



Technical Assistance Report

Project Number: 39354
June 2006

Proposed Technical Assistance Papua New Guinea: Demographic and Health Survey in Papua New Guinea

(Financed by the Japan Special Fund, Government of Australia,
and Government of New Zealand)

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 30 April 2006)

Currency Unit	–	kina (K)
K1.00	=	\$0.33
\$1.00	=	K3.04

ABBREVIATIONS

ADB	–	Asian Development Bank
AusAID	–	Australian Agency for International Development
DHS	–	Demographic and Health Survey
DNPM	–	Department of National Planning and Monitoring
MDG	–	Millennium Development Goal
MTDS	–	Medium-Term Development Strategy 2005–2010
NPP	–	National Population Policy 2000–2010
NSO	–	National Statistical Office
NZAID	–	New Zealand Agency for International Development
PNG	–	Papua New Guinea
TA	–	technical assistance
UNFPA	–	United Nations Population Fund
UNICEF	–	United Nations Children's Fund

TECHNICAL ASSISTANCE CLASSIFICATION

Targeting Classification	–	Targeted intervention
Sector	–	Health, nutrition, and social protection
Subsector	–	Health systems
Themes	–	Inclusive social development
Subthemes	–	Human development

NOTE

In this report, "\$" refers to US dollars.

Vice President	C. Lawrence Greenwood, Operations 2
Director General	P. Erquiaga, Director General, Pacific Department (PARD)
Director	I. Bhushan, Director, Pacific Operations Division, PARD
Team leader	K. Taniguchi, Country Programs Specialist/Economist, PARD
Team members	J. Iazard, Health Specialist, PARD
	B. Reid, Financial Management Specialist, PARD
	M. Suga, Social Sectors Specialist, PARD

I. INTRODUCTION

1. The technical assistance (TA) will assist the Government of Papua New Guinea (PNG) in undertaking a Demographic and Health Survey (DHS). The Government convened the 2005 National Health Conference in Kimbe in June 2005. At the conference, the Department of National Planning and Monitoring (DNPM) stressed the importance of optimally integrating the Medium-Term Development Strategy (MTDS) 2005–2010, Millennium Development Goals (MDGs), and National Population Policy (NPP) 2000–2010 through its presentation of the MDG/MTDS Monitoring Plan 2005–2015. Development partners pointed out that monitoring these strategies and goals could not rely solely on data sources like the civil registration system and service statistics of Government departments because of their incompleteness and other deficiencies. Monitoring in PNG therefore has to depend largely on survey data.

2. At the conference, the proposal for undertaking a DHS in 2006 was discussed among funding agencies, notably the Asian Development Bank (ADB), Australian Agency for International Development (AusAID), and the New Zealand Agency for International Development (NZAID). Donor partners announced their support for conducting the DHS in 2006, but a detailed implementation scheme was not determined at the conference.

3. The National Statistical Office (NSO) hosted a DHS initiating meeting on 26 August 2005. At that meeting, NSO and DNPM reaffirmed their commitment to the 2006 DHS. During the Fact-Finding Mission on 7–11 November 2005, an understanding was reached with the Government on TA objectives and implementation arrangements, and with AusAID and NZAID on the cofinancing plan. The TA design and monitoring framework is attached as Appendix 1.

II. ISSUES

4. Nearly 80% of PNG's 5.5 million people live in rural areas. Rugged terrain, limited physical infrastructure, remoteness, and fragmented communities make effective provision of basic social services a major challenge for the Government. Concerns regarding population growth and demographic changes; issues related to gender, urbanization, and demographic transfer; and basic social services delivery led the Government to adopt the MTDS and MDG report¹ in 2004.

5. The principal goal of the MTDS is to improve the quality of life and accelerate the pace of development in the country. DNPM has overall responsibility to coordinate and monitor the implementation of the MTDS. The Government acknowledges that measuring the successful implementation of the MTDS and the achievement of the MDGs will require a clearly set benchmark. In view of the major challenges to providing basic social services, a socio-demographic and health survey is a high priority for DNPM and development partners in order to monitor social and poverty conditions.

6. Poor transportation and communications infrastructure, as well as cultural barriers, make it difficult to increase awareness about diseases and their prevention. Ample anecdotal evidence shows how poor medical and public health conditions are in PNG.² However, the magnitude of the problems and differences across provinces are not known. Because economic growth interrelates with the provision of basic social services, population growth, and

¹ PNG. 2004. *Millennium Development Goals in Papua New Guinea*. Port Moresby.

