuria's annual growth rate in 2000 was at -0.2%, by the year 2005, it had increased to 2.4%, quite a significant change, well above the national population growth rate. Nationally, the Gilbert islands population growth was 1.7% in 2000 and 1.8% in 2005. Kiritimati in the Line Group has the fastest national growth rate of 8% on average with Kanton in Phoenix group the lowest at -7.9% (2005 *Analytical report*)

3.1.3 Population Density

Population density is defined as the number of people living within a square kilometer of land that is calculated by dividing the number of people in a given location with the area of land. Table 2 below presents the population density on the island showing that the density was at 70 people per sq. km in 2005, a density change of 16% since the density record of 2000.

Table 1: Population Density by village 2005

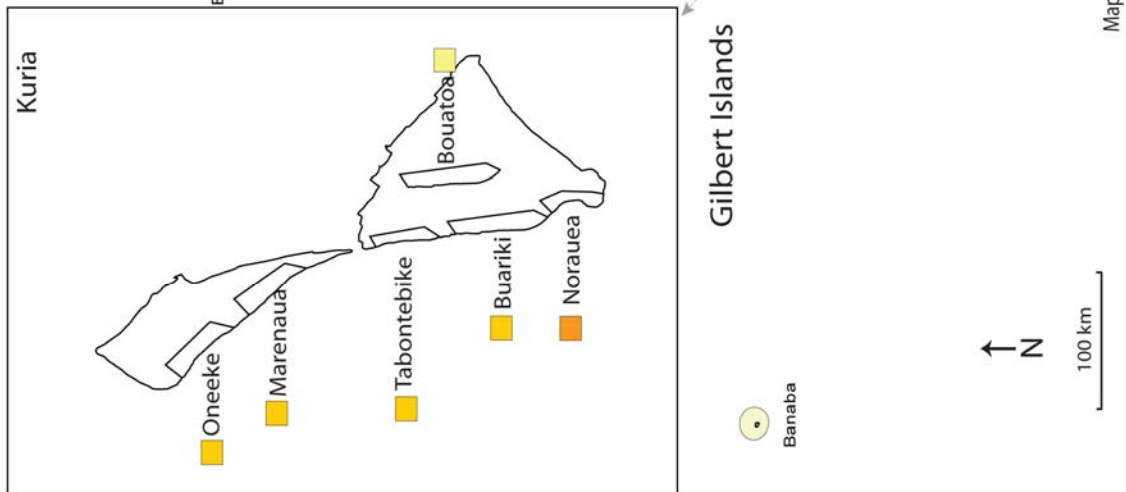
Villages	Village Land Area	Pop 2005	Density 2005	Density Change %
Oneeke	0.49	188	384	22
Marenaua	0.51	246	482	5
Tabontebike	0.28	119	425	23
Buariki	0.59	199	337	-23
Norauea	0.3	219	730	0
Bouatoa	0.59	111	188	0
Total village area	2.76	1082	392	
KURIA	15.48		70	16

Source: PopGis 2005 SPC Noumea

Kuria has a total land area of 15.48 sq. km of which approximately 2.76 sq. km (PopGis 2005) comprise the 6 village areas leaving 12.72 sq. km as free owned individual arable or unused land. Like the rest of the islands in Kiribati, people live in the Imatang designed villages (Dixon. K. 2007) giving the idea from statistics such as that in the above table that people on the islands are congested in the villages when they are actually not. It is now more a voluntary need to live in the village communities rather than being

forced to live in congested circumstances such as in living conditions of Betio where people are congested because there is lack of living space on the islet. Furthermore, unlike Betio where there is hardly any space surrounding any one house, households on Kuria are placed linearly to each other and have heaps of space at the front and back. Kuria is fortunate in being an island that is wide as there will always be space and more land resources for the limited number of people on the island for years to come.

Population density by Island, Kiribati 2005



3.1.4 Breakdown of Population

The following table shows the breakdown of the population and age groups in the six villages of Kuria.

