

Economic Activity, Population, and Social Dimensions

Key Features of the Economy

The 33 atolls and reef islands of Kiribati, with a total land area of 810 km², are scattered across the central Pacific. More than half the land area is in the Line Islands and 48% is in one atoll, Kiritimati. Kiribati's EEZ is made up of three separate zones, with a total area of 3.5 million km², stretching 5,000 km from east to west and 2,000 km from north to south. Tiny land areas, vast distances, and physical isolation are facts of economic life in Kiribati.

The economic effects of physical remoteness include limited and costly international shipping and air services, because of distance from regular routes and low volumes. Domestic air services are intermittent and inter-island shipping services are generally of low quality and infrequent. For many islands, the delays and costs of getting products to South Tarawa and then to international markets are so large that unless these costs are reduced by subsidy, these islands are largely precluded from export activity. Remoteness also offers some natural protection to domestic production, but this is offset in Kiribati by the small size of domestic markets and uncompetitive, high wage levels, driven by public service pay scales.

With the exception of Banaba, all the islands are low lying (a maximum of 3–5 meters above sea level) and most are very narrow, making the country vulnerable to the effects of rising sea level and

sea erosion. The soils are predominantly coralline and of low agricultural value, and the islands experience periodic droughts.

These factors result in a narrowly-based and shallow economy. This is reflected in a very high import dependency, a low level of exports, and little manufacturing activity. The ratio of imports to GDP is in the order of 75%, while exports typically account for 10–20% of GDP (Figure 3.1). The main export is copra, while there are also significant exports of seaweed, *bêche-de-mer* (sea cucumber), and aquarium fish.

Geographic dispersion creates administrative challenges, particularly in providing health, education, and transport and communications services to the small isolated communities. It also brings economic benefits in the resource rent value of a vast combined EEZ. The tuna resources of the EEZ generate considerable revenues from fishing licenses, recently accounting for around a third of total government funding. The large increase in this revenue during the 1990s has had important flow-on effects to the economy in helping trigger a substantial expansion in the size of government.

Considerable overseas income is also earned from past government savings invested in international financial markets. These funds are held in the RERF, which has almost tripled in value over the past 10 years, for reasons mentioned above.

Commodity exports are small, but Kiribati has been very successful in exporting labor. There are approximately 1,100 I-Kiribati merchant seafarers and 300 fishers working on foreign fishing vessels. There are more than 200 Kiribati nationals working in Nauru, many of them with their families, who are to be repatriated to Kiribati in the near future when the Nauru phosphate operation ends. The 2000 census indicates that 15% of all households receive remittances from men working on overseas vessels—12% of households in the outer islands and 20% in South Tarawa. In 2000, offshore wages and salaries amounted to an estimated \$10 million, equivalent to about 15% of GDP or about \$115 per capita, most of which was remitted home. Remittances in 2002 were expected to be around \$14 million.

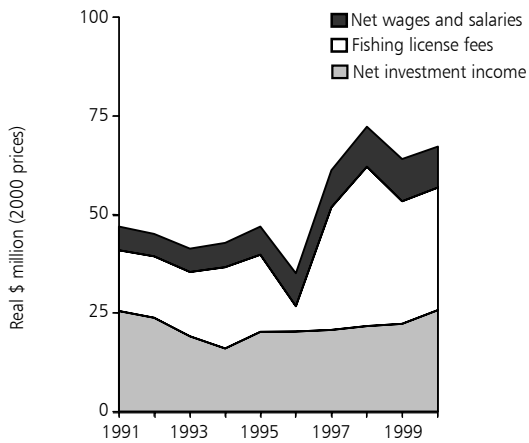
The combination of fishing licensing revenue, income from the RERF, and wages of seafarers and fishers overseas gives rise to a substantial foreign income (Figure 3.2). This produces an unusually

Figure 3.1: Exports and Imports



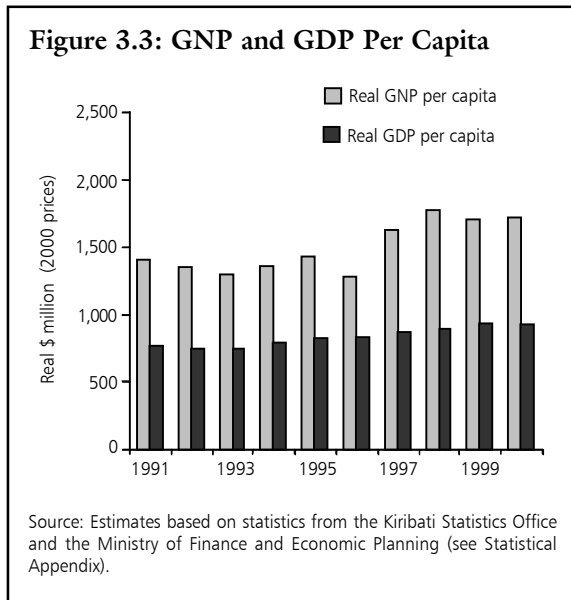
Source: Estimates based on statistics from the Kiribati Statistics Office and the Ministry of Finance and Economic Planning (see Statistical Appendix).

Figure 3.2: Overseas Income



Source: Estimates based on statistics from the Kiribati Statistics Office and the Ministry of Finance and Economic Planning (see Statistical Appendix).

large difference between GNP and GDP, with GNP around twice the size of GDP. Both GDP and GNP per head have grown substantially during the 1990s, at an average annual rate of 2.1% and 2.3%, respectively, in real terms (Figure 3.3).



Despite that growth, ranking by GNP per head still places Kiribati among the poorer countries in the region. Low income per head tends to be associated with weaker performance by other human development indicators also, for example with a relatively low life expectancy (see Table 3.1).

