



Rehabilitation and Reconstruction Program

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Rehabilitation and Reconstruction Program for Disaster-affected Areas

Solomon Islands

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CURRENCY EQUIVALENTS

(as of 22 November 2007)

| | | |
|---------------|---|-------------------------------|
| Currency Unit | – | Solomon Islands dollar (SI\$) |
| SI\$1.00 | = | \$0.1400 |
| \$1.00 | = | SI\$7.141177 |

ABBREVIATIONS

| | | |
|--------|---|--|
| ADB | – | Asian Development Bank |
| AusAID | – | Australian Agency for International Development |
| EAP | – | Emergency Assistance Project |
| EC | – | European Commission |
| FAD | – | Fish Aggregating Device |
| FEDU | – | Financial and Economic Development Unit |
| HTF | – | Hazards Task Force |
| JICA | – | Japan International Cooperation Agency |
| MAL | – | Ministry of Agriculture and Livestock |
| MERHD | – | Ministry of Education and Human Resource Development |
| MFMR | – | Ministry Of Fisheries & Marine Resources |
| MHMS | – | Ministry of Health and Medical Services |
| MME | – | Ministry of Mines and Energy |
| MoF | – | Ministry of Finance |
| NCU | – | National Coordination Unit |
| NGO | – | Non Government Organization |
| NZAID | – | New Zealand Agency for International Development |
| RAP | – | Recovery Action Plan |
| RRP | – | Rehabilitation and Reconstruction Program |
| SIG | – | Solomon Islands Government |
| SOPAC | – | Pacific Applied Geoscience Commission |
| UNICEF | – | United Nations Children's Fund |
| WWF | – | World Wildlife Fund |

NOTE

In this report, "\$" refers to Solomon Islands dollars, unless otherwise stated.

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I. INTRODUCTION

1. On 2 April 2007 a devastating magnitude 8.1 earthquake struck the Western and Choiseul Provinces of the Solomon Islands followed shortly after by a tsunami which hit the exposed western coastal villages of the two provinces. Around 50 villages suffered major damage from the tsunami and/or the earthquake. In addition, over 500 other villages suffered either earthquake or tsunami damage at a family level and major disruption to their livelihoods. Among the main islands hit were Gizo, Simbo, Ranongga, Vella La Vella, Shortlands, (Western Province) and Choiseul Province.

2. Damage to schools, health facilities and infrastructure was widespread throughout the affected areas. Re-construction and rehabilitation costs are estimated at \$591.7 million. This figure represents around 90% of the 2006 recurrent government budget and will impact fiscal budgets for the Solomon Islands for at least the next 5 years.¹

3. The Asian Development Bank (ADB) entered in a memorandum of understanding with the Solomon Islands Government (SIG) in May 2007 to assist with disaster recovery by: (i) providing technical support to the coordination and drafting of the damage assessment and rehabilitation and reconstruction plan; (ii) prioritizing the Solomon Island Rehabilitation and Reconstruction Investment Project activities where appropriate within the National Transport Plan; and (iii) processing a dedicated emergency assistance project (EAP). This Rehabilitation and Reconstruction Program (RRP) contains sector plans, and is the outcome of continuous engagement and consultations with SIG, donor partners, non government organizations (NGOs), affected communities, and various task forces.

4. The RRP is structured to provide a brief overview of the current status post disaster, examine the situation and provide a plan with costing at the sector level for shelter, infrastructure, education and health. It also includes proposals to address the issue of livelihood disruption for those communities dependent on agriculture and fisheries and address future risk reduction with proposals to improve awareness and preparedness. The RRP concludes with recommendations for action.

5. The proposed time frame for the RRP has been the subject of much discussion and consultation with various stakeholders. There is some pressure to focus on a 2 or 3 year implementation period. Based on ADB's project implementation experience and extensive interaction with sector ministries, this seems optimistic. At a minimum, a 5-year time horizon is likely to be required given financial and human resource constraints and an 8-year timeframe may be more realistic. However, the RRP should be viewed as a guiding document that supports restoring the affected areas to at least the level of just prior to the disaster, as quickly as possible. As the situation in the affected communities evolves, implementation protocols will need to be further refined. For example, the accuracy of basic data on affected people (and families) being collected is still the subject of debate. That will need to be updated and some ministries are currently undertaking this task. The rehabilitation and reconstruction cost estimates should likewise be updated as more information becomes available.

¹ In comparison, major disasters in developed countries typically result in damage of less than 1% of the recurrent budget.

II. PROGRESS TO DATE

6. While this disaster is not comparable in scale to recent ones in places such as the Indonesia, it does have several complex elements which make it a challenge to manage. Among the challenges are the remoteness and thinly populated widely dispersed villages in the affected areas, the absence of roads and easy communications, weak provincial as well as national systems, communal land owned by diverse groups and affected groups of different ethnic descent.

7. A Recovery Action Plan (RAP) was developed and approved by Cabinet in June 2007 to catalyze early recovery activity following the immediate disaster relief efforts. The objective was to establish a coordination framework for allocating responsibilities and monitoring activities across sector ministries for the substantial task of early recovery. It set out national priority areas for immediate attention including proposals for: (i) establishment of community processes to obtain input and buy-in to facilitate recovery and rehabilitation and reconstruction sector programs; (ii) establishment of the national and provincial coordination units to provide the means for engagement with communities and coordination of sector programs; (iii) development of a Shelter Housing Strategy (including advice on safe land use and building techniques) to support the process for communities to rebuild their homes and return to normality; and (iv) address the asbestos cleanup at Gizo to remove a critical hazard which was impeding recovery activities. It also included the first estimates of the size of the disaster and recovery costs.

8. It can be argued that to date, there has been little activity flowing from the RAP, aside from the shelter work which will be discussed separately below. The Task Forces that were created never quite gathered the momentum anticipated, and the work never progressed through the mechanisms developed. That said, NGOs have been very active since the first days of the disaster and have continued to provide support at the community level. Inertia at the government level may in part be due to an underestimation of SIG resources required for disaster recovery given: (i) the negligible overall economic impact on the national economy; and (ii) experience with previous natural disasters such as earthquakes and storm surges that were either kept largely unattended by SIG or dealt with by donors directly and in an uncoordinated fashion. The reality is however that the fiscal or direct budget impact could be considerable. There is an expectation on the part of sector ministries that any tsunami rehabilitation and reconstruction activity will be funded by new budget and donor funding, and an unwillingness to commit to any activity in the absence of such funding. This resource stalemate has contributed to slow or no action.

9. While some relief activity continues, after 8 months almost all recovery activity on the ground has been initiated by NGO's or community based groups with little effective engagement from government or sector ministries. Indeed, it has been made clear to the sector ministries that sector plans under the RRP will not be included in the SIG 2008 budget.²

10. There is a substantial risk that if this neglect continues, the RRP sector plans will default into specific project-level activities managed within existing funding and donor support arrangements. While this is obviously preferable to no progress at all, it would potentially leave needed tasks undone which would have been picked up by a more holistic or whole-of-government approach. Particular risks include:

² The exceptions are infrastructure and shelter.