Fig. 3: Kuria Population distribution by age group in villages

	Broadage Age Group								
	Total	<1	1	2-5	6-14	15-17	18-49	50-69	70+
KIRIBATI	92533	2403	2167	8819	20804	6589	41131	8628	1992
Males	45,612	1,235	1,114	4,483	10,693	3,334	20,045	3,971	737
Females	46,921	1,168	1,053	4,336	10,111	3,255	21,086	4,657	1,255
Oneeke	188	3	5	29	53	8	71	18	1
Marenaua	246	7	6	23	56	13	108	25	8
Tabontebike	119	1	4	15	36	9	44	10	0
Buariki	199	9	6	26	49	7	83	16	3
Norauaea	219	3	4	27	47	12	92	23	11
Bouatoa	111	1	0	12	36	7	33	21	1
KURIA	1,082	24	25	132	277	56	431	113	24

Source: 2005 Census of Population, NSO/MFED, 2007

The Kuria population age group were randomly distributed between those not a year old and the elderlies, more than 70 years of age. The most populous of the villages was Marenaua followed closely by Norauaea. These two villages are in the mainland Kuria and the most accessible to the Kuria Island Council and buzz of the island. The village of Bouatoa is where the Island Council is and therefore comprises most of the local government structures such as the offices as well as the homes of Government employees working at the island council.

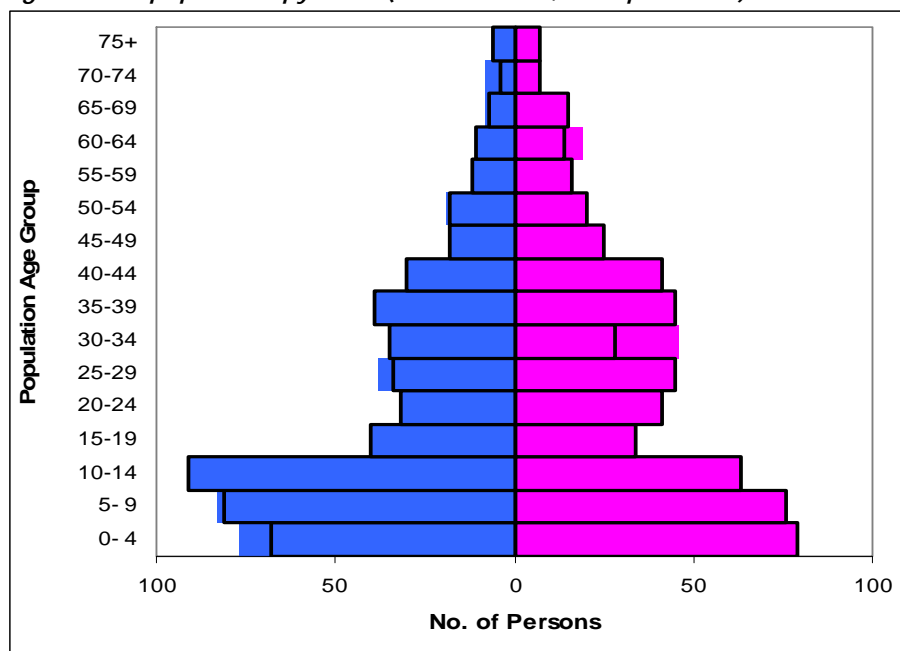
The age dependency group is defined as those unable to live on their own and generally those below 15 years and those over 64 years of age. A total of 504 (47%) of the Kuria population are in the age dependency group of which the majority 458 (91%) are the younger folk aged 0-14 years old, greatly supporting the trend of a young population. The rest 46 (9%) are those aged 65 and over. 240 (48%) of those 0-14 years are males while 218 (43%) are females. The lesser older folks figuratively comprised 17 (3%) males and 29 (6%) females. The oldest person on Kuria in 2008 was Nei Taaren Kanere, 83 years old however, the oldest person in the country was Tawetia Nakabuta, 109 years old in 2008 and originally from Maiana.