² For instance, though a sizable proportion of rural health facilities are closed, they are frequently reported open.

demographic changes, setting a clear benchmark is indispensable for developing evidence-based development strategies.

7. Demographic and health issues cannot be separated from gender issues. The health of mothers and children is closely related to the status of women. The social aspects of sexually transmitted infections are growing concerns in PNG due to the impact of HIV/AIDS. Gender inequality is one of the cultural and socioeconomic causes of poor public health.

8. Knowledge of demographic change and health status is essential for effective development planning for the country. The DHS was undertaken in 1996, facilitating the formulation of a number of demographic and health-related policies, including the (i) NPP 2000–2010, (ii) National Health Plan 2001–2010, (iii) National Human Development Report 1999–2000, (iv) MTDS, and (v) MDG report. Repeating the DHS is recommended every 5 years.

9. The output of TA is of crucial importance for monitoring the MTDS and MDGs and will be fully utilized to monitor various population and health indicators employed to develop the strategies and policies mentioned above. Monitoring knowledge and attitudes toward the HIV/AIDS epidemic will be part of the TA result, providing indispensable information for tackling the epidemic.

10. Support to undertake the DHS is fully consistent with (i) the Government's strategies and policies, (ii) ADB's Pacific strategy for 2005–2009, and (iii) ADB's country strategy and program update 2005–2006 for PNG.³ Support provided through TA will complement ADB's ongoing capacity-building TA for the NSO.⁴

III. THE PROPOSED TECHNICAL ASSISTANCE

A. Impact and Outcome

11. TA will enhance monitoring relevant to MTDS and MDG targets and formulating social development strategies in PNG. It will identify the most efficient and effective modalities to help achieve these specific goals. It will generate and disseminate high-quality demographic and health survey data to use in formulating an evidence-based strategy.

12. TA results will include (i) estimates of intercensal population size and growth and basic demographic characteristics; (ii) information on the population's reproductive health, fertility preferences, and family-planning practices; (iii) information about access to and use of health services and facilities; (iv) information on the health status of the population, particularly of mothers and children; (v) information on awareness and attitudes toward HIV/AIDS; (vi) information on the prevalence of contraceptive use; and (vii) assistance in demographic and health-related research and evidence-based policymaking.

13. TA will facilitate consultation with stakeholders to establish an information-sharing and coordination mechanism for country data collection, analysis, and monitoring activities. It will encourage contributions from other development partners to build on, expand, and extend TA activities.

³ ADB. 2004. *Responding to the Priorities of the Poor: A Pacific Strategy for the Asian Development Bank 2005–2009*. Manila; ADB. 2005. *Country Strategy and Program Update 2005–2006: Papua New Guinea*. Manila.

⁴ ADB. 2002. *Technical Assistance to Papua New Guinea for Improving Economic and Social Statistics*. Manila (TA 3946-PNG).

B. Methodology and Key Activities

14. As the 1996 DHS provides a significant database for future initiatives in the population, health, basic social services field, TA will build on its work. Following upon the 1996 DHS, TA will undertake national surveys of households, women, and men. The key activities include (i) developing the sampling frames from the household listing from the 2000 census, (ii) preparing survey instruments, (iii) undertaking the pre-test, (iv) training enumerators and fieldworkers, (v) providing training and supervision for data entry and processing, (vi) conducting publicity and increasing awareness through various media, (vii) assisting NSO staff in reporting requirements for MDGs and other demographic- and health-related indicators, and (viii) helping planners and staff at the National Department of Health to formulate an evidence-based social policy.

15. Lessons learned from the 1996 DHS, 2000 census, and past censuses will be fully explored before undertaking the 2006 DHS. AusAID, NZAID, United Nations Population Fund (UNFPA), and United Nations Children's Fund (UNICEF) have been assisting survey activities in PNG, and TA will facilitate consultation with appropriate staff of these partner organizations for any comments and advice early in TA implementation. Also through AusAID and NZAID, assistance will be sought, if necessary, from the Australian Bureau of Statistics and Statistics New Zealand.