- Weak governance arrangements for dealing with recovery and rehabilitation under the National Disaster Plan leading to ad hoc activity and a lack of involvement (and therefore accountability) of the Government.
- Insufficient capacity to implement a well-coordinated, whole-of-government rehabilitation plan.
- Failure to engage with donors in a whole program of activities at the SIG level, leading to fragmented program funding decisions on the part of donors.
- Inattention to continuing vulnerabilities and applying risk reduction measures in rehabilitation.
- A missed opportunity to develop national coping mechanisms leading to the risk that the next major disaster will result in cumulative degradation of community living conditions and capacity.
- No counterpart funding from SIG budget.

III. REHABILITATION AND RECONSTRUCTION FINANCING

A Finance Requirements and Gaps

11. Funding constraints and scarce human resource capacity will be the primary factors determining the scope and pace of the rehabilitation and reconstruction process. Others include the availability of the material, labor and other inputs required for repair and rehabilitation and reconstruction. Assistance to affected residents in repairing and rebuilding their homes and in re-establishing their livelihoods will depend upon the amount of resources available as well as the incentives provided. However, the goal is to assist as many as possible with the minimum assistance package needed to obtain a satisfactory level of core shelter units and some resources (simple tools and equipment, etc.) to enable them to begin the process of rebuilding their lives.

12. After deliberations and consultations with donors and other stakeholders, the following activities have been identified in Table 1 for the rehabilitation and reconstruction program. This program is expected to take 3-5 years and involve the participation of several different groups. Available funding sources for identified components are also presented along with information on those which do not yet have any committed funding source. For the identified works to be done within the envisaged timeframe, the existing financing gap has to be filled. If all of the proposed works and activities cannot be financed at this time, some will have to be deferred or even cancelled. SIG, in consultation with all stakeholders, will decide what adjustments to make if the funding is less than required for full restoration.

13. Currently, there is a SIG counterpart financing commitment for infrastructure, shelter, and minor health services programs.³ Other areas such as health facilities, education and livelihood have not yet been able to secure SIG counterpart funds to match donor commitments for the 2008 budget. For example, the Ministry of Health is now diverting existing operating budgets to pay for rental of staff housing destroyed in the disaster.

14. The total disaster rehabilitation and reconstruction costs, together with government and donor funding commitments and the corresponding gaps are in Table 1 and 2. The estimated total resources required for the RRP are \$591.7 million, donor funding commitments are estimated at \$206.8 million, and SIG commitments total \$21.1 million, leaving a gap of approximately \$363.8 million with the largest gaps in infrastructure, education, and health areas.

³ In the health sector this refers to potential reallocation from the current budget rather than new funds.

Table 2 summarizes donor commitments by sector with Japan International Cooperation Agency (JICA), the European Commission (EC), and ADB accounting for the bulk of the resources.

Table 1: Tsunami Reconstruction Costs, Commitments, and Gaps

| Sector | Disaster Rehabilitation & Replacement Cost | | Financing | | | |
|--|--|-------------------|-------------------|--------------------|--------------------|--------------------|
| | Total | | SIG | Donors | Total | GAP |
| | SI\$ | US\$ | | | | |
| Shelter | 34,100,000 | 4,775,123 | 15,000,000 | 8,000,000 | 23,000,000 | 11,100,000 |
| Transport Infrastructure | 289,604,507 | 40,554,170 | 5,712,942 | 63,913,534 | 69,626,476 | 219,978,031 |
| Education | 104,229,388 | 14,595,547 | 0 | 46,815,118 | 46,815,118 | 57,414,270 |
| Health Infrastructure & Medical Services | 144,141,176 | 20,184,512 | 364,000 | 82,745,187 | 83,109,187 | 61,031,989 |
| Agriculture | 6,215,000 | 870,305 | 0 | 0 | 0 | 6,215,000 |
| Fisheries & Marine Resources | 8,569,460 | 1,200,007 | 0 | 5,363,024 | 5,363,024 | 3,206,436 |
| Future Risk Reduction | 4,835,000 | 677,059 | 0 | 0 | 0 | 4,835,000 |
| Total | 591,694,530 | 82,856,724 | 21,076,942 | 206,836,863 | 227,913,804 | 363,780,726 |

Source: SIG ministries, staff estimates as of September 2007.

Table 2: Donor Commitments by Sector and Donor

| Sector | ADB | AusAID | EU | JICA | NZAID | Others | Total |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|--------------------|
| Shelter | 0 | 0 | 0 | 0 | 8,000,000 | 0 | 8,000,000 |
| Transport Infrastructure | 35,348,826 | 0 | 28,564,708 | 0 | 0 | 0 | 63,913,534 |
| Education | 0 | 0 | 20,000,000 | 0 | 26,815,118 | 0 | 46,815,118 |
| Health Infrastructure & Medical Services | 0 | 18,130,000 | 472,000 | 60,000,000 | 0 | 4,143,187 | 82,745,187 |
| Agriculture | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fisheries & Marine Resources | 0 | 0 | 0 | 0 | 5,363,024 | 0 | 5,363,024 |
| Future Risk Reduction | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 35,348,826 | 18,130,000 | 49,036,708 | 60,000,000 | 40,178,142 | 4,143,187 | 206,836,863 |

Source: SIG ministries, staff estimates as of September 2007.

* NZAID has committed to support shelter through NGOs.

B Program Processes Going Forward

15. In contrast to disaster relief activities, rehabilitation and reconstruction after major disasters is a long term process. It cannot be achieved without leadership and commitment from government. Lessons from other disasters around the world demonstrate the importance of government involvement in facilitating and coordinating rehabilitation and reconstruction efforts.

16. Given budget constraints, sector ministries have stated that disaster related expenditure on rehabilitation and reconstruction or livelihood activities need to be treated with special program funding over and above their normal SIG budget allocation. For the draft 2008 recurrent and development budgets, no sector ministries have reallocated existing program funding for their respective programs and only two ministries, the Ministry of Infrastructure and Development (MID) and the Ministry of Education and Human Resource Development (MEHRD), have sought additional funding in their development budget.

17. Indications from the Ministry of Finance (MOF) are that apart from shelter and infrastructure, no new disaster funding will be made available to sector ministries. Ministries will be expected to meet additional costs by re-allocating within existing budgets. However in some areas of activity, operating budgets are already severely constrained by other demands from the disaster. Therefore, priorities will need to be identified and agreed upon.