With a narrow range and low volume of exports, and little domestic value-adding activity, the economy depends heavily on factor income from abroad, and government expenditure of its share of that income and foreign aid. Total government expenditure is typically bigger than GDP³¹ (Figure 3.4). Changes in the level of Government expenditure have a large and direct impact on the level of domestic economic activity. Since the mid-1990s, the budget has

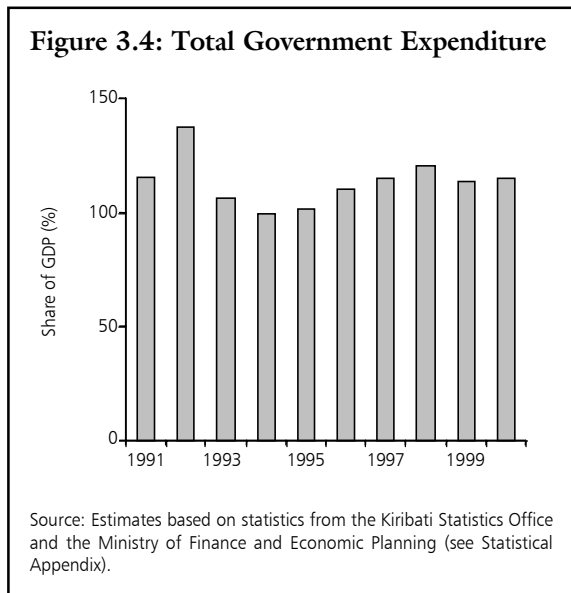
Table 3.1: Regional Comparisons

	GNP per head (US\$, 2000)	Life expectancy at birth (years, ^b 2000)
Cook Islands ^a	4,355	70.5
Kiribati	950	62.5
Fiji Islands	1,820	69.0
Marshall Islands	1,970	65.5
Federated States of Micronesia	2,110	66.0
Papua New Guinea	700	56.5
Samoa	1,450	70.0
Solomon Islands	620	69.0

^a From country sources.

^b Simple average of data for male and female.

Sources: World Bank, World Development Indicators 2001 and 2002 and CD Rom; WHO, World Health Report 2001 and website as cited in ADB 2002a.



come under political pressure to maintain and increase economic activity through government expenditures directly and through PEs. The level of government expenditure is in turn dependent on offshore revenue from the fish license fees, foreign aid, and the RERF. This

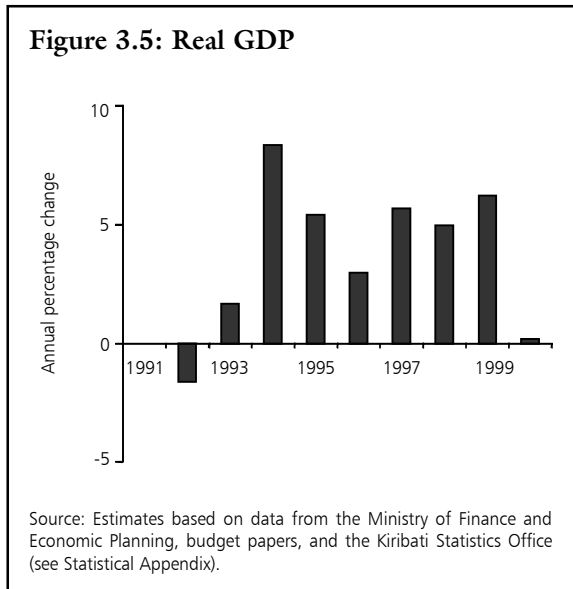
dependency ties the Kiribati economy closely to certain aspects of the international economy.³²

A feature of the economy is the use of public sector employment as a de facto social security system. While only 15% of the adult population work in the public sector, an extensive system of income redistribution based on family ties means that around two thirds of the population share these incomes. This makes public sector employment a powerful political tool, and puts pressure on fiscal policy to promote public approval of government through wage and salary allocations in the budget. There is growing concern that increasing unemployment and a lack of legitimate sources of cash incomes are bringing about adverse social impact, particularly on South Tarawa. In this context, increasing government pay scales is counter-productive, because it drags private sector wages upward and makes job-creating private investment less feasible.

Recent Macroeconomic Performance and Prospects

After growing strongly from 1994 to 1999, economic activity leveled off in 2000 (Figure 3.5) as construction, manufacturing, and transport activity eased. Although up-to-date statistics are scarce, it appears that economic activity picked up again in 2001 and continued to expand in 2002. The buoyant economic conditions are mainly a result of continued growth in government expenditure on wages and salaries and development projects. The 2001 national budget provided for a 15% rise in public sector wages and a further substantial real increase was allocated in the 2002 budget. Significant development projects include the construction of junior secondary schools throughout the country, and on South Tarawa a new power station, improved water and sanitation infrastructure, and a \$4 million investment in a copra mill.

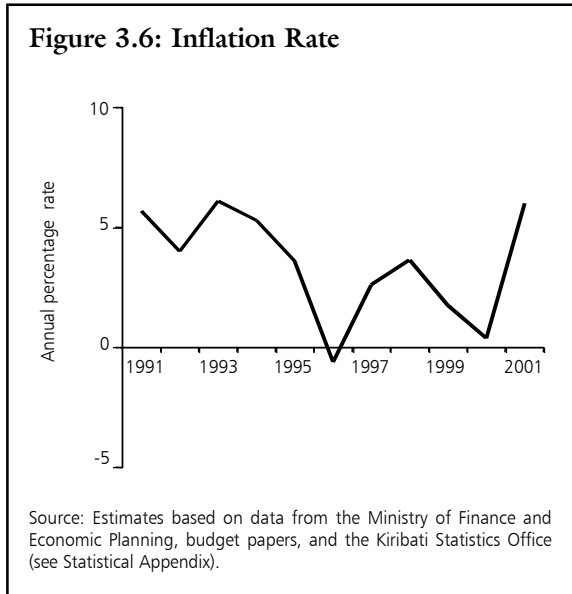
In total, central government expenditure is estimated to have increased from \$88 million in 2000 to \$110 million in 2001, an increase of 25%. This was largely made possible by increased revenue from the foreign fishing industry, from \$31 million in 2000 to \$47 million in 2001. Preliminary budget data for the first half of 2002



suggest that expenditure for the year is likely to be close to if not exceed the 2001 levels (in nominal terms), with fishing revenues also likely to at least match the 2001 level.