C. Cost and Financing

16. TA, to be administered by ADB, is estimated to cost \$3.232 million equivalent. The Government has requested financing on a grant basis of \$250,000 from the Japan Special Fund, funded by the Government of Japan, \$1.320 million from the Government of Australia, and \$662,000 from the Government of New Zealand, for a total of \$2.232 million. The Government will finance the remaining \$1 million equivalent through in-kind contributions, including office accommodation and facilities, counterpart staff and surveys needed for TA. The cost estimates and financing plan are attached in Appendix 2.

D. Implementation Arrangements

17. DNPM will be the Executing Agency, and NSO the Implementing Agency. The total duration of TA will be 18 months beginning in July 2006 and ending in January 2008. TA will require 40 person-months of international and domestic consulting services in total, including the (i) demographic and health survey specialists and team leader for 12 person-months (domestic, intermittent), (ii) sampling and survey specialist for 1 person-month (international, intermittent), (iii) data processing and computer specialist for 4 person-months (international, intermittent), (iv) demographer for 5 person-months (international, intermittent), (v) funds manager and project coordinator for 10 person-months (international, intermittent), and (iv) field supervisors for 8 person-months (domestic). An international consulting firm will be engaged using the quality-based selection method in accordance with ADB's *Guidelines on the Use of Consultants*. The simplified technical proposal procedure will apply. The terms of reference for the consultants are in Appendix 3.

18. Any procurement under TA will be conducted in accordance with ADB's *Procurement Guidelines* and the relevant laws in Papua New Guinea. However, in the event of any inconsistency between ADB's requirements and the national laws, ADB's requirements will prevail. Civil works are limited to repair and upgrading of existing facilities and will be carried out through direct purchase. All equipment will be turned over to the counterpart agencies upon completion of TA.

19. The TA implementation structure will follow the 1996 DHS. The 2006 DHS survey management chart is attached in Appendix 4. The steering committee and user's advisory committee will be regularly convened, and the team leader and other team members, if they are available, will report to them. The Government statistician will nominate the DHS project director, and the project director will chair the steering committee as well as the user's advisory committee. The DHS steering committee comprises members from DNPM and other interested departments. Partner agencies, including but not limited to AusAID, NZAID, UNFPA, UNICEF, and World Bank, will participate in DHS activities through the user's advisory committee. The TA will provide a team of DHS experts, and these consultants will directly serve NSO under the supervision of the project director.

20. ADB, AusAID, and NZAID will work closely with the Government in all phases of the TA. If other funding agencies want to join at a later stage, suitable arrangements will be worked out. Outputs resulting from analyses of survey data will be made available to ADB and financing agencies, and will be placed in the public domain for further investigation and policy formulation.

E. Financial Management and Anticorruption

21. DNPM and NSO will maintain records and accounts in accordance with generally accepted accounting principles, consistently applied, and adequate to identify (i) goods and services financed from the TA funds and (ii) expenditures incurred for the Project. The account and related financial statements will be audited annually in accordance with approved auditing standards by independent auditors engaged by ADB. NSO will submit to ADB, AusAID, and NZAID through DNPM consolidated annual audited reports within 3 months after the end of each calendar year. The auditor's assessment of the examination relating to the imprest account and statement of expenditures should be separately set out in the auditor's report. In addition, ADB may conduct spot audits and random checks on the flow of funds and their use at any time during project implementation, and the Government has pledged its cooperation in these efforts.

22. For sound financial management, the Project includes an international funds manager and project coordinator and domestic field supervisors. The funds manager and project coordinator will provide six monthly financial statements.