18. To facilitate this process, it is suggested that sector ministries should be given clear directions to review their draft 2008 budgets and identify existing programs that could contribute to their sector plans. Guidance should indicate that a minimum contribution (i.e., 5-15%) be allocated to this effort. In addition, it is in the interest of SIG to identify additional domestic resources particularly in the areas of health, education, and livelihood support. Finally, for the RRP to gain traction and accomplish significant rehabilitation and reconstruction in the disaster areas; there needs to be an explicit financial commitment in the 2008 budget and beyond, and a dialogue with donors and other stakeholders to close financing gaps. A proposed system for funding management, project implementation, and monitoring and overview is in Appendix 1.

IV. SECTOR PLANS

19. This section provides a summary of damages, impact, and sector plans and priorities for shelter, infrastructure, health, education, and livelihood programs (agriculture and fisheries). The final part of this section also proposes a costed plan for disaster risk reduction.

A. Shelter

20. With approximately 4,000 families still displaced by the tsunami, rehabilitation and reconstruction of shelter is among the highest priority items. In addition to providing a basic human need, it is also expected that the process of organizing all levels of the community for this task would create a platform for various community rebuilding activities. It could also provide the basis for livelihood programs to assist communities in returning to self sufficiency.

21. Houses were damaged or destroyed in over 500 widely dispersed villages and communities. Poorly-built and maintained units and those closest to the sea were the most affected. Bracing, cyclone, and foundation anchoring straps were not widely used in many of the

houses in the affected areas. In addition, some villages may need to consider re-location from vulnerable situations such as landslide risk areas. All coastal villages should consider safe building heights and all shelters should be built with building details suitable for earthquake, cyclone and tsunami wave or tidal surge situations.

Table 3: Shelter Rehabilitation and Reconstruction Costs

| Item | Destroyed Shelters | Collapsed Shelters | Damaged Shelters | Total SI\$ | Total US\$ |
|--|--------------------|--------------------|-------------------|-------------------|------------------|
| Number | 833 | 789 | 3,897 | 5,519 | |
| Materials | 11,250,000 | 5,520,000 | 7,800,000 | 24,570,000 | 3,440,609 |
| Technical Support Administration & Service | 600,000 | 600,000 | 400,000 | 1,600,000 | 224,053 |
| | 3,550,000 | 1,880,000 | 2,500,000 | 7,930,000 | 1,110,461 |
| Total | 15,400,000 | 8,000,000 | 10,700,000 | 34,100,000 | 4,775,123 |

Source: SIG ministries, ADB staff estimates as of September 2007.

22. Indeed, the major impact was on small village communities with local and semi-permanent houses. Using a classification system of 3 categories of damage; (i) dwellings that were significantly damaged but are capable of being repaired, (ii) those that collapsed (usually during the earthquake) and need to be rebuilt using some or all of the existing materials, and (iii) those that were destroyed (usually by the tsunami or landslide) and require completely new materials. The recent Red Cross assessment indicates that around 1622 houses or sleeping shelters have been destroyed or collapsed and around 3897 significantly damaged in over 500 rural villages in Western and Choiseul Provinces. Some of the people in this last group will need to consider community re-location. In fact, many of the families with destroyed or collapsed shelters are living in relief camps or are camped on inland garden plots.

23. SIG Cabinet adopted a Shelter Strategy in July and committed \$15 million to a \$34 million program. This resulted in a shelter process being adopted in September by the Shelter Task Force in coordination with donors and NGOs. NZAID was prepared to contribute \$8 million to co-fund the shelter process but following the decision of SIG to distribute money through Members of Parliament from the disaster-affected areas, NZAID will now work directly with NGOs.

24. **Damaged dwellings.** For eligible families whose shelters were significantly damaged and can be repaired on their existing site, the shelter strategy identified assistance up to \$2000 to carry out repairs. In most cases this would include a standard package of materials and hardware for straightening and bracing the damaged shelter. Where tools and materials have already been distributed to the family, their value would be included in the support allocation. It was anticipated that technical assistance will be provided at the village level for the re-building process. Where families have already had their shelter appropriately repaired or restored with help from an NGO or other agency, they are deemed to have received the equivalent level of support and would not be eligible for further assistance. Where eligible families have already repaired or restored their shelter by self-help and their own resources, they could be eligible for appropriate support which may be in the form of materials or vouchers.

25. **Collapsed dwellings.** Under the shelter strategy, eligible families whose shelter collapsed but the materials remain available for re-use, assistance could be provided to help them resurrect their shelter or dismantle the collapsed shelter and build a new core shelter re-using materials where practicable. The level of support would be equivalent to that provided for

destroyed buildings less materials able to be re-used. In most cases this would amount to a standard package of materials and hardware for re-stumping and bracing the collapsed shelter. Collapsed buildings would be re-built on existing sites or relocated within the existing village as agreed at the village level. Technical assistance will be provided at the village level for the re-building process.

26. **Destroyed dwellings.** Finally for eligible families whose shelter was destroyed, assistance would have been provided to help them build a 20 square meter core shelter to form the basis of a new home to be added to by the family as personal circumstances allow. The core shelter will comprise braced poles, an elevated floor and a roof. All labor, additions and finishings (including walls, doors, windows, steps etc.) would be provided for by the individual family. Support will be in the form of a standard package of materials to allow the building of the 20 square meter core shelter, standard tools if not already provided, a model drawing of the core design with required details for resilient building and technical assistance at the village level for the building process.

27. Including the SIG commitment to shelter and the support NZAID is providing through NGOs, the financing gap for this program is approximately \$11 million.

B. Infrastructure

28. Damage to infrastructure has been extensive. The disaster cut off villages from the main centers on the islands. In the worst affected areas, roads and coastal areas have been heavily scoured and covered with debris. Roadside drains and culverts have been blocked or damaged because of seismic and tsunami action. Bridge abutments, which were not designed for seismic impacts, have been completely destroyed. A few bridges appear to be in satisfactory condition but will require investigation as the earthquake tremors may have destabilized their foundations. In total, about 70 kilometers (km) of roads, 48 bridges, 0.7 km of seawalls, and 0.7 km of protection works were severely damaged or destroyed. In addition, minor damages have been incurred to other roads, bridges, and retaining walls. Most of the damage has been on the islands of Gizo in Western Province and Choiseul with Western Province accounting for 80 percent of the total.

29. Earthquake tremors have destabilized the substructure of many wharves and jetties, and the tsunami has mostly destroyed their superstructures, leaving them unsafe. Some wharves are completely destroyed, while some are repairable. A total of 19 wharves, 14 jetties, and 52 causeways were damaged or destroyed in the areas affected by the earthquake and tsunami. In addition, the earthquake raised parts of some islands (e.g. Ranongga) and lowered others (e.g. Simbo), which has dramatically impaired physical access and rendered some wharves unusable.

30. In the main town of Gizo, the water supply is damaged and is now operating at a significantly reduced level. Following the earthquake, water flows have slowed and there is significant supply loss from the intake to reservoirs and storage tanks. The distribution main from the intake to the storage reservoir was broken in several locations. The water supply is contaminated and unsuitable for drinking. The intake, distribution, and storage and water treatment systems need to be upgraded to meet the demand from the growing population of Gizo. Sanitation facilities also require improvement.