3.1.5 Population by Gender

The 2005 statistics indicated that females outnumbered the males by 30 with the males numbering 526 (49%) and 556 (51%) females as further portrayed in the population pyramid below for Kuria (*Kiribati 2005 Census2: Analytical Report*, SPC, Noumea, 2007). The sex ratio for Kuria in 2005 was 95 males to 100 females (total number of males/total number of females * 100 ==> 526/556*100).

Kuria, like every other outer island has got a young population with the majority aged between 0 years and 49 years old summed up to 945 (87%) of the total 1082 population. Compared to 2000 statistics as portrayed in the population pyramid below, it would seem unlikely that the population is increasing considering that the decreases are more very significant in the 0-4, 25-29 and 70-74 year old males while the female significant decreases are in the 30-34 and 60-64 year olds. However, the increases are not dominated by any age group but insignificantly distributed amongst these age groups.

Fig. 4: Kuria population pyramid (2005 outlined, 2000 patterned)



Source: 2005 Census Analytical Report, SPC, 2007

3.1.6 Population distribution by religion

Like most of the islands in the central and northern group, even though the LMS was the first church to have converted the people of Kiribati from paganism and idol worshipping to Christianity, a lot of the people on Kuria later converted to the Roman Catholic because the initial LMS church pastors had established amongst others a lot of restrictions to the people's normal way of life such as in forbidding dancing (considered an act of paganism as it involved a lot of magic) and imposing fines and contributions to members. This motivated the people to turn to Roman Catholic as there were less restrictions on their normal ways of life and were providing a lot of assistance without a lot fines such as education and books. The LMS church is now known as the Kiribati Protestant Church (KPC).

Table 2: Kuria Population by Religious denomination 2005

Religion	Number	% Religion of Kuria Population	% National Church Representation
Kiribati Protestant Church	455	42.1	1.4
Roman Catholic	440	40.7	0.9
Seventh Day Adventist	124	11.5	7.1
Bahai	30	2.8	1.5
Church of God	0	0	0
Mormon	8	0.7	0.3
Assemblies of God	25	2.3	2.0
KURIA	1082		

Source: 2005 Census of population, NSO/MFED

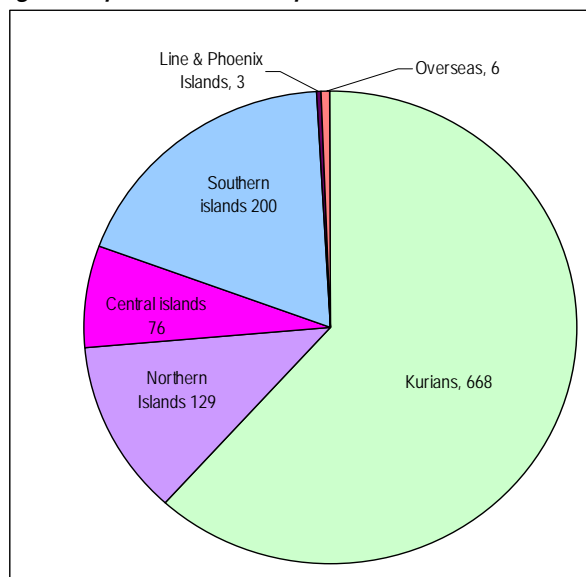
The two dominant churches are the Roman Catholic (RC) and KPC which together constituted the majority 83% of the church population in Kuria. The Seventh Day Adventist (SDA) church came third in number after the KPC at a sheer 125 (11.5%) of the Kuria population. Even though the Bahai came to the island before the Assemblies of God and Mormon, it's congregation is still limited at 30 (2.8%) while the Assemblies of God followed closely with 25 (2.3%) followers. A fast growing church, the Mormons

already have 8 (0.7%) congregational members on the island. The Church of God still has to make their presence known on the island. The other churches not stated in the census data include the Church of Christ, Pentecostal Church, Jehovah's Witness and the Muslims, amongst others.