23. The Project will be implemented in line with ADB's anticorruption policy.

IV. THE PRESIDENT'S RECOMMENDATION AND DECISION

24. The President recommends that the Board approve ADB administering a portion of technical assistance not exceeding the equivalent of \$1,320,000 to the Government of Papua New Guinea for the Demographic and Health Survey in Papua New Guinea, to be financed on a grant basis by the Government of Australia. If the Board approves ADB administering the technical assistance, the President, acting under the authority delegated by the Board, will approve (i) ADB administering a portion of the technical assistance not exceeding the equivalent of \$662,000 to be financed on a grant basis by the Government of New Zealand; and (ii) ADB providing the balance not exceeding the equivalent of \$250,000 on a grant basis, for the Demographic and Health Survey in Papua New Guinea, and hereby reports this action to the Board.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Impact Enhance monitoring of relevant Medium-Term Development Strategy (MTDS) and Millennium Development Goal (MDG) targets and formulation of social development strategies in Papua New Guinea (PNG).	Progress toward health- and socioeconomic-related MTDS and targets Formulation of evidence-based basic social services policies	Asian Development Bank (ADB) analysis of PNG economies Improvement in MTDS and MDG indicators	Assumptions <ul style="list-style-type: none"> Government's continued commitment to achieving goals to be set in MTDS and MDGs No major external economic shocks
Outcome Generate and disseminated high-quality demographic and health survey data.	Appropriate demographic and health data collected and analyzed Improvements in coverage, reliability, and timeliness of demographic and health statistics Survey data used by policymaking	ADB review missions and reports from steering committee and user's advisory committee Records of national statistics offices and other key data producers Feedback from social and health policy and planning offices Consultation with, and feedback from, other agencies Review of official publications and reports	Assumption <ul style="list-style-type: none"> Commitment of the Government and development partners to use the survey data to inform policy and program developments Risks <ul style="list-style-type: none"> Availability of adequate human and financial resources Support from the Government Adherence to milestones
Outputs <ol style="list-style-type: none"> Estimates of population growth Information on reproductive health, fertility preferences, and family planning Information about access to and use of health services and facilities Information on the health status of the population 		Review of the survey data ADB review missions and consultants' reports Regular communication with steering committee and user's advisory group Progress reports from country authorities	Assumptions <ul style="list-style-type: none"> Commitment of Government staff Development agencies willing to support capacity building through engagement of user's advisory committee Good relationships among consultants and counterpart staff Risks <ul style="list-style-type: none"> Sufficient budget and human resources Adherence to schedule

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
5. Information on awareness and attitudes toward HIV/AIDS			
Activities with Milestones 1. Planning and Preparatory Work (July 2006) 1.1 Set up the management team 1.2 Review the survey instruments 1.3 Review the sampling frame 1.4 Define contents of basic reports 2. Sampling (July 2006) 2.1 Sample design 2.2 Select census units 2.3 Plan field assignments 2.4 Update household listing and maps 2.5 Select households in each census unit 3. Staffing and Training (July 2006) 3.1 Select and train pilot test staff 3.2 Train for the household listing operation 3.3 Prepare supervision procedures and manuals 3.4 Prepare interviewers' manual 3.5 Select household survey field staff 3.6 Select women survey field staff 3.7 Select men survey field staff 3.8 Train household survey field staff 3.9 Train women/men survey field staff 4. Field Work (August 2006–October 2006) 4.1 Pre-test survey instruments 4.2 Develop survey instruments 4.3 Household survey in the field 4.4 Women survey in the field 4.5 Men survey in the field 5. Data Management (July–December 2007) 5.1 Prepare data entry program 5.2 Prepare data entry manual 5.3 Install data entry computers for training 5.4 Define data management procedures 5.5 Train data entry operators 5.6 Input editing 5.7 Data entry for household survey 5.8 Data entry for women survey 5.9 Data entry for men survey			Inputs ADB 20 person-months of international consulting services \$400,000 20 person-months of domestic consulting services \$60,000 International and local travel \$200,000 Reports and communications \$80,000 Equipment \$347,000 Surveys \$800,000 Auditing \$24,000 Miscellaneous administration and support costs \$120,000 Contingencies \$201,000 Total \$2,232,000 Government Office accommodation and transport \$240,000 Counterpart staff \$150,000 Surveys \$500,000 Others \$110,000 Total \$1,000,000

6. Data Analysis and Dissemination (January–December 2007) 6.1 Edit outputs 6.2 Analyze outputs 6.3 Prepare preliminary report 6.4 Distribute preliminary report 6.5 Seminar 6.6 Revise contents of preliminary report 6.7 Create final datasets 6.8 Prepare statistical summaries 6.9 Document datasets 6.10 Disseminate datasets	
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COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Total Cost
A. Asian Development Bank (ADB), Government of Australia, and Government of New Zealand Financing^a	
1. Consultants	
a. Remuneration and Per Diem	
i. International Consultants	400
ii. Domestic Consultants	60
b. International and Local Travel	200
c. Reports and Communications	80
2. Equipment	
a. Vehicles	80
b. Plotters	47
c. Computers	10
d. Laser Printers	6
e. Photocopiers	7
f. Mapping Software	4
g. Global Positioning System	3
h. Satellite Communication System	180
i. Mobile Phones	10
3. Surveys	800
4. Auditing	24
5. Miscellaneous Administration and Support Costs	120
6. Contingencies	201
Subtotal (A)	2,232
B. Government of Papua New Guinea Financing	
1. Office Accommodation and Transport	240
2. Remuneration and Per Diem of Counterpart Staff	150
3. Surveys	500
4. Others	110
Subtotal (B)	1,000
Total	3,232