Table 4: Infrastructure Rehabilitation and Reconstruction Costs

| Item | Province | | Total SI\$ | Total US\$ |
|---------------------|--------------------|-------------------|--------------------|-------------------|
| | Western | Choiseul | | |
| Airport | 13,093,872 | 0 | 13,093,872 | 1,833,573 |
| Bridges | 16,090,307 | 16,789,874 | 32,880,181 | 4,604,308 |
| Causeways | 6,102,694 | 299,476 | 6,402,170 | 896,515 |
| Gravel Roads | 17,829,185 | 9,319,807 | 27,148,992 | 3,801,753 |
| Jetty | 24,955,134 | 0 | 24,955,134 | 3,494,541 |
| Protection Works | 9,277,359 | 2,682,613 | 11,959,971 | 1,674,790 |
| Sealed Roads | 6,682,609 | 0 | 6,682,609 | 935,785 |
| Seawalls | 2,612,193 | 1,444,172 | 4,056,365 | 568,025 |
| Water Supply | 6,178,519 | 0 | 6,178,519 | 865,196 |
| Wharves | 37,021,955 | 8,543,528 | 45,565,482 | 6,380,668 |
| Administration | 27,887,724 | 7,815,895 | 35,703,619 | 4,999,683 |
| Contingency | 58,564,217 | 16,413,374 | 74,977,592 | 10,499,332 |
| Total | 226,295,767 | 63,308,739 | 289,604,507 | 40,554,170 |

Source: SIG ministries, staff estimates as of September 2007.

31. A broad sector approach will be adopted to rehabilitate or reconstruct high-priority infrastructure. In addition, a systematic and consultative approach will be established for subproject appraisal, covering: (i) social, economic, and environmental evaluation; (ii) design; (iii) procurement; (iv) implementation; and (v) monitoring. Each subproject feasibility study will provide sufficient evidence of its eligibility under the agreed criteria, and will be in accordance with the detail and quality required to assess the viability and suitability of the subproject.

32. **Road rehabilitation.** Finance rehabilitation and reconstruction of damaged infrastructure. This will include the repair of about 35 km of high priority unsealed roads and about 35 watercourse crossings (culverts and wet crossings), and the replacement of about 19 bridges. The proposed bridge structures will be designed and constructed in accordance with seismic standards to withstand earthquakes of a similar or larger magnitude. Designs will accommodate lateral movement of the structure compatible with earthquake and tsunami forces.

33. **Wharf and jetty rehabilitation.** Finance reconstruction of damaged marine transport infrastructure and seawalls. This will include reconstruction of about five high priority wharves and jetties. The proposed wharves and jetties will be designed and constructed in accordance with seismic standards so as to withstand future earthquakes of similar or larger magnitude.. Wharves and jetties will be constructed and located so as to withstand tsunami or cyclone-generated forces.

34. **Gizo water supply and sanitation rehabilitation.** Finance reconstruction of the Gizo town water supply and sanitation system. This will include: (i) repairs to the distribution main and restoring flows to pre-disaster level; (ii) clean, repair and upgrade water intakes, reservoirs; water supply systems and investigate more reliable sources; and (iii) installation of a new water treatment plant and carryout repairs to the sanitation system.

35. **Maintenance with community participation.** Small specialized maintenance equipment will be procured for future sustainability of labor-based methods and ongoing road

maintenance contracts by the community.

36. The total cost for infrastructure rehabilitation, reconstruction, and replacement is approximately \$289.6 million. The above priority areas are being financed under the ADB's Emergency Assistance Project, in partnership with the EC, to the value of \$63.9 million. SIG is also providing \$5.7 million in counterpart funds. This leaves a gap of approximately \$219.9 million to finance work on the airport and the balance of roads, bridges, causeways, wharves, jetties, seawalls and protection works. The balance of works will take another 5-8 years to complete following the completion of the EAP.

C. Education

37. There were over 20,000 students in the area affected by the disaster and around 90% of schools experienced at least some disruption. Over 50% of schools had classrooms destroyed or suffered major damage. There has been a major program to provide basic schooling at the camps and with temporary facilities in villages.

38. The re-instatement of schooling facilities is a fundamental need following a disaster to provide for the resumption of interrupted schooling. Schools are critical community focal points and the commencement of rehabilitation and reconstruction activities, both for school programs and physical works, provides a strong signal of government support to communities.

39. Approximately 240 classrooms (out of a total of 813 in 142 schools in the affected area) have been destroyed or have major damage and a further 304 had minor damage. Staff housing has also been affected with major damage or total collapse of around 244 staff houses, while an additional 164 had more minor damage. Over a third of 399 ancillary facilities (dormitories, kitchens, toilet blocks and offices) were destroyed or suffered major damage and 98 schools had disrupted water supply. There was significant loss of equipment and curriculum material reported including stationary and text books.

Table 5: Education Rehabilitation and Reconstruction Costs

| Item | Province | | Total SI\$ | Total US\$ |
|---------------------------------|-------------------|-------------------|--------------------|-------------------|
| | Western | Choiseul | | |
| Education Facilities | | | | |
| New Classrooms | 28,384,272 | 8,767,397 | 37,151,669 | 5,202,457 |
| New Staff Houses | 16,694,730 | 5,798,676 | 22,493,406 | 3,149,818 |
| Repair Work | 15,089,344 | 4,817,727 | 19,907,071 | 2,787,646 |
| Other Facilities | 5,089,823 | 4,306,190 | 9,396,013 | 1,315,751 |
| Water Tanks & Sanitation | 5,815,505 | 2,605,024 | 8,420,529 | 1,179,151 |
| Total | 71,073,674 | 26,295,013 | 97,368,688 | 13,634,823 |
| Education Services | | | | |
| Classroom & Office Equipment | 965,850 | 490,850 | 1,456,700 | 203,986 |
| Classroom & Office Furniture | 1,054,000 | 487,500 | 1,541,500 | 215,861 |
| Curriculum Materials & Training | 2,275,000 | 1,587,500 | 3,862,500 | 540,877 |
| Total | 4,294,850 | 2,565,850 | 6,860,700 | 960,724 |
| Grand Total | 75,368,524 | 28,860,863 | 104,229,388 | 14,595,547 |

Source: SIG ministries, staff estimates as of September 2007.

40. The education sector rehabilitation and reconstruction program has been prepared by

the Task Force for Education in Emergency Situations (TEES) of the MEHRD. The Task Force is supported by UNICEF, NZAID, EC and the NGO Save the Children Fund. The plan addresses the repair and reconstruction of education facilities and is a major development activity estimated to cost \$97.4 million. The plan also has an education services component with the provision of classroom and office furniture and the development and provision of curriculum materials and training estimated to cost \$6.9 million. Overall replacement cost is currently estimated to be around \$104.2 million. A reassessment is underway and should be completed in November.

