

**ASIAN DEVELOPMENT BANK**

**TAR:KIR 32497**

**TECHNICAL ASSISTANCE**

**TO THE**

**REPUBLIC OF KIRIBATI**

**FOR**

**COMMUNITY DEVELOPMENT AND SUSTAINABLE PARTICIPATION**

**March 2002**

## **CURRENCY EQUIVALENTS**

(as of 31 January 2002)

Currency Unit	–	Australian Dollar (A\$)
A\$1.00	=	US\$0.5184
US\$1.00	=	A\$1.9288

## **ABBREVIATIONS**

ADB	–	Asian Development Bank
FSP	–	Foundation of Peoples of the South Pacific
KHC	–	Kiribati Housing Corporation
MESD	–	Ministry of Environment and Social Development
NGO	–	Nongovernment organization
SAPHE	–	Sanitation, Public Health, and Environment
TA	–	technical assistance

## **NOTE**

The fiscal year of the Government ends on 31 December.

## I. INTRODUCTION

1. During the 2000 country programming mission, the Government of the Republic of Kiribati requested technical assistance (TA) to expand and institutionalize community development and participation initiatives begun under an earlier TA.<sup>1</sup> The Fact-Finding Mission for the proposed TA visited Kiribati during 14–27 June 2001 and reached an understanding with the Government on the goals, objectives, scope, and implementation arrangements. The TA is included in ADB's country strategy and program update for Kiribati for 2001.<sup>2</sup> The TA framework is in Appendix 1.

2. The TA will be complementary to the ongoing Sanitation, Public Health, and Environment (SAPHE) Project,<sup>3</sup> which is providing funding to help improve water supply, sanitation, and solid waste management in South Tarawa. The loan was declared effective on 15 September 1999. The detailed designs have been prepared, and the first civil works are under way. The civil works are expected to continue until project completion at the end of June 2003.

## II. BACKGROUND AND RATIONALE

3. Kiribati, with a population of 88,000, is one of the poorest countries among the Pacific developing member countries. It comprises 33 atolls in three groups with coral soil, limited vegetation, and a maximum elevation of less than 5 meters above sea level. The public sector dominates the economy, which is otherwise based upon copra, fishing, and small-scale tourism. Real per capita gross domestic product growth has been almost nil since the early 1980s. Life expectancy is only 60 years, infant mortality is high, secondary school enrollment is only about 32 percent, population growth is high, and women have low social status.

4. The combination of high population growth and lack of employment in the countryside is causing the population to drift to Tarawa, the capital and main seat of government. Although some of the in-migrants have jobs, most subsist on occasional work supplemented by copra farming and fishing. Some have housing, but many live as squatters on both private and public land. Over the last five years, the population of Tarawa has increased by 33 percent, a trend that is expected to continue.

5. Tarawa comprises a string of small islets divided by shallow tidal passages, arranged in an "L" shape around a central lagoon. Most of the population of about 36,000 persons lives on South Tarawa, where the islets have been joined by causeways to form a single continuous ribbon of islands stretching about 30 kilometers from east to west. The population density of South Tarawa averages 2,400 per square kilometer, but is much higher in the urban settlements of Bairiki, Bekenibeu, and Betio. This stresses natural resources, ecosystems, and infrastructure.

6. Both Tarawa Lagoon and the groundwater underlying most of South Tarawa are very badly polluted from human and animal (pig) waste. Although most of the time rainfall is substantial (it averages about 155 centimeters per year) there is a pronounced dry season and

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<sup>1</sup> TA 3109-KIR: *Community Development and Participation Initiatives*, for \$300,000, approved on 8 December 1998. The TA began in October 1999 and was completed at the end of December 2001. The consultants were Coffey International of Australia, in association with the Foundation of the Peoples of the South Pacific (FSP).

<sup>2</sup> The TA first appeared in *ADB Business Opportunities* on 9 March 2001.

<sup>3</sup> Loan 1648-KIR: *Sanitation, Public Health, and Environment Improvement*, for SDR 7.3 million, approved on 8 December 1998.

droughts are frequent. The groundwater aquifers are shallow and most are badly polluted. Groundwater can now be used for drinking in only a few locations. Houses with permanent roofs can collect rainwater for drinking but those with temporary roofs must rely on ground and piped water. Water provided through the piped water supply system is intermittent and of poor quality, the sewage collection system is not operational, and most solid wastes are uncollected. Low-income households usually obtain their water from a combination of dug wells, which are often brackish and/or polluted, and community water taps, which contain water for only an hour or so a day.