^a Financed by the Japan Special Fund, funded by the Government of Japan (\$250,000), Government of Australia (\$1,320,000), and Government of New Zealand (\$662,000), administered by ADB.

Source: ADB estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

A. Scope of Consulting Services

1. The technical assistance (TA) will require the services of a team of international and domestic consultants. A locally recruited demographic and health survey (DHS) specialist will, as team leader, organize and coordinate all activities of TA to ensure its successful implementation and liaise with local stakeholders. The sampling and survey specialist will be responsible for sampling survey operations' design and implementation. A data processing and computer specialist will ensure that data entry, processing, and tabulation are completed systematically. The demographer will participate in TA planning and conduct policy analyses using survey data. A project management team, comprising (i) the funds manager and project coordinator and (ii) the field supervisors, will be responsible for procuring and disbursing funds.

2. Throughout TA implementation, the team leader, with assistance from team members, will provide guidance to ensure that outputs are utilized for formulating an evidence-based basic social policy. Further, all consultants will ensure transfer of skills to staff of the National Statistical Office (NSO) in the process of supporting the preparation of specific outputs, and so ensure sustainability in conducting the survey and analyzing the findings. The team leader will be responsible for preparing and submitting a report. All consultants will closely collaborate with each other in extending assistance to staff at NSO and local stakeholders.

1. Demographic and Health Survey Specialist and Team Leader (domestic, intermittent, 12 person-months)

3. The demographic and health survey specialist and team leader will be an experienced public health expert or demographer with a strong background and experience in conducting DHS. The team leader will be based at NSO for the duration of TA. The team leader will (i) direct and supervise activities to develop baseline survey instruments, ensuring that the methodology can be implemented in PNG with the assistance of other team members, and, (ii) after the preparatory work is completed, direct and supervise all field activities and data processing and analysis.

4. Specifically, the team leader will

- (i) be responsible for the collective work of the consulting team and for the timely preparation of all formal written reports: the inception report, report after the preparatory work including survey instruments and enumerators' training manual, periodic progress reports, draft final report, and final report;
- (ii) formulate a detailed timetable and work plan for preparing, conducting, and analyzing the survey and identify logistical requirements for the survey with clear milestones, data content, and tabulation plans;
- (iii) thoroughly review documents from the 1996 DHS and 2000 census and summarize lessons learned from them;
- (iv) review the 1996 DHS and 2000 census to ensure that the questionnaires are set up so that the Government can comparatively study 1996 and 2006 DHS;
- (v) conduct, with the help of the sampling and survey specialist, field pre-tests to develop survey instruments for the DHS and an enumerators' training manual;
- (vi) prepare and submit a comprehensive report on the effectiveness of baseline survey instruments;
- (vii) develop survey instruments for the household, women, and men surveys based on findings from the pre-tests;

- (viii) direct and supervise fieldwork to conduct the DHS, ensuring that the methodology developed in the preparatory work is utilized and that the survey is conducted in a manner that allows comparisons with the 1996 DHS;
- (ix) ensure that the consultant team fulfills the terms of reference, taking responsibility for programming, coordinating, and directing the work and specialist inputs in terms of content, quality, and timing to complete the final assignment objectives on time;
- (x) analyze, with the help of other team members, the findings of the DHS and draft and propose an evidence-based basic social services policy; and
- (xi) consult with local stakeholders, nongovernment organizations, and other relevant technical international agencies (e.g., the United Nations Children's Fund [UNICEF], United Nations Population Fund [UNFPA], World Bank, etc.) to get feedback and inputs on TA design, sampling framework, survey instruments, enumerator training, and other TA activities, and to solicit their contribution to the TA.