41. **Education facilities.** Reconstruction and repair costs for education facilities total \$97.4 million and cover the cost of 148 new classrooms (\$37.1 million), 133 new staff houses (\$22.5 million), repairs in 153 schools (\$19.9 million), new ancillary facilities including dormitories, kitchens, toilet blocks etc. (\$9.3 million) and water and sanitation infrastructure (\$8.5 million).

42. **Education services.** This includes equipment (\$1.5 million), furniture (\$1.5 million) and curriculum materials and training (\$3.9 million) for a total of \$6.9 million. This plan is over and above the normal education services budget which is already constrained by additional costs from the disaster for temporary accommodation etc.

43. The total plan is being proposed as a two year program. This is ambitious in the current environment. It is not evident that MEHRD has the capacity to implement such a large project. This is being addressed by the Task Force for Education in Emergency Situations (TEES) with support from donor partners. A review of the plan following the re-assessment of the needs and priorities should address the timeframe and concerns about the project capacity required to implement it. It is likely that a 4-5 year period will be needed. This will place extra pressure on the education services area to maintain schooling programs in temporary facilities.

44. Lingering issues include staff housing and the continuing provision of schooling in temporary facilities while rehabilitation, reconstruction and repairs are undertaken over the next 3 to 5 years. Other issues include the development of training and curriculum programs to address the potential impacts of trauma on young students, and ensuring that rehabilitation and reconstruction and repairs are undertaken in a manner that ensures resilience against hazards including earthquake, cyclone and tsunami.

45. Total funding required is \$104.2 million. Thus far, there is donor commitment from NZAID and the EC for about \$46.8 million. MEHRD is not committing any existing budget to this program and currently has a funding request to SIG for \$60 million over the next 2 years. This would require SIG counterpart funds of about \$12 million per year. Until budget decisions are made, SIG counterpart funding is taken as zero. This leaves a gap of \$57.4 million.

D. Health

46. Damage to health sector infrastructure was widespread throughout the affected areas. Two hospitals, Gizo and Sasamunga, were badly damaged and their services have been substantially downgraded. Efforts are focused on increasing the capacity of the remaining two hospitals in Munda on New Georgia and in Taro on Choiseul which were largely unaffected by the disaster.

47. A total of 34 rural clinics (out of 52) in the affected area were damaged, 15 of them seriously. These include 4 major Area Health Centers, 7 smaller Regional Health Centers and four local Nurse Aide Posts. In all areas temporary clinics have been established, 14 in

alternative accommodation, and some level of service is being provided. In two of these, staffing remains a problem due to the unavailability of staff housing.

48. In Gizo town almost 80% of health-worker staff houses were destroyed (53) and 15 others damaged. At the rural clinics 26 out of 75 staff houses suffered major damage and a further 27 were partially damaged. At Sasamunga hospital, 7 out of 15 staff houses suffered major damage and 4 were partially damaged. In addition, damage to medical equipment and radio communication systems is substantial. This is being addressed in an ad hoc manner and a more thorough assessment is required.

49. Major issues to be addressed are re-instatement of facilities and provision of staff housing. Restoring services has been impeded by lack of staff housing and by the diversion of normal operating budgets to pay rental accommodation for staff whose houses have been destroyed. This is a major on-going issue which is currently being dealt with through diverting about one-third of the existing SIG budget. The situation has resulted in reduced health services in the affected communities at a time of increased demand with difficult living conditions for many affected families. Rehabilitation and reconstruction and replacement costs are estimated to be around \$144.1 million. This assessment was largely based on reports received from the centers and clinics and a re-assessment is currently being undertaken by the Ministry of Health and Medical Services (MHMS) to refine actual costs and priorities.

Table 6: Health Reconstruction and Replacement Costs

| Item | Province | | Total SI\$ | Total US\$ |
|--|--------------------|-------------------|--------------------|-------------------|
| | Western | Choiseul | | |
| Health Facilities | | | | |
| Asbestos Clean Up | 610,000 | 75,000 | 685,000 | 95,923 |
| Program Coordination | 2,845,632 | | 2,845,632 | 398,482 |
| New Clinics | 21,955,250 | 1,100,000 | 23,055,250 | 3,228,494 |
| New Hospitals | 66,531,000 | 5,660,000 | 72,191,000 | 10,109,118 |
| New Staff Housing | 18,572,000 | 3,150,000 | 21,722,000 | 3,041,795 |
| Repairs - Facilities and Staff Houses | 4,145,508 | 2,312,460 | 6,457,968 | 904,328 |
| Water & Sanitation | 2,825,000 | 680,000 | 3,505,000 | 490,815 |
| Total | 117,484,390 | 12,977,460 | 130,461,850 | 18,268,956 |
| Health Services | | | | |
| Adolescent Health, Reproductive Health | | | 1,836,000 | 257,100 |
| Expanded Program on Immunization | | | 796,798 | 111,578 |
| Health Promotion | | | 1,894,000 | 265,222 |
| Mental Health | | | 300,200 | 42,038 |
| Nutrition | | | 130,000 | 18,204 |
| Rural Water Supply & Sanitation | | | 8,722,328 | 1,221,413 |
| Total | | | 13,679,326 | 1,915,556 |
| Grand Total | | | 144,141,176 | 20,184,512 |

Source: SIG ministries, staff estimates as of September 2007.

50. There are two components to the health sector rehabilitation and reconstruction plan, developed by MHMS. It includes: (i) health facilities addressing hospitals, clinics and housing; and (ii) health services, comprising the provision of expanded operational programs for immunization, health services, mental health, health promotion and rural water supply and sanitation.

51. **Health Facilities.** The proposed health facilities program is \$130.5 million over an estimated implementation period of 3 years. The main components include a new hospital at Gizo for \$60 million commencing 2010 plus \$6 million for civil works preparation, new hospital facilities at Sasamunga for \$5.2 million, 21 new clinics for \$23 million, 48 new houses for Gizo and 21 for rural clinics and Sasamunga for \$21.7 million, repairs for facilities and staff housing for \$6.5 million and water and sanitation services for health facilities for \$3.5 million.

52. At Sasamunga a new \$450,000 prefabricated building has been established by the United States and outfitting is programmed with support from AusAID. In addition, JICA has committed to fund the construction of a new hospital at Gizo estimated to be about \$60 million, although full design work currently underway will provide exact costs by December.

53. **Health Services.** Additional operational services activities are proposed for a \$13.7 million program to be implemented over 3 years. This program addresses additional health services needs for those affected by the disaster. This is particularly important given the reduced current services (with operating budgets diverted to rent) and the large number of families remaining in camps. Primary outputs expected are expanded coverage for immunizations, expanded programs for reproductive health, adolescent health and nutrition, increased health promotion, focused mental health programs to address disaster issues particularly in children, and additional support for the re-instatement of sanitation and water systems in the rural communities to provide the rural water supply staff with resources to work with NGOs.