7. Poor quality and insufficient quantity of drinking water have led to a high incidence of waterborne diseases, particularly among children, and a serious risk of epidemics. The last serious epidemic was in late 2000, when an outbreak of cryptosporidium caused about 900 cases of severe diarrhea, and several deaths. Cholera has broken out several times in the last two decades in the project area.

8. In most of the project area, land-based agricultural activities have almost ceased. Taro pits have fallen into disuse due to a beetle blight; groundwater is polluted; and vegetable gardens are difficult to establish due to the lack of soil conditioners, nutrients, and water. Nevertheless potential exists for agriculture. Some wastes, such as palm leaves and pandanus leaves, can be used as soil conditioners; metal wastes can be used to provide iron; and compost wastes can be used as fertilizer. Fresh vegetables produced in home gardens are needed.

9. Despite widespread reliance on water of doubtful quality, only a few of Tarawa's residents have knowledge of the water cycle, the causes of waterborne disease, or the basic techniques of safe water handling and sanitation. Only a few are able to draw a connection between pollution of the land and pollution of the groundwater that ends up in their teapots. Although communities linked by kinship, or religious or village ties meet regularly to discuss common problems and develop common courses of action, they seldom get together to discuss water and waste management problems because these are viewed as individual prerogatives.

10. Nongovernment organizations (NGOs), particularly FSP, have worked with communities, schools and staff of government agencies to help educate people about the water cycle, and to teach them methods of safe water handling and sanitation. Until now, however, Government efforts in the area of water management at the community level have been fragmented and ineffective. The Ministry of Environment and Social Development (MESD) has a mandate to work with communities, but its staff lack technical training. The Ministry of Works and Energy is responsible for regulating well and latrine construction, but limits its assistance to this area, and its staff lack experience in working with communities. The Ministry of Health has staff with technical skills to monitor water quality and diseases, but its resources are limited and it tends to focus more on curative than on preventive medicine. Urban councils, which are divided into wards, each containing several communities, are used to working with communities, but their activities focus more on licensing food vendors than on community development and participation.

11. The earlier TA helped pilot test community development and training programs in the areas of community water management, wastewater management, and self-help well and latrine construction. Community, school, and teacher training materials, including posters, plays, flip charts, and manuals, were prepared and tested, and staff of MESD and other government agencies received training in community development and the water cycle. A video was produced to allow wider dissemination of information. About 45 workshops were conducted,

comprising about 25 for communities, and 20 for schools, women's groups, and local governments. These have reached about 10 percent of the population.

12. The initiatives conducted to date have been well prepared and received. People are more broadly aware of water and waste management issues, and the population of the communities and schools in which more in-depth training and assistance have been provided have a greater understanding of the issues. Some of these communities have constructed water protection works, and some individuals have constructed low-cost latrines. FSP, Ministry of Health, Ministry of Works and Energy, and the Kiribati Housing Corporation (KHC) are all receiving requests for follow-up training and assistance in such subjects as testing well water, constructing well improvements and water tanks, installing simple water purification systems, constructing low-cost composting and pit latrines, and disposing of solid wastes. To date, however, only modest follow-up has been provided. The roles of various stakeholders need to be clearly defined; and procedures, funding mechanisms, and performance management systems established to ensure the program is continued upon TA completion.

13. Under the SAPHE project, the quality and duration of piped water supplies is expected to be improved, piped sewerage will be provided in the three densest urban areas, and solid waste collection and disposal will be enhanced. However, most households will rely on groundwater for at least part of their water supply, and many households will continue to suffer from inadequate sanitation and waste disposal. These will be assisted in their self-help efforts to improve their own water supply and sanitation facilities through a loan program funded under the SAPHE project, administered by KHC, and assisted under the TA. They will be provided with better solid waste collection by the local governments, funded under the SAPHE project.