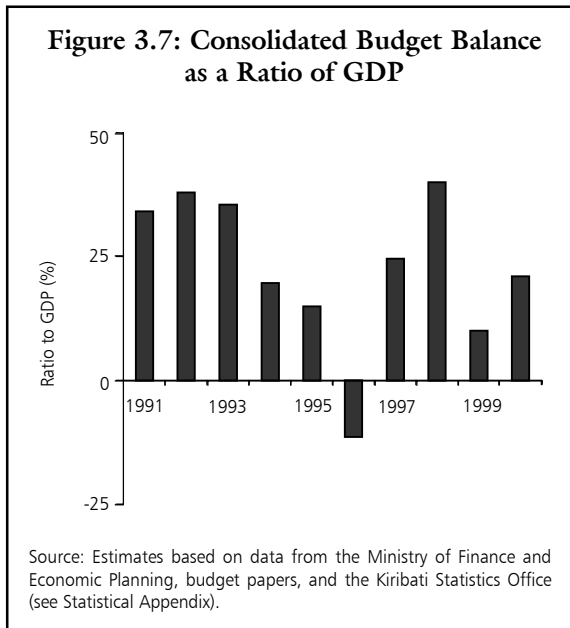
In addition to a growing public sector, there is evidence of a related expansion in the private sector taking advantage of business opportunities caused by rising personal consumption and construction expenditures. BoK and DBK both report strong demand for credit for start-up and expansion of small businesses. A number of church-funded projects are also helping to create economic activity.

Given the high import dependency of the economy, the inflation rate tends to follow closely that of Kiribati's trading partners, principally Australia. An extended period of low inflation rates in Australia was reflected in low inflation rates in Kiribati for much of the 1990s. The rate of inflation is estimated to have increased during 2001 to 6.0%, a marked increase on the 0.4% inflation of the previous year (Figure 3.6). Most of the increase in inflation was attributable to the delayed impact of high oil prices and depreciation of the Australian dollar that increased certain import prices.



By the end of June 2002, inflation was still 4.8% on an annual basis (i.e., the change over the four quarters to end June 2002), with much of the increase attributable to a rise in the price of food, drink, and transport. The most likely explanation for the increase in the relative inflation rate is a steady rise in the profit margins of suppliers made possible by strong demand growth, originating in the increased public service payroll.

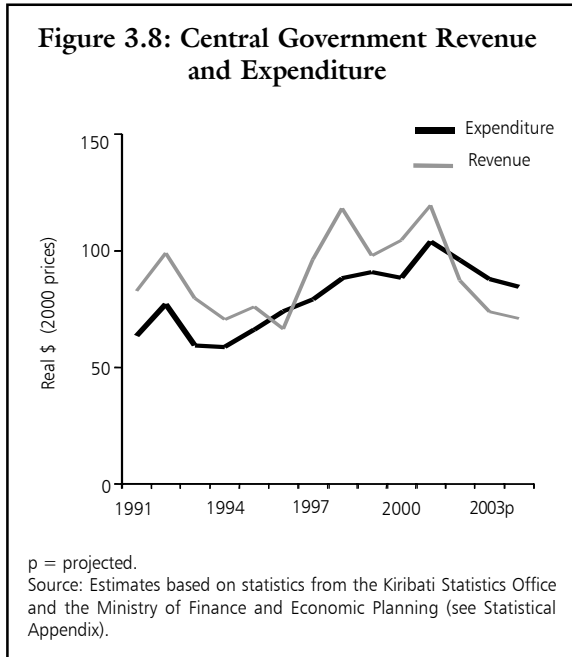
Preliminary data for 2001 point to an increase in imports and continuing low level of exports over the year. The rise in imports is consistent with a rise in domestic demand fuelled by the large increase in government expenditure, while the fall in exports is largely a result of a decline in the copra industry. In 1999, 12,500 tonnes of copra were exported. But export volumes were below 7,000 tonnes in both 2000 and 2001, and unit export values in these years were half the 1999 levels in dollar terms. Partial data suggest that imports continued to rise over the first 6 months of 2002, while some recovery in total export values appears possible over 2002 given improving world prices for copra.



Fiscal management in Kiribati has historically tended to be conservative. During the 1990s, the only deficit year was 1996, because of a massive temporary drop in fishing license fees (Figure 3.7). Even though the most recent budget year of 2001 saw a large increase in expenditure, this was matched by a record level of fish license fees, and the budget is likely to have been in surplus over the year.

The official projections imply a substantial budget deficit emerging over the medium term (see Figure 3.8). These projections are based on very conservative estimates of future revenue, and recent developments suggest that revenue is likely to remain high and for the budget to remain in surplus over the short term. However, if expenditure continues to grow at the rate seen in recent years, budget deficits can be expected over the medium term. This would mark a significant shift in Kiribati's fiscal stance and require regular drawings from the RERF.

The official projection is for continued real economic growth over the medium term. Key contributors to this optimistic outlook



are the continuation of large public projects on South Tarawa (e.g., the power generation plant and water and sewerage project), infrastructure developments on Kiritimati, the commencement of construction of a new sports complex on South Tarawa, implementation of a satellite project and a rural electrification project, and potentially the commencement of an outer island water supply project.

South Tarawa and the Outer Islands of the Gilbert Group

The focus of government expenditure on South Tarawa and the limited sources of income on the outer islands lead to marked differences in income levels between the two areas. This dichotomy and its consequences have troubled the authorities for 40 years. It

has grown sharper as monetization has advanced. A whole generation has grown up with the polarization of urban and rural lifestyles as part of their perspective on life.