54. The total health sector plan is \$144.1 million. Donor commitments total \$82.7 million comprising \$60 million from JICA, \$18.1 million from AusAID, \$472,000 from the EC, and \$4.1 million from other Donors. SIG has also committed \$364,000 for health promotion leaving a funding gap of \$61 million.

55. MHMS and donor partners will need to establish a project capability which does not currently exist. Given this, it is likely that a 3 year timeframe is unrealistic. In addition, a funding commitment of an additional \$20 million per year for 3 years would need to be realized. A more realistic timeframe for implementation is probably 5 years with a funding commitment of around \$10 million per year to meet the needs of the program.

E. Livelihoods – Agriculture and Fisheries

56. There was limited previous commercial activity in the earthquake and tsunami effected areas, and in fact, limited direct damage to gardens and fishing areas, although coral damage has changed fish populations in some areas. Nevertheless, the loss of tools, equipment, and other livelihood basics in these areas will limit the resumption of community livelihood activities. The livelihoods programs are an attempt to restart some of the basic activities that have been disrupted by this disaster. The restoration of economic and basic livelihood activities and accessibility in affected areas is a key expected outcome. Communities that relied on subsistence agriculture need to return as soon as possible to their pre-disaster situation.

Table 7: The Agriculture Livelihood Program

| Program | Province | | Total SI\$ | Total US\$ |
|-------------------|------------------|------------------|------------------|----------------|
| | Western | Choiseul | | |
| Economic | 1,615,000 | 1,685,000 | 3,300,000 | 462,109 |
| Food Crops | 315,000 | 310,000 | 625,000 | 87,521 |
| Major Agriculture | | | | |
| Development | 625,000 | 625,000 | 1,250,000 | 175,041 |
| Small Livestock | 150,000 | 150,000 | 300,000 | 42,010 |
| Administration | 370,000 | 370,000 | 740,000 | 103,624 |
| Total | 3,075,000 | 3,140,000 | 6,215,000 | 870,305 |

Source: SIG ministries, staff estimates as of September 2007.

57. Disaster damage was very location specific thus supporting the need for verification of the initial assessment of affected areas as well as specific crops. Low lying coastal areas were particularly affected by seawater inundation and salt spray. Where roads are absent, many villagers use the sea and canoes to access their gardens and the local market opportunities. For the fishing community, loss of canoes in the tsunami has cut off access to the sea and their livelihood. Islands closer to the epicenter of the earthquake experienced landslides that affected or completely destroyed food gardens. There is also ongoing damage to gardens caused by roaming livestock, especially pigs.

58. Agriculture and particularly “kitchen” and food gardens are critical to food security and often the survival of isolated island village communities. In the short term the economic impact is often less important than that the health, livelihood and general well being of isolated communities. The early restoration of vegetable, fruit and livestock production is critical towards achieving these goals.

59. The objective is to restore the capacity of communities to return to normal activities as soon as possible. Re-provisioning of gardening tools and canoes lost in the tsunami are required at the earliest. Destroyed or damaged building infrastructure such as copra and cocoa driers need to be rebuilt to ensure any reinstatement of economic activity. In view of the widespread landslide damage to food and village gardens, an assessment of existing risks needs to be made and programs promoted for sustainable land management in affected areas particularly on steeply sloping landslide prone land.

60. The Ministry of Agriculture and Livestock (MAL) in consultation with development partners has developed a program to mitigate the economic impacts of the disaster on local communities and restore livelihoods. The MAL has identified Gizo, Simbo, Ranongga, Vella La Vella, Shortlands and Choiseul as the most affected and therefore the priority islands to be targeted in the livelihood plan.

61. **Economic crop and fruit production.** The rehabilitation and improved production from cocoa, copra and fruit trees is a priority focus in developing a cash economy for the two provinces. Cocoa is budgeted at \$1.4 million, copra at \$1.6 million and fruit tree development at \$370,000 for a total economic program component of \$3.3 million. Of this \$3.3 million, \$1.6 million and \$1.7 are to be spent in Western and Choiseul Provinces respectively.

62. **Food crop rehabilitation and assessment.** This program requires the analysis and assessment of contaminated soils plus the provision and distribution of new planting material.

The assessment component is costed at \$275,000 and the food crop development at \$350,000 for a total program worth \$625,000. Of this \$625,000, \$315,000 and \$310,000 are to be spent in Western and Choiseul Provinces respectively.

63. **Major agricultural development.** A possible outcome of relocating gardens and plantations is the need to liaise and negotiate with new landowners. Surveying and registering new boundaries is identified as a critical activity. These activities are also part of new project development and includes managing the interests of new investors. This component has been proposed at a cost of \$1.3 million.

64. **Small livestock.** To identify individuals who were affected, source and distribute the new livestock MAL have budgeted \$300,000.

65. **Tsunami recovery and reconstruction management.** Progress in the post disaster recovery process has been seriously compromised by the absence of capacity in the provinces and the lack of financial and other resources such as transport and fuel. MAL requires \$740,000 to effectively administer and monitor this program.

66. The total cost for the agriculture livelihood plan is \$6.2 million, all of which is yet to be financed. Actions have been limited to date due to the lack of funding. However, the plan is being submitted for financing.

Table 8: The Fisheries Livelihood Program

| Item | Province | | Total | Total |
|--|------------------|------------------|------------------|------------------|
| | Western | Choiseul | SI\$ | US\$ |
| Fish Aggregating Device Fishing Centre Component | 710,030 | 457,430 | 1,167,460 | 163,483 |
| Fishing Gear | 837,000 | 577,000 | 1,414,000 | 198,007 |
| Passage Clearance | 757,000 | 495,000 | 1,252,000 | 175,321 |
| Surveying Equipment | 2,520,000 | 1,680,000 | 4,200,000 | 588,138 |
| Total | 5,115,030 | 3,454,430 | 8,569,460 | 1,200,007 |

Source: SIG ministries, staff estimates as of September 2007.

67. The main effect of the tsunami and earthquake on fisheries has been the total loss of fishing gear, including canoes and outboard motors by the coastal communities at critically impacted locations. There have been reports of damage to reefs and fishing areas and though the information is based on a limited sample survey it does indicate that the impacts have varied from site to site. The third major impact has been caused largely around Ranongga Island where seismic uplift has stranded shallow reefs and mangroves not only affecting near shore fishing but also preventing access to the sea by canoes. In addition, flushing has not been possible in the cut off lagoons resulting in degraded water quality and resultant adverse impacts on nearby villages.

68. The effect on coastal communities has been widespread but more particularly on islands closer to the source of the earthquake and tsunami. The main priority is to provide equipment and gear such that the communities can continue fishing. Where fishing areas have been damaged alternatives can be developed through the development and deployment of fish aggregation devices (FADs). An FAD is a device deployed to attract pelagic fish to one area and local fishermen can fish around the device using canoes. The problem caused by the

uplifted reefs will require complex scientific studies and an engineering solution such as the drilling and blasting of channels. There will be environmental concerns that will require Environmental Assessments and Environmental Management Plans.

