

THE SOLOMON ISLANDS RURAL WATER SUPPLY, SANITATION AND HYGIENE POLICY

FINAL (February 2014)

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Abbreviations and Equivalents

CBO Community Based Organization

CC Climate Change

CLTS Community Led Total Sanitation
EHD Environmental Health Division

FBO Faith Based Organization
HIS Health Information System

IEC Information, Education, Communication

IWRM Integrated Water Resource Management

JMP Joint Monitoring Program M&E Monitoring & Evaluation

MECDM Ministry of Climate Change, Disaster Management and Meteorology

MEHRD Ministry of Education and Human Resource Development

MID Ministry of Infrastructure Development
MoHMS Ministry of Health and Medical Services

MMEWR Ministry of Mines and Energy and Water Resources

National Program National Rural Water Supply, Sanitation and Hygiene Program

NGO Non Government Organization

ODF Open Defecation Free
O&M Operation & Maintenance

PEHD Provincial Environmental Health Division

PHAST Participatory Hygiene and Sanitation Transformation

PICs Pacific Islands Countries
PVC Poly-Vinyl Chloride

RWASH Rural Water Supply, Sanitation and Hygiene Program

SIG Solomon Islands Government
SME Small to Medium Enterprise

UN United Nations

VIP Ventilated Improved Pit (latrine)

WASH Water Supply, Sanitation and Hygiene

WatSan Water Supply and Sanitation
WHO World Health Organization
WSG WASH Stakeholder Group

1 Introduction

Rural communities across the nine provinces of the Solomon Islands face adverse health problems caused by lack of access to clean water and proper sanitation, and by not practicing proper hygiene behaviour. Many communities spend inordinate amounts of time collecting water for basic living and open defecation is common. With the population of the Solomon Islands increasing at the rate of approximately 2.3% per annum, further pressure will be placed on resources to provide water and sanitation infrastructure to rural villages.

WASH status figures for the Solomon Islands indicate wide and relatively good coverage for water supply but sanitation coverage remains very low compared to progress regionally and internationally. However, it is considered likely that the below figures for water supply may only reflect the installed capacity of WatSan infrastructure and do not provide an accurate figure of the operational status of facilities. The estimated coverage of functioning water supply systems in the Solomon Islands is 35-40%.

Table 1: WatSan Coverage - Solomon Islands and World Figures:

	Population	Water Supply	Sanitation
Solomon Islands – Rural (2010)	404,072	65%	18%
Papua New Guinea – Rural (2010)	5,489,812	33%	41%
Vanuatu – Rural (2012)	176,816	87%	54%
World - Rural (2010)	Approx. 3,2 billion	81%	47%

Source: JMP website

The high failure rate of water supply systems can be attributed to several factors. The government and other implementing agencies lack the resources to maintain systems and, more importantly, communities generally lack the awareness that *they* are responsible for minor maintenance. Furthermore, adequate and appropriate training is not provided to communities to give them the skills to operate and maintain the schemes.

Sanitation in the Solomon Islands is an even bigger challenge, the lack of awareness of the importance of sanitation being the key issue here as much as it is elsewhere. The poor status of sanitation in the Solomon Islands is compounded by a poor sanitation approach in many instances: promotion of a single (often inappropriate) technical solution, poor technical design, full subsidization, and in some cases active discouragement of other, quite appropriate and more sustainable technical options.

Proper hygiene behaviour, in particular hand washing with soap, is rarely practiced in rural areas. A comprehensive set of hygiene IEC materials is not available for use by all implementers. Hygiene awareness is a key component of WASH projects and requires more attention.

This Rural WASH Policy is the first of its kind for the rural WASH sector. It defines the responsibilities of the stakeholders within the sector, provides clear guidance towards achieving the sector aims, and promotes an integrated approach to projects.

2 Policy statement:

2.1 Policy statement:

2.1.1 Definition:

This document is the Solomon Islands Rural Water Supply, Sanitation, and Hygiene Policy, and shall be the instrument governing the development, coordination, management, monitoring, evaluation, implementation and review of the provision of sustainable rural water supply, sanitation and hygiene development activities in the Solomon Islands.