The economic and social differences were highlighted by the 2000 census. This found that employment was the main source of income for two thirds of all households on South Tarawa. Own business was also claimed as a primary source of income by 20% of households in South Tarawa. These compare with an average of 15% and 5%, respectively, of outer island households.³³

There are also marked differences within the outer islands. Employment is concentrated primarily where there are secondary schools or district centers, such as North Tarawa, Butaritari, Abaiang, Abemama, Nonouti, North Tabiteuea, Beru, and Kiritimati (where there is also more commercial development).

Production of food for own consumption is far more important for the outer islands than for South Tarawa. Three quarters of all outer island households reported growing breadfruit and *babai* (a large, slow-growing species of taro), while on South Tarawa the proportions were only 39% and 2%, respectively. Toddy (fermented sap of the coconut palm) was produced by 83% of outer island households compared to only 47% of households on South Tarawa, whilst one quarter of outer island households grew bananas compared to 8% on South Tarawa. Fishing follows a similar pattern with 43% and 37% of outer island households having fishing nets and canoes, respectively, compared to 10% and 30% of South Tarawa households. The reported household ownership of pigs averages 80% throughout the country, but for chickens it is only 12% for Tarawa compared to over 50% in the outer islands.

In the Outer Islands, the main cash-generating activities are copra and seaweed production and fishing. Most of the outer island communities continue to rely on copra to provide their cash incomes and have few viable alternatives. Nationwide, 38% (down from 55% in 1995) of all households received income from copra. However, the proportion of outer island households receiving copra income is 60% and less than 1% in South Tarawa. For fishing income, the respective figures are 34% and 8%; for handicrafts income, 20% and 5%, respectively.

Population Size and Distribution

Structure and Growth

During 1985–2000 the population increased from an estimated 64,000 to 84,500, a compound annual average rate of 1.9%. Population growth is estimated to have slowed slightly in recent years, averaging 1.7% during 1995–2000, although the recent data are not considered reliable enough to support a lower projected growth rate. Youths (aged 15–24 years) comprise almost 20% of the population, but the average rate of growth of this segment of the population was less than half that of net population growth rate. This difference can be explained partly by the many youths who work overseas on merchant ships and on foreign fishing vessels, and also by the impact of the successful family planning program implemented in the 1970s.

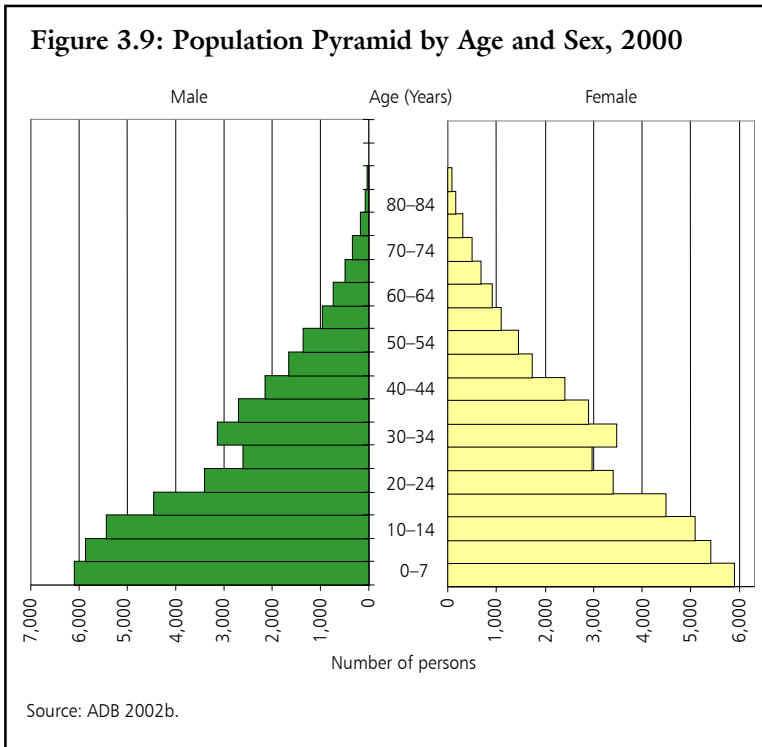
The difficult living conditions and lack of opportunities in the 22 permanently inhabited outer islands have resulted in a steady rate of migration to the urban center of South Tarawa. About 33% of the population lived on South Tarawa in 1985, increasing to 37% in 1995, and to 44% in 2000. Nearly all (93%) the remainder live in the Gilbert Group. There is one small settlement in the Phoenix Group (Kanton Island). The only substantive settlements in the Line Group are on Kiritimati, Tabuaeran, and Teraina.

Since independence, the population of South Tarawa has increased at an annual average rate of 3.3% compared to a national growth rate of 1.9%. In the most recent inter-census period, 1995–2000, the South Tarawa annual growth rate rose to 5.2%, its highest rate for 30 years. At this rate, the South Tarawa population could reach 50,000 (compared to 36,717 in 2000) by 2006. In contrast, the population in the rest of the Gilbert group over the last five years declined by an average of 0.7% per year.

Continued migration to South Tarawa is giving rise to a serious health and environmental situation there. The population density exceeds 2,300 persons per km². More than 6,600 people live on the islet of Betio, on a narrow strip of low-lying land some 35 km long and nowhere more than a few hundred meters wide.

Urban employment opportunities are mainly limited to the public service and there is strong competition for them. Thus, conditions for unemployed migrants into South Tarawa are often very difficult. The impending repatriation to Kiribati of the last workers from Nauru will no doubt add to the population pressure on South Tarawa. Equally, the return of many to the outer islands with skills and some financial capital, could have a positive effect on the economies of some of the islands.

The main concern must be for the future of the young people already born and those sure to be born in the coming years. Just over 40% of the population are less than 15 years old (Figure 3.9). Thus, within the next decade, there will be an increase of some 40% in the number of people in the labor force, from 44,000 in 2000 to around 62,000 in 2010.