3.1.7 Migration

Over the years, since the introduction of shipping and air services, internal and overseas migration has been experienced. Generally, internal and overseas migration was initially been due to recruitment and black-birding in the early days for overseas plantations (copra) in Fiji, Tahiti and even some as far off as Mexico. Then recruitment for phosphate mining on Banaba and Nauru opened and later on, the Northern Line Islands Resettlement Scheme whence the first shipment of settlers began in 1988. Recently, the development of the country and increase in education and employment opportunities within the country and overseas has also contributed to such migrations over the years. During colonial times and aftermath years, the administration of the country was directed mostly by overseas (mostly British) people before independence whence the administrative were slowly filled in by locals. As traveling doors to and from the country opened up, so did other opportunities in meeting, marrying and migrating away with foreign partners. At other times, the foreign partners stay in the country but is greatly outnumbered by those who took their local partners away with them.

Fig 5: Population make-up



61.7% (688) of the people living on Kuria in 2005 were natives, 11.9% (129) were from the northern islands (Makin Butaritari, Marakei, Abaiang, Tarawa), 7% (76) were from the central islands (Maiana, Abemama and Aranuka), 18.5% (200) were from the Southern islands (Arorae, Tamana, Beru, Nikunau, Onotoa, Tabiteuea and Nonouti) and the rest 1% were either foreigners or the Line and Phoenix group as further displayed the left chart. Together, people on Kuria not originally from the island make up 38% of the population. Inter-marriage between islands is now a very common occurrence that is attributable to the mixed population of the island and other islands for that matter apart from land sales to other island natives.

Employment opportunities on the outer islands are pretty much non-existent, and have to be ruled out as a probable contribution to the mixed population of the outer islands.

The national Kuria population added up to 1749, 2% of the Kiribati 92,533 population. 38% (688) of them are living on the island itself while the rest 62%, like the rest of people from the rest of the islands are scattered over the country's 24 inhabited islands, as further portrayed in the following chart. Statistics also showed that there were more Kurians living on South Tarawa than any other island in 2005 and numbered 704 (40%) making of the few islands that have more natives in South Tarawa than on the island itself. Maiana, Nonouti, Tabiteuea North, Onotoa, Tamana and Arorae are the other islands that have more natives living on South Tarawa than on the islands.

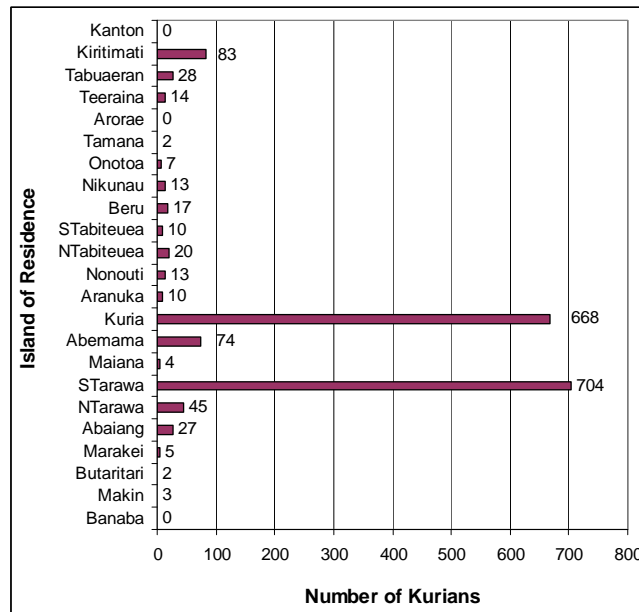
So where 38% of 1749 national Kuria population was living on the island itself, 40% was living on South Tarawa and the rest 22% were scattered amongst the rest of the Kiribati islands except for Arorae, Banaba and Kanton in Phoenix group where there were no native Kurians. Generally, those residing on

other islands of Kiribati could have been there as Government employees working on these islands, through marriage or adoption by people on these other islands, are attending higher education schools or are generally visiting members of the families on those islands.

Fig 6: Population distribution on islands

The 83 living in the Line group islands of Kiritimati, Tabuaeran and Teeraina are a most likely attribute of the Northern islands resettlement scheme that was initially carried out in the late 1980s.