14. The TA will help maximize the benefits of the SAPHE project by helping (i) the majority of water users understand the water cycle, in particular the importance of ensuring their drinking water is potable and their waste does not pollute the ground, the groundwater, or the lagoon; (ii) those who wish to, construct or install their own well improvements, rainwater tanks, water purification systems, waste management systems, or latrines, and learn how to build and operate them in the most environmentally sound manner; and (iii) create the institutional arrangements necessary for sustaining such community development and participation initiatives.

### **III. THE TECHNICAL ASSISTANCE**

#### **A. Objective**

15. The long-term goal of the TA is to improve the well-being, health, and environment of the people of South Tarawa. The short-term objective is to achieve safer water and waste handling practices amongst the majority of communities of South Tarawa, with self-help initiatives underway in a substantial number of communities, and with sustainable programs to support community development and self-help initiatives established in government agencies, schools, NGOs and the private sector.

#### **B. Scope**

16. By completion of the TA, the following achievements are expected: (i) awareness of improved water handling, sanitation, and solid waste management practices imparted to and being used by more than half of the adult residents of South Tarawa; (ii) awareness of improved water-handling and sanitation practices imparted to and being used by a substantial number of

school children; (iii) community leaders, schoolteachers, and NGO and government personnel trained in improved water-handling, sanitation, and solid waste management practices; (iv) appropriate technologies for rainwater storage, water purification, well improvement, latrine construction, and waste separation identified, tested and developed; (v) KHC's rainwater storage, well improvement, and latrine construction program incorporating the results of the pilot tests successfully conducted; (vi) the urban councils' solid waste management programs successfully conducted; (vii) economic activities, such as household gardens, facilitated through greater availability of water and reusable wastes; (viii) education and training materials, including posters, flip charts, manuals, calendars, stamps, plays, and videos produced, tested, and available for use; (ix) role of communities in water and waste management clarified and regularized; and (x) effective and responsive institutions in place to ensure the program can be sustained.

17. The work will be undertaken by a team of MESD officers, consultants, and FSP staff working with about 75 community groups, about 20 schools, and other NGOs, government agencies, and individuals. It will involve provision of awareness materials, education, and training to individuals, communities, schools, and other organizations; design and conduct of pilot projects; provision of support to KHC and the urban councils for implementation of their programs; development and production of manuals, education, and training materials; surveys of communities, and nongovernment and government organizations to assess their present roles and responsibilities; synthesis of proposals and preparation of action plans for the effective, sustainable delivery of community development and participation initiatives; an impact study; and routine reporting and TA management activities. Terms of reference for consultants are in Appendix 2.

### **C. Cost Estimates and Financing Plan**

18. The total cost of the TA is estimated at US\$495,000 equivalent, comprising US\$255,700 in foreign exchange and US\$239,300 in local currency costs. ADB will provide US\$420,700 equivalent to cover all the foreign exchange cost and US\$165,000 equivalent of the local cost. ADB funding will cover the costs of international and domestic consultants, production of training materials, conduct of pilot projects as necessary for the work of the consultants, an impact assessment, a photocopy machine, transportation for the consultants, and support services. The TA will be financed by ADB on a grant basis from the ADB-funded TA program. The Government will provide the remaining US\$74,300 equivalent comprising counterpart staff, office space, education and training materials, transportation for staff, and secretarial and other support services. Detailed cost estimates are in Appendix 3.

### **D. Implementation Arrangements**

19. The SAPHE project steering committee, chaired by the Cabinet secretary, and comprising secretaries of all the government departments involved in the SAPHE project, including MESD, will provide high-level policy guidance. The SAPHE project management office will coordinate the work on behalf of the steering committee. The Executing Agency for the TA will be the Ministry of Finance and Economic Planning. The Implementing Agency will be MESD. The existing project implementation unit—MESD will be responsible for TA implementation. An existing Community Development Coordinating Committee under MESD will ensure appropriate coordination between agencies and action groups, NGOs, church, and community groups. MESD will designate a full-time officer to manage the TA on a day-to-day basis including development of the education and training program for communities and school groups. The TA will be implemented over 18 months from February 2002 through July 2003.

20. The TA will finance 41 person-months of consulting services including 8 person-months of international consulting and 33 of domestic. The international consultants will comprise a community development specialist (5 person-months) and a sanitary engineer, appropriate technology (3). The domestic consultants will comprise a community development field specialist (15 person-months), a water and sanitation field specialist (10), a waste management field specialist (5), and an impact evaluation specialist (3).