The fastest conceivable rate of economic growth would do no more than maintain the present proportion of the working age population in paid employment. The absolute number of young people who will not find paid work will, therefore, rise. These young people represent a valuable and potentially productive resource. On average, they will have had several more years of education than today's youth. It will be essential for most of them and for Kiribati that the education they receive enables them to adjust successfully to the reality of self-employment and a mixed monetary and subsistence lifestyle.

Differences between South Tarawa and the Gilbert Outer Islands

With 40% of the population below 15 years and 3% above 65 years, the overall ratio of "dependents" to working-age persons (15–64 years) is 0.75. This is mid-ranking among Pacific island countries. The ratio reflects the combination of a high birth rate, moderate life expectancy, and the 1,700 working-age adults (almost all males) overseas—equivalent to about 10% of the resident male workforce in the 18–49 age group.

There is, however, a marked difference in the dependency ratios between South Tarawa and the outer islands of the Gilbert group. On South Tarawa, the ratio is 0.70, whilst in the rest of the country it averages 0.82, reflecting the higher level of emigration of working-age adults from the outer islands either to South Tarawa or overseas. Most of the overseas workers are on 1–2 year contracts and make significant contributions to the cost of supporting their families. These remittances average around \$1,000 per month and are shared among two or three households (wife, wife's parents, own parents). There are also significant, although smaller, remittances from those on South Tarawa to families remaining in the outer islands. The impact on the outer islands of the high rate of dependency is felt most keenly in the relative shortage of able-bodied people to undertake heavy domestic and village-related work.

There are minor variations in gender balance in the labor force and among dependents between South Tarawa and the outer islands,

that are probably also due to employment- and education-related migration. Overall, males comprise 49% of the population, but on South Tarawa they make up only 47% of the labor force age group, and in the outer islands they make up 51% of the dependents.

The average household size found by the 2000 census was 6.7 persons. In South Tarawa, the average size was 8.1 persons while in the outer islands it was 5.9. Households with 10 or more persons account for about 15% of total households nationally, whereas in South Tarawa almost 30% of all households contain more than 10 persons. This reflects the number of outer islanders living with extended families in South Tarawa while attending school, searching for work, or simply staying in town rather than going home.

Ownership of important household assets such as radios (average 60% of all households), handcarts (15%), and sewing machines (55%) is quite evenly spread. Bicycles represent an important transport mode for 70% of outer island households compared to only 40% in South Tarawa, where motor cycles, cars, and buses are more readily available.

The church is at the center of Kiribati society. Three quarters of all households throughout the country reported belonging to a church association. The *maneaba* system appears to be much less important in South Tarawa, where less than half of all households are members of a *maneaba* association, compared to two thirds in the outer islands. There is a similar difference for women's associations: 60% of outer island households compared to only 40% on Tarawa belong to women's groups.

Social Dimensions

The Extended Family

The strength and support of the extended family, which has provided the social safety net for family members in need, is weakening as people migrate to South Tarawa for education or in search of work. Children and young people are often encouraged or sent by their families to be educated in South Tarawa, where

educational services are of higher quality than in many of the outer islands. They may go to South Tarawa because access to paid employment is more readily available there, to join a seafarer or a tuna fisher course. Couples and families will move to South Tarawa because they need to be there to have access to sought-after government jobs or because the opportunities for employment in the private sector are greater.

Households in South Tarawa are large because many families are supporting additional children or young people. Once in South Tarawa, contact can often break down between the migrant/s and the family back home. Distance and the cost of communication encourage disintegration. The weakening of family support is evidenced in South Tarawa in the increasing requests for help with school fees received by the Ministry of Education, Training and Technology (METT) and NGOs. There was a time when the family would always provide such help, but it is not so readily available now.

Opportunities for Women

The social and economic status of women is improving as the effect of equal access to education makes itself felt. In the outer islands, the role of women is generally still confined to domestic duties and food gathering. Dealing with land tenure issues and local politics are reserved for men. But women take on additional duties (i.e., additional home roles as providers and caretakers) when men leave home to work at sea. Peer and social pressure within the community at one time appeared to influence girls to accept a domestic role rather than to aspire for a career, but the pattern now seems to be changing.

Girls outnumber boys through all secondary and tertiary levels, and are making headway in participation in paid employment. Women increasingly want access to family health information including information about family planning and sexually transmitted diseases. Women generally live longer than men but they lag behind in literacy because of their historical lack of education. This situation is improving as more girls complete a full program of schooling.

The desire to have a family member working in a government job and the opportunity for women as well as men to access such jobs have resulted in a change in attitudes toward women's working patterns and their behavior. Families in the outer islands now hope that their sons or daughters will gain a government job.

Meanwhile women are taking up employment in a range of occupations, running businesses, being elected to parliament, and changing their ways of dress and behavior. Overall, women comprise 51.5% of the workforce, of which 37% are in paid employment. There are two women in parliament and—according to the 2000 census—44% of administrators and managers, and 51% of professionals (mainly teachers and nurses) are females. In 2001, 56% of overseas scholarship students were women. There are important areas where females are still significantly underrepresented, e.g., men comprise 77% of permanent secretaries, 95% of secondary school principals, and 73% of all legislators and senior officials. But women are increasingly expecting and receiving recognition as full participants in economic activity and the governance of Kiribati.

Government officials and health workers have expressed concern at aspects of the promotion of Tarawa as a trans-shipment port for the EEZ tuna fishery. An unlooked-for consequence of the increased number of calls by fishing vessels and fish-carriers is the growing number of relationships between the crews of these vessels and young women in South Tarawa. The women concerned generally have little formal education and no other income-earning opportunities. The relationships are said to range from simple friendship to more commercial exchanges of money, goods, and services. Concerned officials recognize that the matter needs further study. In the meantime, an appropriate response would be the discreet provision of advice to help the women involved to understand and manage the relationships, and to guard against unwanted pregnancies and transmission of disease.

Challenges for Youth

There are increasing instances of underage drinking, gang-related fights and an increase in crimes by young people. At the

same time, young people are required to be more independent and to take up leadership positions in their sporting groups or peer groups, away from home. They have to deal with new relationships with few supports while still at an emotional age, and are looking for information regarding relationships, sexual activity, and the risks of pregnancy and sexually transmitted diseases including HIV/AIDS.