It is also important to note that during the early warring days, a lot of inter-mixing resulted and thus it is also normal for people in Kiribati to come from two or several more islands. As long as one knows their geneology, they can also claim lands on other islands and therefore call themselves a native of that island. Ultimately, one claims to be from an island where he or she grew up on even though they can be from another island.



Unfortunately, data is not available on the inter island migrations and the census does not indicate when these people arrived on the islands or why they are now living there, for a more detailed expression or elaboration of in and out migration from individual islands.

3.2 LAND RESOURCES

Kuria, like most other islands in Kiribati, is faced with major constraints in agricultural production. Poor soils limit the number of agriculture crops that can be grown and the existing physical features limit the land area where agricultural or livestock activities can be extended. The island's main resources like the rest of the islands are its limited tree resources predominantly coconut trees, pandanus and its vast marine resources. People in Kiribati have to rely to a lot of extent on marine resources for their livelihood.

3.2.1 Terrestrial flora

Plant life plays a great role in livelihood of the islanders and as limited as they are, they all have significant uses as sources of:

- Subsistence and commercial materials and products
- Ingredients for medicines
- Symbols of individual welfare
- Ingredients in traditional cultivation
- Soil improvement
- Provision of shade and groundcover
- Materials for toys

Coconut trees (*Cocos nucifera*) are generally the trees of life for islanders as all parts of the tree provide their mainstay of food, shelter, medicine and income for the people in Kiribati including the people of Kuria. It constitutes one of the main items in the people's main diet and provides a source of cash when processed into copra. Individual households have their own coconut trees of which the ones in the bush are collected for copra and those near the household are used mostly for toddy and consumption. Coconuts have adapted well to atoll and dry conditions and will still remain standing after years of drought even though they may not be producing fruit. However, without fruits, these trees during drought times can still provide toddy spathes that have provided the people for centuries with their initial source of vitamin C found in the toddy. Toddy cutting is an important agricultural activity since it can be made into toddy syrup or 'kamwaimwai'.

The pandanus tree (*Pandanus tectorius*) comes second after the coconut as one of the very important tree crops on the islands that people hack their living out of. There are 96 different pandanus species or varieties throughout the islands and some of these varieties used to be related to individual islands mostly because they would grow in abundance on that island whereas it would hardly be seen on other islands. However, agricultural activities have allowed, introduction of these different pandanus species to other islands and some of the older folk believe



that there are more species that have not been recorded and have disappeared over the years. One, familiar with pandanus would know the species that are best for weaving, cigarette paper, 'tua'e' and 'kabubu'.

There are two distinct species of breadfruit, the common breadfruit (*Artocarpus altilis*) and the Mariannas breadfruit (*A. mariannensis*) plus a hybrid of the two. The breadfruit tree comes third after the pandanus as the popular fruit trees in the islands but unfortunately the most vulnerable to prolonged droughts (R.R. Thaman 1990). These are therefore cultivated and looked after carefully around the homes where it is easier to look after and rarely found inland and away from homes except for northern islands who have a lot of rainfall and breadfruit grow wild around homes and in the bush.

Cultivating 'bwabwai' is generally a tedious task and moreover for those in the south with their limited rainfall. 'Bwabwai' requires a great amount of water to grow and is therefore grown in pits dug to the water table. This has made 'bwabwai' a luxury food item in the southern islands who are generally drier than islands in the north and who do not include it in their daily staple food but instead cultivated and reserved for very important functions. The location of the 'bwabwai' pits deep in the forest is because its cultivation is surrounded in traditional secrecy and intensive care. As such, it is exclusively reserved by the islanders for ceremonial purposes only (R.R. Thaman 1990). This is likewise for Kuria where there is also limited rainfall unlike the northern islands.