21. The TA will be carried out by Coffey International, the international consulting firm which provided consulting and management services for the first TA, in a joint venture with FSP, the domestic NGO which provided consulting services, management, and logistic support for the earlier TA. Coffey and FSP have together been responsible for the identification and development of the existing community development and participation programs, including their supporting documentation, and have performed very well. Their work has been characterized by a close relationship with poor communities, and by innovativeness in the development of cost-effective and sustainable approaches. Their continued involvement in the work will provide continuity in the approach. It will also avoid delays which could seriously affect the implementation of the loan, particularly the KHC loan program. Coffey International were recruited for the ongoing TA in accordance with ADB's *Guidelines on the Use of Consultants* and the FSP were recruited under arrangements satisfactory to ADB. Procurement of minor equipment and materials required for the TA will follow ADB's *Guidelines for Procurement*. ADB staff will conduct an inception mission, review missions at not more than 6-month intervals, and a TA completion mission.

22. The consultants will produce an inception report one month after beginning their services, progress reports at six month intervals, technical reports and manuals as required to support and document the programs developed, an impact evaluation report, and a final report upon completing their services. The various reports will be the subject of discussions at tripartite meetings to be held during each ADB mission.

#### **IV. THE PRESIDENT'S DECISION**

23. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance, on a grant basis, to the Government of the Republic of Kiribati in an amount not exceeding the equivalent of US\$420,700 for the purpose of Community Development and Sustainable Participation, and hereby reports such action to the Board.

## TECHNICAL ASSISTANCE FRAMEWORK

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p><b>Long-Term Goal</b> To improve the well-being, health and environment of the people of South Tarawa.</p>	<p>Increased availability of safe water for drinking, as measured by the need to boil water, and access to piped, rainwater, and protected well water supplies; enhanced availability of facilities for collection and disposal of human and animal sanitary waste as measured by access to piped sewerage, septic tanks, and composting toilets; and enhanced management of solid waste as measured by the reduction of wastes in the community.</p> <p>Reduction in waterborne diseases and infant mortality due to diarrhea and related causes.</p>	<p>News reports; consumer complaint reports of the Public Utilities Board; physical surveys carried out by the Public Utilities Board and Lands Department; socioeconomic surveys carried out by the Statistics Office; water quality statistics collected and published by the Ministry of Health; interviews conducted by nongovernment organizations (NGOs) and the Ministry of Environment and Social Development (MESD).</p> <p>Health statistics collected and published by the Ministry of Health; socioeconomic surveys.</p>	<p>Underlying elements of growth and development continue to be in place.</p> <p>Concurrent elements of the Sanitation, Public Health, and Environment Project continue on time and with the support of the community and Government.</p> <p>The community and Government wish to increase the quality of life for the people especially in the urban area.</p>
<p><b>Short-Term Objectives</b> To achieve safer water and waste handling practices amongst the majority of communities of South Tarawa, with self-help initiatives underway in a substantial number of communities.</p>	<p>Evidence of use of safe water, wastewater and solid waste handling practices; use of simple water purification systems; improvement of wells, latrines and disposal sites; knowledge and capacity in community leaders and individuals.</p>	<p>Interviews with households, community representatives, school children and teachers; field observations; impact survey funded under the technical assistance (TA).</p>	<p>The water cycle and safe sanitation practices are recognized as important subjects for learning.</p> <p>Households are willing and able to undertake self-help initiatives.</p>
<p>To establish sustainable programs to support community development and self-help initiatives in water</p>	<p>Evidence of effective support provided to communities and individuals by government agencies, NGOs and the private</p>	<p>Interviews; field observations; impact survey funded under the TA.</p>	<p>That leaders will recognize the importance of such work; that civil servants can be motivated to undertake work that is at</p>

(Reference in text; page 1, para. 1)