The sheer number of youths in South Tarawa can almost make them appear as a threat when they are undertaking normal activities like walking in a group. Since the opening of the junior secondary schools (JSSs), large numbers of youths have been brought together in one location, whereas previously they attended primary schools in smaller numbers. This grouping of youths has contributed to more evident group behavior and has highlighted to the community the issues surrounding the presence of large numbers of youths.

The natural progression from young man and woman to husband and wife sharing the support of a family is not available to many youths, especially those in South Tarawa where supporting a family means earning an income. In the village, the involvement of older people in fishing, gardening, and copra production would have lessened as their children grew strong and took over. In South Tarawa, people in the public service continue to hold their paid employment past the official retirement age, exploiting the flexibility of the retirement age policy. Opportunities for youths to get started in paid employment are very limited and many rely on low-paid construction work.

The Human Cost of Employment Overseas

The pattern of employment of seafarers and tuna fishers keeps them away from home and family for long periods. When they return, there are high expectations of the goods that they will bring back with them and they are only home for a short time. This is an unnatural existence for those used to traditional Kiribati culture and can put severe strains on relationships, often to the point that they break.

Broken Families

In the urban environment of South Tarawa, there is an increasing incidence of families breaking up. Case statistics of the Ministry of Environment and Social Development (MESD) show increasing occurrences of domestic violence and disagreements over child maintenance. Traditionally, brothers have looked after their sisters if they have been abandoned by their husbands. Now, the women are increasingly turning to welfare agencies and NGOs as this support is weakening. These changes are even felt in villages in the outer islands as men migrate to South Tarawa looking for work, sometimes abandoning their wives.

Landlessness

Land tenure is central to Kiribati culture, but the large population in South Tarawa means that land there is a scarce and precious commodity. Improvements to the lands and surveys administration and its links to the lands court record system have made it easier to deal in land in South Tarawa. Population pressure will inevitably cause the price of land to rise continually; many of the children born now and in the future will be unable to afford to buy land. A group of landless persons has begun to emerge, as some South Tarawa residents have already sold all their land and spent the income from the sale. The prospect of life without customary land rights—the ultimate monetization of support systems—is not one that is easily contemplated in Kiribati.

Social Safety Nets

Traditional Kiribati society is based on principles of community-based caring and sharing, so that those with, for example, surplus food (such as fish catches), will share with those less fortunate. Reciprocation will generally ensure that over time everyone has contributed and received in roughly equal measure. There are strong family and community bonds that provide safety nets for those who

might be specially disadvantaged, such as the elderly and disabled. In these cases, families and society will collectively provide for them on a nonreciprocal basis.

Although this traditional social safety net is still in place, it is developing holes, particularly in urban areas, as monetization progresses. The traditional safety net prevents the emergence of poverty, in the sense of deprivation of the necessities of life. Few people go hungry, although there may be many who have nutritionally poor diets either by choice or by force of economic circumstances. Now, there are signs of increasing hardship among poorer families and individuals who are for some reason cut off from family support, both in South Tarawa and the outer islands.

Governments have developed a response to this need. MESD has the task of improving social and community welfare through facilitating partnerships between the national Government, local government, churches, and NGOs. MESD does not have money to distribute to those in need. It works with other government departments and community organizations to arrange support of an emotional and or material nature. The first priority of MESD is to apply traditional forms of support through the family if this is possible. The approach is based on sound traditional values, and although MESD services are in great demand, the ministry is managing its responsibilities in an appropriate manner.

Access to Education

The overall primary school enrollment rate in 2001 was 82%—87% for South Tarawa and 78% for the outer islands, ranging from a low of 65% on South Tabiteuea to more than 95% in the Line Islands. The differences suggest that there are problems of access to primary education in the outer islands. The quality of teachers and facilities at the schools is a critical issue.

There has been a significant improvement in access to secondary education, with 19 new junior secondary schools established since 1996. Their establishment has made a significant improvement for outer island children.

There has been an increase in secondary schools from 10 to 13 in the last four years. Also, an EU-funded project scheduled to start in 2002 will develop Island Learning Centres in 10 outer islands.

The Marine Training Centre (MTC) and the Fisheries Training Centre (FTC) train Kiribati youths to work on overseas merchant vessels and tuna fishing boats. Access to these training centers is on an island quota basis so that youths in the outer islands have an equal opportunity to participate in this chance of earning an income.

The Government's priority has been to increase access to education to increase the equity of opportunity for students in the outer islands so that they can maintain their livelihoods in the outer islands. This approach has succeeded in increasing access but the quality of education in the outer islands as regards resources, infrastructure, and qualified teachers is not comparable to that in South Tarawa.

Access to Health Services

There is a general perception that the health services available on South Tarawa are better than those available in the outer islands. This perception is borne out in a number of ways:

- Kiribati has 22 doctors, of whom 21 are located on South Tarawa, the other being on Kiritimati Island. While the overall ratio of 3,700 persons per doctor is typical by Pacific islands standards, most outer islanders have no regular access to a doctor unless they travel to South Tarawa, which is costly and difficult for a sick person.
- Outer Island health facilities are generally poorly supplied and maintained, have fewer qualified staff available than in Tarawa, and are often lacking water and toilet facilities. Difficulties of transport and communications are critical factors. Many women in the outer islands are isolated from maternal and infant health services.

- Immunization rates have improved significantly and are now around 70% on a national basis for diphtheria, pertussis, and tetanus (DPT), polio, and hepatitis B. The rate for the outer islands averages 62% compared to 90% on South Tarawa.

The outer islands' less crowded and stressful conditions can, however, result in better health than in Tarawa. Generally, the outer island lifestyle involves more exercise; "junk foods" are less accessible, while water and sanitation conditions are sometimes better than in Tarawa. An analysis of reasons for visits to health clinics and incidences of noncommunicable diseases such as diabetes and heart disease shows that these vary from island to island; there is no Tarawa/outer islands dichotomy (see Statistical Appendix).