69. The rehabilitation of fisheries and associated activities in the disaster affected areas are critical in ensuring a primary source of protein for the population and providing an avenue for income generation to the majority of the coastal communities.

70. The fisheries livelihood plan has been developed by the Ministry of Fisheries and Marine Resources (MFMR) in consultation with donor partners. It is understood that MFMR will work with their Provincial extension officers and relevant NGOs such as Worldfish Centre and WWF(Solomon Islands). It is also understood that NZAID may contribute to the plan.

71. The objective is to assist poor communities whose livelihoods and sustenance were dependent on fishing and to restore access to marine resources. This is expected to allow a resumption of economic activities, and contribute to improving public health by providing an important source of nutrition. The livelihood plan is comprised of 5 components.

72. **The FAD program.** The total cost of this program is nearly \$1.2 million and includes \$650,000 for the cost of 21 FADs deployed in the two provinces, and a further \$510,000 in replacement costs over 4 years. Of this nearly \$1.2 million, approximately \$710,000 and \$457,000 are to be spent in Western and Choiseul Provinces respectively.

73. **Fisheries centers.** To promote better fisheries and livelihood programs \$1.4 million is required for 3 centers in Choiseul and 5 in Western Province. The objective is to provide centers where ice is made and distributed to allow for fish catch to be able to be preserved and transferred to markets.

74. **Fishing gear, surveys, reef passage clearance.** These high priority components are estimated to cost \$6 million. It includes: replacement fishing gear (\$1.2 million); fishery surveys (\$536,000); and reef passage clearance and surveying of at least 10 coastal areas affected by seismic uplift (\$4.2 million)

75. The total fisheries program request for funding is \$8.6 million. NZAID will contribute \$5.4 million towards meeting the cost of some of these activities, in particular fishing gear and channel surveys. The status of the MFMR request for additional funding from SIG is uncertain and could leave some components of the plan unfunded to the value of \$3.2 million.

F. Future Risk Reduction

76. Greater knowledge and better understanding of the recent and past earthquakes and tsunamis is a necessary and fundamental tool in the present and ongoing rehabilitation and reconstruction efforts. An assessment of the long-term history of natural disasters in the region will provide confidence in estimates of the return periods and severities of future events such as tsunamis, storm surges and earthquakes that can be used to guide decision makers at all levels.

77. In addition to the collation and analysis of existing information, the core of the program requires the collection of additional geoscientific data to enhance the effective use of existing resources and describe the long-term sequence and magnitude of events. The work needs to cover the complex and widespread nature of the Solomon Island archipelago by using a vessel-

based survey to acquire geological, paleontological, oceanographic and other data to assist in understanding past tsunami generating events. Links will also be established with Geoscience Australia and the Bureau of Meteorology Australia to incorporate tsunami and storm surge modeling for urban centers such as Gizo and Honiara.

Table 9: Future Risk Reduction Plan

| Item | Total SI\$ | Total US\$ |
|---------------------------|-----------------------|-----------------------|
| Survey Vessel | 1,624,000 | 227,413 |
| Equipment Hire & Analysis | 1,082,000 | 151,516 |
| Scientific Staff | 1,443,000 | 202,068 |
| Travel, Insurance, etc | 144,000 | 20,165 |
| Administration | 542,000 | 75,898 |
| Total | 4,835,000 | 677,059 |

Source: SIG ministries, staff estimates as of September 2007.

78. A Hazards Task Force (HTF) chaired by the SIG Surveyor General was established to coordinate SIG efforts in understanding the existing hazards, map the impacts of the disaster, and ensure the rehabilitation and reconstruction plans are implemented fully cognizant of potential hazards, the vulnerability of communities and, as much as practicable, address the issue of future risk. The SIG through the Ministry of Mines and Energy (MME) has engaged the cooperation of the Pacific Applied Geoscience Commission (SOPAC) to commence mapping tsunami inundation areas, landslides, and the critical facilities and vulnerable communities. This is part of Phase 1 of a program which includes providing technical advice and capacity building in mapping and hazard assessments. A Phase 2 program, presented here, would be managed by MME and implemented through SOPAC.

79. This phase of the project will build on the rapid assessment outputs, and incorporate additional data collection and ground truthing as well as identify and characterize past earthquake and tsunami events. The production of hazard/risk maps can be used for land zoning, infrastructure siting, improved public awareness, increased socio-economic resilience, and to mitigate against the future loss of life. It is proposed that coverage will extend to other populated and vulnerable areas such as Honiara

80. Project outputs will include:

- Production of storm surge, flooding and landslide hazard zone maps identifying areas at risk.
- Production of bathymetric maps for the placement of FADs and coastal infrastructure such as channels and wharfs to restore shipping and restore coastal livelihoods and fisheries.
- Improved design standards and planning procedures through enhanced understanding of tsunami and seismic risks.
- A public education program teaching coastal communities how to react and evacuate during future events.
- Enhanced technical and scientific capacity of the SIG to conduct hazard/risk assessments that can be used in the preparedness, response and recovery of similar future natural disasters.

81. Strengthened competence of the SIG to apply geoscience information datasets to address the threat of natural disasters to national development and implement vulnerability

reduction measures and develop risk reduction tools.

82. HTF, MME, SOPAC and concerned partners have identified priority interventions for vessel-based surveys in order to acquire the following:

- Sedimentary deposits that carry the signature of past tsunami events
- Rock samples that provide dates of uplift/subsidence and landslide events associated with earthquakes
- Marine data on water depth, habitats and seabed structure
- Vertical/horizontal land displacements to establish earthquake magnitudes
- Mapping of landslide deposits to determine land stability

83. The total cost for the Phase 2 for vessel and equipment hire, sample analysis, scientists, travel, insurance and other administrative costs total about \$4.8 million. There is no provision in the SIG budget for this activity and complete donor funding plus in-kind contribution from regional organizations is being sought.

V. CONCLUSIONS AND RECOMMENDATIONS

84. **Conclusion.** SIG sector ministries, provincial governments, NGOs, and donors have committed substantial support in response to the disaster that caused significant damage in Choiseul and Western Provinces. Achievements to date include: completion of the damage assessment and the RAP (adopted by Cabinet, June 2007), completion of the Shelter Strategy (adoption by Cabinet July 2007 with a \$15 million Government commitment), and adoption of a refocused Task Force and coordination structure in August 2007.

85. Progress in the relief and recovery phase has been slower than anticipated. Issues and challenges have included: (i) SIG counterpart staffing, (ii) sector ministries' full commitment and cooperation in coordinating the disaster response, (iii) rapid and effective use of available government and donor resources, and (iv) continued government commitment to the adopted rehabilitation structure and process.