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>resource management, water supply, waste water and solid waste management, delivered by government agencies, schools, NGOs and the private sector.</p>	<p>sector; programs, budgets, and human resources operational in the responsible agencies; knowledge and capacity created in responsible persons, including teachers.</p>		<p>present relatively low in their priorities; that adequate funding and other support is made available.</p>
<p><b>Outputs and Activities</b></p> <p>1. Advice, education, and training in the water cycle, waste management, gardening using waste products and formation of community user groups provided to members of about 75 community groups.</p> <p>2. Advice, education and training in the water cycle, waste management, and gardening using waste products, provided to about 20 primary and secondary schools.</p> <p>3. Advice, education and training provided to KHC, other government agency staff, schoolteachers, community leaders and NGO staff on the water cycle, waste</p>	<p>Number of communities and households reached and provided help both initially and in follow-up continuing through to action by the community. Presence of posters, flip charts, manuals, calendars, and stamps in houses and community centers; number of communities visited and population covered.</p> <p>Number of schools and students reached both directly through school presentations and indirectly through teacher training; presence of posters, flip charts, manuals, calendars and stamps in schools; curricula incorporated in educational materials, produced and distributed.</p> <p>Number of staff reached and trained; public aware of and appreciative of the role of the public agencies and NGOs; presence of posters, flip charts, manuals, calendars and stamps in homes, teachers offices and</p>	<p>Consultant records; agency records; feedback from education and training activities; field interviews; impact survey conducted under the TA.</p> <p>Consultant records: school records; feedback from education and training activities; field interviews with students and teachers; impact survey conducted under the TA.</p> <p>Consultant records; KHC and other agency records; field interviews; impact survey conducted under the TA.</p>	<p>The education and training will lead to improved water and waste management with benefits at the household level.</p> <p>Grassroots school education and training via children will benefit improved water and waste management at the household level, both short and long term.</p> <p>KHC and other agencies will take a proactive role in provision of advice and training including for self-help construction of compost toilets, wells, and rainwater tanks.</p>

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>management and gardening using waste products.</p> <p>4. Further development and testing of appropriate technologies for rainwater storage, water purification using solar heating, and three-stage storage jars, well improvement, composting and evapotranspiration latrines, solid waste separation and composting, and simple water quality testing.</p> <p>5. Successful conduct of the rainwater storage, well improvement, and latrine construction program of KHC incorporating the results of the pilot tests conducted.</p> <p>6. Successful conduct of the urban councils' solid waste management programs, with knowledge and acceptance of environmentally sound waste separation and retrieval technologies established in selected communities.</p> <p>7. Economic activities such as household gardens facilitated based on better groundwater &amp; waste management practices.</p>	<p>government offices.</p> <p>Nature and scale of problems arising and resolved; results achieved including acceptance by individuals and communities; number and variety of units tested.</p> <p>About 1,500 tanks, wells, water purification units, and latrines built and operational evidence of problems arising/solved; evidence of operational instructions in use.</p> <p>About 3,000 new bins provided; composting, recycling and sorting systems in operation; increased knowledge and awareness of safe waste handling practices.</p> <p>About 50 new gardens established; produce being grown and marketed; incomes enhanced.</p>	<p>TA implementation records kept by the consultants; field observations; impact survey funded under the TA.</p> <p>TA implementation records kept by KHC and the consultants; field observations; impact survey funded under the TA.</p> <p>Records kept by the Public Works Department, the urban councils, and the consultants; demand for rubbish bins; field observations; impact survey funded under the TA.</p> <p>Statistics compiled by the Agriculture Department; field observations; NGO and community interviews; impact survey funded under the TA.</p>	<p>That the use of the various technologies will be cost-effective, socioculturally acceptable in the community and affordable for the households who might use them.</p> <p>The need for safe potable water and waste disposal continues to be accepted, with rain tanks and other components affordable and accessible.</p> <p>The community will use new approaches in waste and water practices to support household income generation activities; the local councils will take the lead in encouraging improved waste management practices.</p> <p>Increasing urbanization and decreasing groundwater quality will not drive out kitchen gardening; households will find such gardening economic; other</p>