Defining and Measuring Poverty

The incidence of poverty and hardship in the Pacific islands has come into sharp focus recently, as governments have come under domestic pressure to attend to extreme disparities of income and well-being. The alleviation of poverty worldwide has become the centerpiece of aid policy.

Poverty has both relative (this person or group is poorer than that) and absolute (they are poor) meanings. Standards of poorness are defined differently according to the time and place of observation. Poverty in its absolute sense is most widely associated with hunger, starvation, and destitution—in effect, having insufficient income with which to feed and clothe oneself and one's family. Assessing this implies the existence of an accepted standard of minimum livelihood. People can be adequately fed and housed for purposes of merely staying alive, but still be unacceptably poor. They may lack recognition, choice, protection of the law, education, and the chance to improve their situation. This "poverty of opportunity" is coming to be regarded in the Pacific islands as just as important in defining the extent of poverty as sheer lack of monetary or subsistence income. Kiribati at present has practically no life-threatening income poverty, but poverty of opportunity is apparent in urban and rural areas.

Absolute and relative poverty are the unintended outcomes of the (inevitably) unequal distribution of the costs and benefits of economic activity and social change. Some degree of inequality is accepted as fair and reasonable, and what is fair and reasonable in one society may not be so in another. But at a certain level in any society, increasing inequality demands the attention of governments and the community at large, to alleviate its worst effects and if possible remove the causes of its growth.

Thus, there are good domestic humanitarian and political reasons for recognizing and tackling the growth of poverty, whether of income or of opportunity or both. But even if Kiribati did not want to address these issues, international concern would force it to do so. International donors, financial institutions, and NGOs are insisting that developing countries adopt credible policies to alleviate poverty if they wish to continue to receive development assistance.

A key tool in *income poverty* assessments is a household income and expenditure survey (HIES), one of the most difficult of all surveys to carry out effectively. This was last done in Kiribati in South Tarawa, Onotoa, and Butaritari in 1996 under circumstances that left many reservations about the reliability of the conclusions.³⁵ They are being used in the absence of any better source of data, but it is clear that considerable further work is needed before income poverty can be quantified with confidence.

Assessment of the extent of *poverty of opportunity* requires examination of social as well as economic indicators: for example, literacy levels, school enrollment rates, life expectancy, infant mortality, gender balance, engagement in business, patterns of employment, and dependency ratios. These indicators can be found in official health and education statistics and national census data. Consultations for this report found many reasons to treat aspects of these statistics with considerable caution.

Under a regional project, ADB is examining the extent of income poverty in several of its Pacific member countries by comparing household expenditure against what is termed the *poverty line*. This is a calculation of the minimum income required, firstly, to provide an individual with a basic subsistence diet (measured in terms of the minimum daily calorie intake required for human survival, which is benchmarked at 2,200 calories/day), termed the

food poverty line plus, secondly, an additional allowance for basic nonfood expenditure. Together these make up the poverty line.

The food poverty line is based on the cost of a food basket made up of a combination of own food production and other purchased items that is just sufficient to meet the minimum food-energy needs per adult per day. It will not necessarily be, indeed it is very unlikely to be, a representation of what is actually consumed or what an individual might personally consider to be desirable or acceptable. The food poverty line is usually calculated from data in the HIES and from information on minimum/recommended nutrition requirements in each society.

For South Tarawa the food poverty line³⁶ is estimated by the ADB regional study to be \$600 per head per year in 1996 prices, whilst for the outer islands it is only \$167. This reflects the much higher level of consumption of own-production food that is possible in the outer islands compared to that in South Tarawa. Adjusting for the estimated requirement for additional nonfood basic needs to give a minimum standard of living in each location, indicates a poverty line of \$750 in South Tarawa and \$201 in the outer islands (1996 prices).

The estimated extent of income poverty derived from these poverty lines is shown in Table 3.2. The results suggest that for both South Tarawa and the outer islands, 39% of households had expenditure levels below the food poverty line and that 51% of households had expenditure below the poverty line. Not surprisingly, household size appears to have an important bearing on the outcome. For South Tarawa, households with expenditure below the poverty line averaged 11.7 persons compared to 7.7 persons in households above the poverty line. For the outer islands, whilst the difference was not so marked, 6.8 persons per household below the poverty line compared to 5.2 persons in households above the poverty line, it is still noticeable.

The results do not necessarily mean that people who are below either of the two poverty lines are going hungry. They mean only that, according to the data, they had insufficient income to meet the average expenditure requirements for a model diet plus the costs of other nonfood items.³⁷ They may have made up the shortfalls by additional fishing and own-produce consumption,

Table 3.2: Estimated Poverty Incidence, using 1996 HIES Data

	Percentage of Households with Recorded Expenditure Below:	
	Food Poverty Line	Poverty Line
South Tarawa	39	51
Outer Islands	39	50

Source: ADB 2002b.

by borrowing from others, or by going without some of the nonfood items.

It is apparent, however, that some households were considerably more likely than others to have difficulty making adequate provision for all their members, and for some the difficulty could be severe. Intuitively this is a credible conclusion. The problem lies with the implied precision of the data and their use for regional and international comparisons. The 1996 HIES found that the average annual per capita cash expenditure of the highest-spending 20% of households on South Tarawa was \$1,765, compared to \$309 for the lowest-spending 20%. For the outer islands, the inequality appears to be even more marked at \$1,952 (10% higher than the top 20% in South Tarawa) and \$95, respectively.

The hazards of this process for analysts, policymakers, and concerned observers are exemplified by Tables 3.2 and 3.3. Table 3.2 summarizes the findings of ADB's regional poverty assessment study in relation to Kiribati. In the study itself, reservations were properly expressed about the methodology and data used—for lack of any better—in reaching conclusions. Yet, those reservations become invisible in Table 3.3, which states that 4 out of 10 households in Kiribati live below the food poverty line and 5 out of 10 live below the general poverty line. It seems unlikely that most people familiar with the economic and social conditions of Kiribati will be comfortable with this statement, but this is the “fact” that will be quoted everywhere, particularly by Kiribati's development partners and international agencies.