Other general terrestrial flora comprise papaya/pawpaw (*Carica papaya*), local fig (*Ficus tinctoria*), bananas (*Musa sp.*), uri (*Guettarda speciosa*), casuarinas, leucaena, non (*Morinda citrifolia*), saltbush (*Scaevola sericea*), heliotropes (*Tournefortia argentea*), Alexandrian laurel (*Calophyllum inophyllum*), sea trumpet (*Cordia subcordata*), iron tree (*Pemphis acidula*), beach almond (*Terminalia samoensis*), great lettuce tree (*Pisonia grandis*), privet (*Clerodendrum inerme*) and a variety of ornamental plants, grass and weeds. The flower of the *Guettarda* locally called 'te uri' is the national flower of Kiribati. Individually, all these plants play a great role in the subsistence and economic life of the people on Kuria and Kiribati as a whole.

3.2.2 Terrestrial fauna

Concurring with atoll physical features, Kuria is not rich in its land fauna and comprise the common pigs, chickens, dogs, cats, birds and island insects such as rats, lizards, ants and crabs amongst others. It's marine fauna however is well known for having a season when nearly all fish catches are deliciously excessive in oil content. The island has limited shellfish which could be attributed to the physical feature of the lagoon that is not surrounded by the island like most lagoons in the country.



A dead land crab - either it died due to old age or from a bushfire

Pig farming is widely practiced, initially, as a way of maintaining traditional status and important household functions mostly, the daughter's first menstruation, engagements, marriages and deaths, but nowadays, they are also farmed for income generation and social functions, mostly the latter. The introduction of goats in the 1990s was not unsuccessful and was proved unviable for Kiribati circumstances for several reasons. There were not enough shrubs or vegetation that the goats could live on in the long term and the problem of uncensored dogs contributed to the decline of goats on South Tarawa where breeding herd was kept and thus the attempt was completely abandoned. Chickens on the other hand are also kept but not intensively and thus chicken are free ranged.



Free ranged piglets at Oneeke

The local pigs and local chicken are generally priceless domestic animals that all households have to own and they are kept and managed well. Introduced breeds of pigs, chickens and other livestock (goats and ducks) have been introduced to the islands by the Division of Agriculture but have limitations. These limitations include not being able to thrive well on a local diet of coconuts and household remains and being vulnerable to the hot climate, diseases and for goats, predators (dogs). Dogs

are also kept domestically and to a lesser extent cats. Where dogs are kept as pets because of their role in guarding homes, cats are kept to control rats around the home as rats are abundant throughout Kiribati and in some places such as in the northern islands, they are devouring more coconuts and pandanus fruits than can be harvested for consumption and copra.

3.2.3 Land Tenure and Ownership

During colonial times, people of all the Kiribati islands were brought together for easier census and administration resulting in the formation of villages throughout the islands in the country. The rest of the island, not used for settlements or infrastructure (airport, schools etc), are individually owned agricultural land where coconuts, pandanus, and bwabwai are cultivated. All land tenure is catered for under the laws of the 'Native Lands'.

The people own most lands in Kuria and some acres of freehold land are leased by the Island Council to accommodate its administrative buildings, schools and health centers. In the years following initial establishment of island councils on the outer islands, the system of land taxes was introduced but slowly disappeared over the years. However during those times when land taxing was very much in place, a lot of land taxes on Kuria were not paid for and these lands were eventually taken over by the Kuria Island Council. It was also around this time that the Island Council also put up these lands for sale resulting in a lot of people from other islands buying up lands on Kuria.

Disputes over land ownership and boundaries are settled in a Lands Court that is present on every island in the country. They are fragmented and held in small plots as a result of the inheritance system where all offspring are entitled to a share in the lands and where it is also a custom to subdivide all lands. The sizes of plots owned by individual households vary and only few plot bigger than 6 hectare in size. The areas where the churches stand were freely given away during the initial establishment of the LMS on the island in the early 1900s and therefore remain solely the church properties including the surrounding areas where there is not a record of whose land plot it is. However, on some other islands, churches are also now paying leases where the owners, feel and require payments for the use of their land.