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>8. Education and training materials including posters, flip charts, manuals, calendars, stamps, plays and videos produced, tested, and available for use including in schools.</p> <p>9. Monitoring and assessment reports prepared on rain tanks, toilets, wells, gardens, waste management, and community education materials facilitated under the TA.</p> <p>10. Institutional and financial assessments undertaken; findings reported and discussed at workshops.</p> <p>11. Options formulated for sustained, effective provision of community development and participation initiatives. These may include government- based model, NGO-based model, and hybrid model.</p> <p>12. Recommendations made for preferred institutional arrangements, linking together funding agencies, service</p>	<p>Materials on hand covering all aspects of the water cycle and waste management in accordance with the consultants' terms of reference. Coverage, quality, outreach value and cost of the materials.</p> <p>Recommended adjustments in designs, manuals, and promotion materials incorporated in the materials.</p> <p>Agreed milestones achieved.</p> <p>Agreed milestones achieved.</p> <p>Agreed milestones achieved.</p>	<p>Consultant, agency and school records; input survey funded under the TA.</p> <p>Consultant records.</p> <p>Agency records; consultant records: interviews with agencies and NGOs on the effectiveness of the work.</p> <p>Consultant records; interviews with agencies and NGOs on the quality and effectiveness of the work.</p> <p>Consultant and agency records; stakeholder interviews.</p>	<p>inputs will be available.</p> <p>Materials will be used and effective in communicating their messages.</p> <p>The reviewers will have the experience and expertise to assess the suitability of the facilities provided.</p> <p>The community and Government have the capacity and will to conduct dialogue on sustainable community development initiatives.</p> <p>The options formulated will reflect the views of the stakeholders and help mobilize support for a preferred option.</p> <p>The institutions will discuss and settle on an agreed approach.</p>

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>providers, communities and individuals.</p> <p>13. Action plan formulated to implement the preferred option, and assistance provided for implementation of the preferred option, with the aim of having all necessary arrangements in place by completion of the TA.</p> <p>14. Role of communities in water and waste management clarified and regularized.</p> <p>15. Effective and responsive institutions in place to ensure the program can be sustained.</p> <p>16. Production of semiannual progress reports, technical reports, and final report.</p>	<p>Agreed milestones achieved; action plan supported by key stakeholders.</p> <p>Agreed milestones achieved; action plan supported by key stakeholders.</p> <p>Legislation, bylaws, standing orders, knowledge of community members and government officials all in place and operational.</p> <p>Agreed milestones achieved; reports have suitable coverage, are of high quality, and help advance the TA.</p>	<p>Consultant and agency records; stakeholder interviews.</p> <p>Consultant and agency records; stakeholder interviews.</p> <p>Documents and field surveys.</p> <p>Documents and field surveys.</p> <p>Consultant and agency records.</p>	<p>The decision makers will value the plan prepared and commit to support it with action.</p> <p>The decision makers and responsible agencies will have ownership of the plan prepared and support it with action.</p> <p>The Government will be willing to empower communities.</p> <p>The Government will recognize the value of the program and therefore support it.</p> <p>Regular reporting will help the consultants keep their work on track and facilitate monitoring and feedback.</p>

<p><b>Inputs</b> Financed by ADB</p> <p>1. International consultants: 8 person-months.</p> <p>2. Domestic consultants: 33 person-months.</p> <p>3. Design and production of education and training material.</p> <p>4. Design and implementation of pilot projects.</p> <p>5. Production of drama play.</p> <p>6. Provision of office equipment, communications, transport, and secretarial staff.</p>	<p>As stated.</p> <p>As stated.</p> <p>Materials produced to reach 75 communities.</p> <p>Pilot projects designed and implemented.</p> <p>Play produced and recorded in video.</p> <p>Adequate office space provided.</p>	<p>Consultants' reports, agencies' records.</p>	<p>The activities undertaken result in the outputs desired.</p> <p>Project management and other support is provided on time and as required.</p>
<p>Financed by the Government</p> <p>1. Staff: 36 person-months.</p> <p>2. Production of education and training materials, implementation of pilot projects.</p> <p>3. Provision of office space, equipment and support staff not provided by the consultants.</p>	<p>As stated.</p> <p>See above.</p> <p>See above.</p>	<p>Agencies' records, consultants' reports.</p>	<p>The activities undertaken result in the outputs desired.</p> <p>Leadership, funds and administrative support are provided on time and as required.</p>