2. Sampling and Survey Specialist (international, intermittent 1 person-months)

5. The sampling and survey specialist should have experience in a wide variety of sampling and survey work, particularly in DHS, and a strong background and experience in training trainers. The specialist is in charge of fieldwork, enumeration, and developing various manuals under the close supervision of the team leader. The consultant is also in charge of logistics and local survey team support.

6. Specifically, the consultant will

- (i) train domestic survey supervisors and enumerators to use demographic and health survey instruments;
- (ii) ensure that sampling frames and cartography are up-to-date to enable proper sampling;
- (iii) prepare appropriate documentation including manuals and training materials for DHS fieldwork including, but not limited to, an enumerators' field book, instruction manuals for questionnaires, and a fieldworkers' training manual;
- (iv) review existing data in the country related to population and health, and the sampling methodology utilized in previous surveys, and make suggestions to institutionalize changes;
- (v) help, with the domestic survey specialist, NSO recruit supervisors and enumerators;
- (vi) arrange, in collaboration with domestic supervisors, transportation, meals, lodging, and security personnel for the interviewers at each field site;
- (vii) oversee the selection of samples for the household survey to ensure strict adherence to sampling methodology;
- (viii) direct and supervise the domestic supervisors as they collect household, women, and men data, check its quality, and edit completed questionnaires;
- (ix) investigate, with the help of the NSO staff, efficient means to make anonymous unit-record data for data dissemination if possible;
- (x) develop and identify the method of calculating sampling error; and
- (xi) review and examine the prepared survey instruments, finalize the sampling design strategy in consultation with NSO staff and other stakeholders, assist NSO staff in selecting samples, and suggest appropriate adjustments to enhance the efficiency of the survey design.

3. **Data Processing and Computer Specialist** (international, intermittent 4 person-months)

7. The data processing and computer specialist should have strong background and experience in developing and applying generalized software for processing sample surveys, as well as in other areas of statistics. The processing system will include data entry, editing, tabulation, and imputation, and the generation of statistical tables. However, the processing system needs to be kept fairly simple so that results are reproducible locally for future use. It will include calculating sampling error in accordance with specifications provided by the sampling and survey specialist. In addition, the specialist will support formulating evidence-based social basic policies using the data findings. Thus, experience related to processing and analyzing DHS and other surveys is desirable.

8. The terms of reference for the specialist will include, but not be limited to, the following:

- (i) Prepare a suitable data-processing plan for DHS that includes developing application modules such as data entry, editing, imputation, and tabulation, and generating sampling error, as required.
- (ii) Prepare appropriate documentation including, but not limited to, editing and coding manuals, a commodity listing, and training materials for all application modules for the DHS.
- (iii) Liaise with the team leader to develop questionnaires and advise on its design.
- (iv) Develop the data-processing and tabulation strategy and start to program once the questionnaire is pre-tested and finalized.
- (v) Oversee the activities of the data entry clerks in editing and recording survey data to ensure the quality of data entry.
- (vi) Train concerned NSO and local staff on data-processing software and aspects of the data-processing plan for the household expenditure survey.
- (vii) Assist NSO in data processing for the DHS to ensure that all survey results are tabulated and documented properly.

4. **Demographer** (international, intermittent 5 person-months)

9. The demographer will provide policy guidance for formulating an evidence-based social policy, the end result of the entire DHS exercise. The demographer is responsible for conducting survey data analysis.

10. The demographer will

- (i) review and examine the proposed DHS preparations and, with the assistance of the team leader, review and revise the baseline survey instruments, ensuring that they provide wide coverage of economic activities and asset-holding so that economic and health analyses can be conducted;
- (ii) support modifications and adjustments to the survey instruments on the basis of quick field pre-tests, develop training manuals for local supervisors and enumerators, survey operations plans and training material, and identify potential local supervisors for the survey;
- (iii) assist, with the help of the team leader and the sampling and survey specialist, staff at NSO in selecting samples, suggest appropriate adjustments and improvements for enhancing the efficiency of the survey design, and finalize the sampling design strategy in consultation with other team members, NSO staff, and other stakeholders;
- (iv) coordinate support to strengthen and improve the quality of surveys and analyses that relate to population and health, and select and recruit short-term consultants to conduct surveys, if necessary;

- (v) facilitate the processing, analysis, and preparation of reports based on the survey results to ensure that health statistics can be properly analyzed;
- (vi) discuss with the United National Development Programme, UNFPA, and UNICEF progress toward health- and socioeconomic-related MDGs targets, providing support to the Government in monitoring MDGs and discussing their relevance to PNG and the determination of indicators and targets appropriate for PNG;
- (vii) assist, in collaboration with local planning and relevant line ministries, in institutionalizing links between national planning and data collection;
- (viii) support refinements to, and the implementation of, a development plan for policy making; and
- (ix) help the team leader prepare a detailed report describing the population and health policy.