Individual land plots are marked by stones, boulders, trees and specific land marks such as beachrocks, lakes, pits or shrines. On some islands such as in Onotoa in the southern Gilberts, land plots are also taxed whether one lives on the island or not. Fish traps that are basically walls of coral rocks placed in a certain pattern to a certain height can be found on the reef and these are also legally recognized as belonging to individuals or family.

Land is owned by individual landowners and inheritance is as willed by the parents. However, land can also be conveyed as gifts especially when one has done the landowner a big assistance such as in looking after an elderly till death because he was neglected by his own next of kin. Some can be given away to adopted ones who also can inherit lands from their own biological parents. Some lands have been sold off to other native islanders who now reside on the island as natives.

Due to the increasing population, lands on the outer islands are as precious as they were in the olden days with some preferring to leave their lands as family lands for all members to utilize as required for

reasons such as:

- Division of parental lands would mean that some would get the best lands while others could get barren ones
- Division of lands could leave one with as few as 2 plots of land or less, especially now that the lands have been divided so many times over the generations

Nowadays, anybody can inherit lands regardless of whether they are sons or daughters but this depends on the parents, the landowners. In cases where a parent ceased without leaving a will, his or her children will divide the lands between themselves in court if they so wish to get individual shares otherwise, the lands are left as family lands. In family lands, all the children and grandchildren of the parent whose land it is are free to harvest or use the land as necessary however, one cannot give it away or sell it without prior consent of all the family members.

3.3 MARINE RESOURCES

3.3.1 Size of reef and Lagoon area

Table 3: Size of Reef/Lagoon Size

Island	REF(sq/km)	REF base (sq/km)	LGN (sq/km)	LAND (sq/km)
Kuria	13.02	12.7	Nil	15.5

3.3.2 Fish resources and status

It is difficult to quantify the fish resources of Kuria, or any island for that matter. However, it is generally accepted that the bigger the reef area the larger the fish resource, particularly reef fish. It could therefore be concluded that due to its small reef area, Kuria will have a limited number of marine resources in both its close to non-existent lagoon and ocean. Free migratory fish such as skipjacks and yellow fin tuna (*Katsuwonus pelamis*,

Thunnus albacores) flying fish (*Cypserulus sp.*), shark (*Ginglymostoma ferrugineum*), oil fish (*Ruvettus pretiosus*) and lobsters (*Panurillus sp.*) however, are always abundant but this requires that the ocean is accessed for harvesting such marine resources which, in Kuria is not an issue considering that its lagoon is small and ocean easily accessed from the villages.



Fishing was and is still considered one of the important sectors in the economic development of Kuria or Kiribati for that matter. Fishing provides an important component of the day-to-day diet as well as income from the sales of the surplus catch. An ice-plant was established in the late 1990s that, useful as it was, had to later on be closed down as it was not making any profit. This was mostly due to the fact that the initial idea of marketing the fish to Tarawa had failed due to transportation problems and the Kuria natives seldom bought fish from the plant as most fished for their own livelihoods plus fish from the plant were costlier than those bought locally. The ice-plant now awaits further plans to tackle the issue of

marketing and transportation before it opens again.

The main and major source of protein to atoll islanders is ocean and reef fish as hardly any other animal apart from pigs and chickens can live and survive in the atolls plus they take time to grow and are kept for special functions or family celebrations.

3.3.3 Pattern of fishing

The proportion of fresh fisheries resources caught and locally consumed in Kiribati ranks amongst the highest in the Pacific region (Frank R. Thomas 2003). Fishing is largely a man’s responsibility even though women are not restricted from fishing. Not every man owns a canoe or boat but most households own a canoe or have access to one. Having access to one implies that one can borrow a neighbour’s or a family member’s canoe.