86. The RRP for Western and Choiseul Provinces has been calculated at \$591.7 million (US\$ 82.8 million). If all programs were to be implemented, there is a funding gap of \$363.8 million (US\$ 50.9 million). However, it is not realistic to envision that Solomon Islands has the capacity to fully implement all of these programs simultaneously. SIG will need to examine the programs and prioritize within the existing resource envelope and also within their capacity. Although there are pressing demands in the disaster areas, a longer term approach is required.

87. National level coordination is unlikely to be effective so rehabilitation and reconstruction will be by individual sector ministries supported by related donor arrangements. This reflects the absence of integrated national development planning which is at least partly due to the limited capacity to undertake such an activity. All programs will struggle with the capacity issue and discussions of capacity supplementation as well as capacity building may be required given the weakly performing country context.

88. **Recommendations.** The RRP, as laid out in this document, is meant to provide the framework for rehabilitation and reconstruction work going forward, setting out sector damage information and associated rehabilitation and reconstruction plans, as well as funding requirements and gaps. It should be noted that this document is reliant on information and data

provided by government authorities, and has had to overcome the above issues and challenges. The RRP is a flexible document and the further refinement of information should continue as new and more accurate data becomes available in this changing environment. Given some of the issues faced during the preparation of the document, the RRP does not provide for appropriate accountability arrangements and should therefore be regarded as a guidepost for discussion and further engagement. It nevertheless provides useful indications, to SIG and development partners (NGOs and donors) alike, as to the status quo, issues, and current priorities and strategies going forward. In this way, it can be used as a yardstick against which progress can be monitored.

89. *Funding priorities.* On a practical note, there needs to be further discussion within SIG on funding priorities for the sector ministries, time bound plans for implementation with milestones, and a monitoring system to assess progress. Ministries need to be given clear directions to review their draft 2008 budget requests and identify potential resources to contribute to their highest priorities in their sector plan. A discussion of priorities needs to be part of the dialogue within SIG. It may be useful to request ministries to provide a minimum contribution of (5 – 15%) from existing budget toward RRP activities they have identified as critical. In a similar way, SIG needs to identify additional counterpart resources to support donor financed programs particularly in the areas of health and education services and in the area of livelihood support. It may also be useful to track RRP allocations for funding in the 2008 budget to be reflected in the Supplementary budget and for future budgets, including identifying SIG share and gaps to provide a basis for discussion with donors. SIG needs to prioritize the recovery effort, particularly health and education.

90. *Implementation.* Sector ministries need to make more realistic assessments of their capacity to implement projects of the magnitude described in the RRP, and also the ambitious timeframes suggested. Donors also need to consider the capacity of counterparts to implement such projects. Given urgent priorities, consideration needs to be given to capacity supplementation as well as capacity building options in Solomon Islands. For example, NZAID sees education recovery being delegated to a dedicated team and not supported by MEHRD directly.

91. *Monitoring.* The National Coordination Unit should be fully staffed and retained in the Finance and Economic Development Unit (FEDU), MoF, for RRP monitoring and interacting with the SIG budget processes. The National Coordination Unit should report through the Permanent Secretary in the Ministry of Finance. In addition, SIG needs to open dialogue with donors at a whole of government level on the means for addressing on-going financial support for the RRP.

APPENDIX 1: PROPOSED SYSTEM FOR FUNDING MANAGEMENT, PROJECT IMPLEMENTATION AND MONITORING AND OVERVIEW

92. A key issue is the development of project capacity to deliver the identified \$592 million rehabilitation and reconstruction program which will take at least 4-5 years to implement. Experience has shown that centralized arrangements do not work in this environment and devolved implementation at the sector Ministry level is proposed. For the key programs of health, education and infrastructure, only the Ministry of Infrastructure Development is supported by a substantial ADB managed implementation unit. Other Ministries do not have adequate project capacity for implementation of their RRP components. While the Health and Education Ministries have donor partners supporting their planning, their project capabilities will need to be substantially reinforced.

93. For rural shelter there is no direct line Ministry accountability and a recent SIG decision to fund shelter rehabilitation through local Members of Parliament makes an agreed provincially managed and centrally funded Shelter Process unworkable. A possible means for a coordinated approach is the development of a local shelter process between the provincial governments, local MP's and NGO's, managed through the recently set up Program Management Unit (PMU) at Gizo and an associated cell at Choiseul. Such an arrangement would require the agreement of all the parties and the development of a local shelter process with them. It is proposed that such a process be developed, led by the Provincial Premiers.

94. With national planning and budgeting mechanisms unable to bring the RRP issues together, a central coordination point is still needed to provide for "whole of government" prioritization of the rehabilitation and reconstruction process. The existing National Coordination Unit (NCU) is established in the Financial and Economic Development Unit (FEDU) of the Ministry of Finance. It has a SIG staff of four with management and accounting skills and is appropriately placed to provide a monitoring and overview function and link to the SIG budgeting functions of the Ministry of Development Planning and Aid Coordination (MDPAC) and the Economic Reform Unit (ERU) of the Ministry of Finance.

95. The following processes could address funding management, project implementation and monitoring and overview for this major multi-sector program which sits over and above the normal budget activities of the SIG:

1. Proposed Funding Management

The following 3 point process could be adopted for funding management:

- Line Ministries be given clear directions to review their draft 2008 budgets to identify **existing funding** to re-prioritize and reallocate to contribute to their rehabilitation program. Guidance should indicate that a minimum of 15% of the rehabilitation program is expected to come from existing programs and be reflected in the supplementary budget and future budgets.
- SIG to identify **additional funding** needs to support existing constrained recurrent budgets particularly in the areas of health and education services and in the areas of livelihood support. It is expected that a commitment of around \$30-50 million will be required which should be identified for contingency warrants and inclusion in the Supplementary budget.
- SIG to explicitly **identify the priority rehabilitation activities** for inclusion in the 2008 Supplementary budget and future budgets – including identifying SIG share and gaps to provide a basis for discussion with donors.

2. Proposed Rehabilitation and Reconstruction Program Implementation

For implementation, the following 3 point process could be adopted:

- **Line Ministry management and accountability** for implementation of their Rehabilitation Program component
- **Development of project capacity** for implementation at the line Ministry level for health and education supported by donor partners
- Provision for SIG **whole of government prioritization** through the NCU

3. Proposed Rural Shelter Implementation

The following 3 point process could be developed for implementing shelter:

- Implementation managed through a **Provincial Premier led arrangement** involving the Provincial secretary, local MP's, Provincial Assembly members and NGO's
- **Development of a local shelter process** to deliver equitable support into the affected communities including auditable financial management arrangements
- **Retaining of the PMU at Gizo** and the establishment of an associated cell at Choiseul to administer and support the local shelter process

4. Proposed Overview and Monitoring

For overview, the following 2 point processes could be adopted:

- **The NCU be retained in the FEDU** for the RRP overview and monitoring role and for interacting with the SIG budget processes
- The NCU report through the PS Finance to the Disaster Rehabilitation Committee of the NDC.