5. Funds Manager and Project Coordinator (International, intermittent 10 person-months)

13. The funds manager and project coordinator will design, establish, and monitor project management, financial management, and procurement arrangements in consultation with the Department of National Planning and Monitoring (DNPM, the executing agency) and NSO (the implementing agency). The consultant should have recognized professional accountancy qualifications and an understanding of the PNG environment. A minimum of 10 years' experience in financial and project management, including procurement experience, is required.

14. The funds manager and project coordinator will
- (i) facilitate, in close cooperation with the team leader, overall project and financial management, including the preparation and provision of monitoring and financial reports to stakeholders;
 - (ii) oversee all project operations and reporting, including compliance with ADB policies and procedures and local policies and laws;
 - (iii) help DNPM and NSO prepare their respective work plans, timetables, and budgets for project implementation, and ensure necessary coordination among them;
 - (iv) help DNPM and NSO design, establish and monitor project operating arrangements, including project planning, management, and monitoring; procurement; and financial management (the design of financial management arrangements—including cash and bank management, cash planning and management, funds disbursement, and monitoring—will be subject to ADB review and approval);
 - (v) provide the Government and ADB with six monthly financial statements reflecting the utilization of project funds and progress reports on the implementation of work funded under the Project;
 - (vi) supervise, in close cooperation with the team leader, the work of the international and domestic consultants;
 - (vii) ensure that the Project is implemented in a timely manner, subject to any subsequent ADB instructions and guidance;
 - (viii) provide support to the DNPM on all aspects of procurement, overseeing and coordinating all procurement activities; and
 - (ix) advise on and support the procurement of equipment and supplies; civil works contracts for upgrading and maintaining facilities, office equipment, and supplies; and other goods and consultant services.

6. Field Supervisors (domestic, 8 person-months)

15. The field supervisors will help the fund manager and project coordinator supervise field activities. Ideally, they will have accounting qualifications and a minimum of 7 years' clerical and cash-handling experience.

16. The field supervisors will

- (i) support the fund manager and project coordinator by following up on and supervising enumerators' field activities;
- (ii) assist payments in the field to enumerators; and
- (iii) help the fund manager and project coordinator prepare plans, budgets, and monitoring reports, and to assist in processing disbursements and procurement.

B. Reports

17. The team leader is responsible for submitting various reports to the Government, ADB, Australian Agency for International Development (AusAID), New Zealand Agency for International Development (NZAID). The inception report will be submitted within 1 month of commencement of services. The report will describe detailed cost estimates, a detailed timetable, and the work plan for preparing and conducting the survey and analyzing the results. The report will also include the identified logistical requirements with clear milestones, data content, and tabulation plans for the survey, as well as the baseline survey instruments and the draft enumerators' training manual. The report on preparatory work will be submitted within 2 weeks of the completion of field pre-tests, describing the progress of TA implementation.

18. After submitting the report on survey instruments, the team leader will provide bi-monthly progress reports throughout TA implementation. Other team members will provide inputs for the reports when appropriate. Inputs by the sampling and survey specialist will focus on sampling and survey methodologies and the progress made in the survey, while inputs by the data-processing and computer specialist will develop the data-processing plan. The demographer will ensure that analysis of the survey data is conducted once it is collected. At the completion of a country survey, the team leader will submit a draft country report together with questionnaires to the Government and ADB.

19. The draft final report will be submitted within 17 months from the start of services. It will give a brief progress report on each item of the detailed terms of reference and any other milestones described in the TA implementation plan.

20. The final report will be submitted 2 weeks after comments on the draft final report are received from the Government, ADB, AusAID, NZAID, and participating local stakeholders. The final report will incorporate all revisions deemed appropriate. One set of final guidelines and manuals, as well as raw data, will also be sent along with each copy of this report to the Government, ADB, AusAID, and NZAID.

THE 2006 DEMOGRAPHIC AND HEALTH SURVEY MANAGEMENT CHART