To illustrate how this happens, Table 3.3—in a formulation commonly used for comparative purposes—takes the conclusions of Table 3.2 and includes them in a compendium of social and economic statistics. The components of the table are not all of equal

Table 3.3: Profile of Living Standards

1. Poverty Measures (\$1996 prices)				
• South Tarawa Poverty Line Head Count	750			
Index (%)	51			
• Outer Island Poverty Line Head Count	201			
Index (%)	50			
2. Development Progress Indicators				
• Human Development Index	0.515			
PDMC Rank	9.000			
• HPI	12.70			
PDMC Rank	7.000			
3. Inequality Measures				
• Expenditure Ratio (H20/L20)				
South Tarawa	5.7			
Outer islands	20.5			
• Average per Capita Expenditure				
H20 South Tarawa (\$ pa)	1,765.0			
L20 South Tarawa (\$ pa)	309.0			
• Average per Capita Expenditure				
H20 outer islands (\$ pa)	1,952.0			
L20 outer islands (\$ pa)	95.0			
4. Population and Household				
• Population (2000 census)	84,494			
• Population Net Growth Rate	1.7			
Annual average (1995–2000) (%)				
• Dependency Ratio (2000)	0.76			
• Average Household Size	6.7			
South Tarawa	8.1			
Outer Islands	5.9			
• Average Household Size				
Poor South Tarawa (Below PL)	11.7			
Nonpoor South Tarawa (Above PL)	7.7			
5. The Economy				
• Real GDP Growth Rate 1991–2000	3.70			
5. The Economy (cont.)				
• GDP per capita 2000		US\$38		
Current Prices		US\$50		
• Sectoral Shares (% of GDP 2000)				
Agriculture & Fishing		20.0		
Secondary		7.0		
Tertiary		73.0		
• Inflation 2001 (%)		6.0		
• US\$ Exchange Rate (31/12/01)		\$1.75		
• % of Labor Force in subsistence		74.0		
• Debt Servicing (% of GDP)		0.5		
6. Vulnerability Indicators				
• CVI		5.082		
PDMC Rank		7.000		
• Foreign Grants (% of GDP 2000)		24.3		
• Exports (% of GDP 2000)		12.8		
• Imports (% of GDP 2000)		85.6		
• Export /Import ratio		1:8.5		
• Emigration Significant		No		
• Remittances Significant		Yes		
7. Basic Education				
• Adult Literacy Rate (%)		92		
• CGER (%)		68		
• Expenditure on Education 2001				
As % of GDP		16.4		
Per Pupil (\$)		55		
8. Primary Health and Nutrition				
• Life Expectancy at Birth (year)		62.8		
• Infant Mortality Rate (per 1,000)		43		
• Pop'n with access to safe water (%)		76		
• Population per Doctor		3,700		
• Reported TB cases (per 100,000)		0.0		
• Immunization Coverage (DPT)		72		
• Expenditure on Health 2001				
As % of GDP		11.3		

(continued)

Table 3.3 (continued)

<ul style="list-style-type: none"> Expenditure on Health 2001(cont.) 			
Per capita (\$)	104.5		
9. Gender Issues		10. Governance	
<ul style="list-style-type: none"> Total Fertility Rate 	4.5	<ul style="list-style-type: none"> Public Sector % of Formal Employment 	77
<ul style="list-style-type: none"> Contraceptive Prevalence Rate (%) 	28	<ul style="list-style-type: none"> Share in Government Expenditure 	
<ul style="list-style-type: none"> Maternal Mortality Rate 	225	<ul style="list-style-type: none"> Education 2001 (%) 	20.0
<ul style="list-style-type: none"> Life Expectancy Gender Gap (F-M) 	6	<ul style="list-style-type: none"> Health 2001 (%) 	13.7
<ul style="list-style-type: none"> Female Literacy Rate (%) 	91	<ul style="list-style-type: none"> Agriculture & Fishing 2001 (%) 	3.6
<ul style="list-style-type: none"> Female CGER (%) 	69	<ul style="list-style-type: none"> Primary Education Educ. Share (%) 	30
<ul style="list-style-type: none"> Women in Paid Employment (%) 	33	<ul style="list-style-type: none"> Participation in Local Gov't Budget 	Yes
<ul style="list-style-type: none"> Women in Government (No. of seats) 	2	<ul style="list-style-type: none"> Published Economic Strategy/Plan 	Yes
		<ul style="list-style-type: none"> Democratically Elected National Gov't. 	Yes
		<ul style="list-style-type: none"> Democratically Elected Local Gov't. 	Yes
		<ul style="list-style-type: none"> Ombudsman 	No

Notes: CGER = combined gross enrollment rate; CVI=composite vulnerability index; DPT= diphtheria, poliomyelitis, tetanus; Gini=Gini Coefficient, a measure of inequality; GDI=Gender Development Index; GDP=gross domestic product; HDI=Human Development Index; pa=per annum; PDMC=Pacific developing member country (ADB). Source: Kiribati Statistics office.

reliability. Some are quite precise measurements. Others are estimates subject to fairly standard reservations, as in the case of the census data. Still others incorporate a substantial amount of guesswork and should properly always be referred to as estimates, such as most references to GDP and social indicators like literacy and prevalence of contraception. Some, such as the poverty assessments, are highly tentative and unless used with an explicit caveat may be misleading.

It is clear that the poverty measures developed by ADB's regional study are only a first step, although an important one, toward credible estimates of the extent of unacceptable inequality of income and opportunity. The increasing importance being attached to poverty alleviation domestically and internationally means that a higher priority should be given to the regular collection of HIES and other relevant data, and to refinement of the analytical methods used.