## TERMS OF REFERENCE FOR CONSULTANTS

### A. Community Development Specialist (International)

1. The specialist will undertake the following:
  - (i) Review the overall experience with community-based development and participation initiatives (CDPI) of all sorts on South Tarawa; become familiar with the culture, land, social groupings, and communities.
  - (ii) Review the experience and achievement of the earlier CDPI TA and other, closely related projects in the areas of community and school education and training in water and environmental management, village mapping, well improvement, solid waste management, composting latrines, and gardening.
  - (iii) Collect economic and social information for the TA area, relative to CDPI; identify any gaps in the information and methods of filling them.
  - (iv) Carry out assessments of participating institutions including government agencies, nongovernment organizations (NGOs), and others, and the mechanisms and processes they use to provide services; and help identify methods of enhancing performance.
  - (v) Identify alternative policy and institutional frameworks for CDPI, including government-based, NGO-based, and hybrid models, with advantages and disadvantages of each; and conduct workshops and discussion sessions to consider them.
  - (vi) Based upon the workshops and discussions, prepare a policy and institutional framework including a midterm budget and funding arrangements for CDPI.
  - (vii) Prepare a time-bound action plan for implementing the agreed policy and institutional framework, and help initiate the action plan; to the extent necessary, help secure funding for the proposed program.
  - (viii) Review TA fieldwork proposals in terms of their likely impact, feasibility, and sustainability; and recommend any course-corrections necessary.
  - (ix) Help assess the TA work program, staffing plan, and budget; and identify necessary adjustments.
  - (x) Provide training in CDPI; disseminate information about the TA.
  - (xi) Help develop education and training materials.
  - (xii) Prepare regular and technical reports about the TA.
  - (xiii) Prepare a TA completion report including a comparison of proposed and actual outputs, inputs, and activities.
  - (xiv) Complete other tasks required to ensure satisfactory completion of the TA.

### B. Sanitary Engineer (Appropriate Technologies) (International)

2. The engineer will have the following responsibilities:
  - (i) Review the overall experience with CDPI on South Tarawa; become familiar with the culture, land, social groupings, and communities.
  - (ii) Review the experience and achievement of the earlier CDPI TA and other closely related projects in the areas of community and school education and training in water and environmental management, village mapping, well improvement, solid waste management, composting latrines, and gardening.
  - (iii) Review the options for low cost water supply and sanitation initiatives under CDPI; identify any gaps in the options.

- (iv) Identify new methods of low cost water supply and sanitation for pilot tests to determine its likely impact and sustainability.
- (v) Design pilot tests program taking into account the likely impact, feasibility, and sustainability of the technologies proposed.
- (vi) Help develop education and training materials.
- (vii) Advise on the design, construction, use and operation of small-scale, community-based methods of water supply, sanitation, and environmental management.
- (viii) Help prepare the policy framework for CDPI.
- (ix) Provide training in water supply, sanitation, and environmental management initiatives under CDPI; disseminate information about the TA.
- (x) Assess water quality and water management measures being taken in the TA area; help develop a program for monitoring water quality.
- (xi) Prepare technical reports about the TA; provide inputs into the quarterly reports.
- (xii) Help prepare a TA completion report.
- (xiii) Carry out other tasks needed to ensure the satisfactory completion of the TA.

### **C. Community Development Field Specialist (Domestic)**

3. The specialist will undertake the following:
- (i) Review the education and training materials on the water cycle and public health presently available; identify materials needing improvement, and help prepare the materials.
  - (ii) Carry out the community education component of the TA: identify communities needing education; help prepare and conduct education sessions; arrange for support from various government agencies and NGOs; train trainers; and arrange for follow-up after each training program.
  - (iii) Carry out the school education component of the TA: help prepare a program for curriculum development; conduct trial education sessions; train trainers; arrange for support from various agencies; and arrange for necessary follow-up.
  - (iv) Assist in planning, promotion, and implementation of other programs, including solid waste management, well and rainwater improvement, and latrine improvement programs.
  - (v) Help develop manuals and other training materials.
  - (vi) Help assess and develop sustainable institutional arrangements.
  - (vii) Train staff of the Government agencies in community characteristics, approaches to community development, and community relations.
  - (viii) Help prepare the policy framework for CDPI.
  - (ix) Provide inputs into the quarterly and technical reports.
  - (x) Help prepare a TA completion report.
  - (xi) Carry out other tasks needed to ensure the satisfactory completion of the TA.