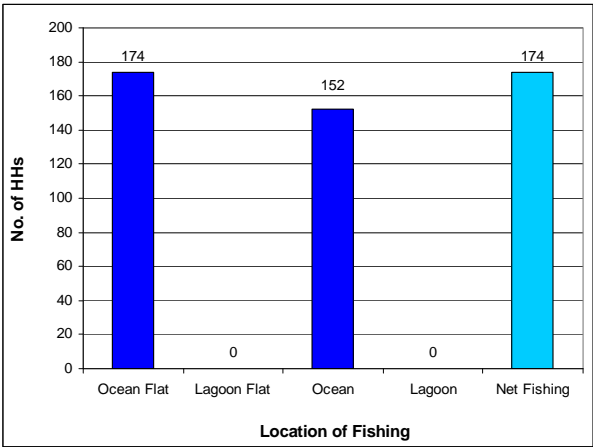


Canoes are highly priced items as they are hard to make and equally hard to get materials to construct one. The frames and planks are made up from imported timber obtained from Banaba, Nauru and South Tarawa while the outrigger is made from local wood that are light most of the time breadfruit, sea trumpet ('kanawa') and the great lettuce tree trunks. Canoes are handled generally by men in Kiribati with hardly any women heard of having manhandled a canoe by herself thus leaving ocean fishing as solely a man’s job. However, the introduction of fishing boats has allowed women to also take part in

ocean fishing but is generally rare to hear of a woman ocean fishing as they are more well known to participate in reef and lagoon flat fishing such as in shellfish collection and net fishing.

Fig 7 (left): Household fishing location

The left chart categorizes the most popular fishing sites on the island showing that the people do not engage in any kind of lagoon fishing at all due to the fact that there is no lagoon. Where 86% of the 202 households are using the ocean/reef flats and net fishing,



73% is accessing the ocean to get fish for their livelihoods. Accessing the ocean resources requires that one owns a canoe or a boat, deep fishing gears and one to be a good diver therefore those comprising the 73% either have a boat, canoe, deep fishing gears or are good and skilled divers.

Lying 139 km away from Tarawa, Kuria is not far from this urban center and normally takes a day to travel to and from the island by boat/ship. The fact that the fish in Kuria have what other islands do not (oily season), has made it a favourable choice to import fish from to the fish markets in South Tarawa. Other than the problem with transportation, Kuria still remains a favourite and popular island for fish imports.

Fishing catches are generally used for subsistence living only and where surplus, they are either shared with neighbors, sold to local consumers mostly Government council staff or salted and preserved for later consumption, sale and sending to relatives outside the island specially those in South Tarawa.

3.3.4 Marine Developments

The Ministry of Fisheries & Marine Resources Development (MFMRD) is responsible for marine development nevertheless; Island Councils on individual islands have their own marine developments that include establishing marine bylaws to prohibit certain kinds of fishing such as 'te orooroo' in North Tarawa and catch flying fish with nets in Tamana. The MFMRD initial most well known trials included seaweed and pearl farming and recently, the promotion of sea cucumber harvesting for income generation purposes.

The Fisheries Department in Tanaea is also carrying breeding trials of some marine resources for dissemination throughout the islands of Kiribati as fitting. Mother pearl oysters are being bred in artificial tanks in Tanaea and are presently supplying young oysters to Butaritari, Abemama and Onotoa for oyster farming trials on these islands. The first island to have undergone this kind of pearl oyster farming trial was Abaiang and having been a success, it has now been taken to some outer islands of Kiribati as required by the Island Council and island community. Abaiang however remains the base for pearl culture where the sitting house is located that is used for imbedding pearls into the oysters before the oysters are again transferred back to the islands where they were sent from or are to be farmed. The white teat-fish (*Holothuria* sp.) is also being bred in the artificial tanks for further deployment in the outer island waters (sea) as stocks are slowly depleting on the outer islands with the increase in export of sea cucumbers from Kiribati. A shellfish locally known as the 'bwaraitoa' is also being bred simply because it is not abundant in Kiribati waters but has great export potential as the shell is usually processed into buttons.

Unfortunately for Kuria, since it does not have a lagoon, seaweed and pearl farming has not been an option for the islanders. Instead, sea cucumbers is a practical income generating activity for the people on Kuria other than fish. As for the ice-plant (right photo), it was closed in 2008 awaiting funds from the Central Pacific Producers (CPP) in Betio.