### **D. Water and Sanitation Field Specialist (Domestic)**

4. The specialist will have the following responsibilities:
- (i) Review the manuals, and education and training materials presently available for specific initiatives, including wells, rainwater storage, water handling, and solid waste management, identify materials needing improvement, and help prepare the materials.
  - (ii) Help carry out the pilot component of the TA: identify communities needing help; help prepare and conduct field activities; arrange for support from various

- government agencies and NGOs; and arrange for follow-up after each training program.
- (iii) Advise Kiribati Housing Corporation staff and borrowers for Appendix 2, page 3 fund on construction techniques and operation of completed
  - (iv) Help develop manuals and other training materials.
  - (v) Help assess and develop sustainable institutional arrangements.
  - (vi) Train staff of the PMO, PIUs, PUB, KHC, and other agencies in community-based water supply and sanitation.
  - (vii) Help with trouble-shooting and evaluation activities as necessary.
  - (viii) Provide inputs into the quarterly and technical reports.
  - (ix) Help prepare a TA completion report.
  - (x) Carry out other tasks required to ensure satisfactory completion of the TA.

#### **E. Solid Waste Field Specialist (Domestic)**

5. The specialist will undertake the following:
- (i) Review current practices of waste disposal as practiced by communities and local governments; identify the need and potential for improved waste management practices, including burial or covering wastes, mulching, composting, and separating wastes.
  - (ii) Review the pilot projects, manuals, education and training materials, and new proposals presently available; identify materials needing improvement; and help prepare the materials.
  - (iii) Help design and carry out a pilot project to improve waste management: identify communities needing help; prepare and conduct field activities; arrange for support from various government agencies and NGOs; and arrange for follow-up after each training program.
  - (iv) Advise local government staff and communities on waste management techniques and operation of completed facilities.
  - (v) Help develop manuals and other training materials.
  - (vi) Help assess and develop sustainable institutional arrangements.
  - (vii) Train staff of government agencies in community-based waste management.
  - (viii) Help with trouble-shooting and evaluation activities as necessary.
  - (ix) Provide inputs into the regular and technical reports.
  - (x) Help prepare a TA completion report.
  - (xi) Carry out other tasks required to ensure the satisfactory completion of the TA.

#### **F. Impact Evaluation Specialist (Domestic)**

6. The specialist will undertake the following:
- (i) Collect and analyze available baseline information on water use, sanitation, health, gardening, and waste collection.
  - (ii) Design a simple method of reporting TA field activities, perhaps using a field journal.
  - (iii) Conduct field interviews of beneficiaries, community leaders, and civil servants to determine the impacts of the TA.
  - (iv) Prepare a written report presenting the impacts of the TA, and the sustainability of the programs developed under the TA.

**COST ESTIMATES AND FINANCING PLAN**  
(\$'000)

Item	Foreign Exchange	Local Currency	Total Cost
<b>A. Asian Development Bank Financing<sup>a</sup></b>			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	160.0	0.0	160.0
ii. Domestic Consultants	0.0	100.0	100.0
b. International and Domestic Travel			
i. International Travel	40.0	0.0	40.0
ii. Domestic Travel		9.0	9.0
c. Reports and Communications	6.0	0.0	6.0
2. Equipment and Materials <sup>b</sup>	3.0	16.0	19.0
3. Training and Workshops <sup>c</sup>	10.0	15.0	25.0
4. Laboratory Tests and Impact Surveys	0.0	4.0	4.0
5. Administration and Support Costs	0.0	2.0	2.0
6. Representative for Negotiations	6.0	0.0	6.0
7. Contingencies	30.7	19.0	49.7
<b>Subtotal (A)</b>	<b>255.7</b>	<b>165.0</b>	<b>420.7</b>
<b>B. Government Financing</b>			
1. Office Accommodation	0.0	18.0	18.0
2. Remuneration and Per Diem of Staff	0.0	18.0	18.0
3. Equipment and Materials	0.0	6.0	6.0
4. Transport of Staff	0.0	12.0	12.0
5. Administrative and Support Costs	0.0	11.0	11.0
6. Contingencies	0.0	9.3	9.3
<b>Subtotal (B)</b>	<b>0.0</b>	<b>74.3</b>	<b>74.3</b>
<b>Total</b>	<b>255.7</b>	<b>239.3</b>	<b>495.0</b>

<sup>a</sup> Financed on a grant basis from the ADB funded TA program.

<sup>b</sup> Includes a photocopy machine, and materials for the conduct of small pilot projects as necessary for the conduct of the consultants' work.

<sup>c</sup> Includes the cost of training materials, media, venues, and refreshments.

Source: Staff estimates.