2.1.2 Authority

The Authority for this policy is vested in the appropriate laws and regulations of the Solomon Islands, including:

- The Environment Act, 1998;
- The Environmental Health Act, 1996 (Cap 99);
- The River Waters Act, 1996
- The Order Delegating Functions, 1987 Section 5(1);

Under the above Acts and regulations, the Ministry of Mines and Energy (MME) is responsible for the overall management and regulation of the water resources of the Solomon Islands. The Ministry of Health and Medical services (MoHMS), Environmental Health Division (EHD), Rural Water Supply, and Sanitation Unit (RWSS¹) is responsible for rural WASH activities which, although not specifically referred to, are managed under the Environmental Health Act, 1996 and its subsidiary legislation (Section 5(1)), Order Delegating Functions, 1987. All matters failing to be administered by the Ministry under the Act are delegated to the Honiara City Council.

It is recognized that several Provinces have Provincial Ordinances governing the implementation of community WASH projects. This Policy aims to strengthen and support the Provincial Ordinances where they exist, and to form the basis for the development and review of the Provincial Ordinances.

2.1.3 Application

This policy applies to all organizations, be it government, funding agencies, national and international, non-governmental, faith-based, community based, and commercial, as well as individuals involved in the sector.

¹ Following Cabinet Conclusion C5 2014 7, dated 20/2/2014 the RWSS Unit is now renamed as the Rural Water Supply, Sanitation and Hygiene Program (RWASH). Hereto onwards in this document the new name will be used.

3 Vision, aims and outcomes

3.1 Policy vision

All Solomon Islanders with easy access to sufficient quantity and quality of water, appropriate sanitation, and living in a safe and hygienic environment.

3.2 Sector policy aims and outcomes:

Access to water and sanitation is a universal human right (UN Declaration July 2010). Water and sanitation can be directly linked to health, dignity, equality and safety, and sustainable environments, as well as being an economic investment. The following aims and outcomes have been identified:

AIMS	OUTCOMES			
To contribute to the health and wellbeing of recipient communities and individuals through improved and appropriate WASH facilities and hygiene practices.	 To assist in the provision of environmentally sustainable, safe and appropriate water supplies to all rural villagers of the Solomon Islands, in order to: Contribute to improved public health; Improve the livelihoods of rural villagers; Reduce the burden on women and children of collecting water; Promote social development based on gender equity and disability; Promote and support basic water needs; Promote the conservation of water resources; To promote and provide environmentally sustainable and appropriate sanitation to all rural villagers in the Solomon Islands, in order to: 			
To increase the capacity of (all levels of) the government and civil society to assist, promote, plan, design and implement high quality, appropriate WASH facilities and hygiene practices.	Increased coverage of improved WASH facilities and hygiene practices as a result of increased capacity of the sector to promote, manage, and deliver services. through regulations, standards, and minimum requirements			
To promote community managed, operated and maintained systems.	Increased sustainability of projects through increased community ownership resulting from promoting community participation, comprehensive community preparation, and a maintenance model dividing maintenance responsibility between the community for minor repairs and the public sector and civil society for major repairs			
To increase and develop cooperation and coordination between all sector stakeholders.	Improved sector coordination and output through active participation of sector stakeholders in the sector's steering committee, the WASH Stakeholders Group			
To promote, encourage, and develop sector alignment in technical design, hygiene promotion, community engagement and gender equity.	Sector alignment through the joint defining, implementation and enforcing of the sector's regulations, standards, procedures and requirements			
To encourage environmentally sustainable development of the water and sanitation services, supported information campaigns and continuous educational interventions at all levels.	Sustainable development of water and sanitation and hygiene services through national and local awareness and information campaigns and standardization of IEC materials. Monitor and respond to the implications of climate change on the sustainability of water and sanitation services.			

Special emphasis is placed on coordination by allocating adequate capital funds and making appropriate institutional arrangements to rapidly increase sanitation coverage.

The conservation and protection of water resources is of great importance in the Solomon Islands. Increasing population pressure, logging and other activities are threatening water catchment areas in many places in the Solomon Islands, with detrimental effects to the livelihoods of the communities. The Ministry of Mines, Energy, and Water Resources is leading the *Integrated Water Resource Management* approach, which requires collaboration and coordination with all sectors including rural WASH.

3.3 Sector Principles

a) Participation and Access

Women and men will be equally engaged in planning, design and service delivery of WASH activities. Vulnerable and disadvantaged people (in particular the very poor, women and people with disabilities) will be identified and prioritized in planning, design and service delivery to reflect their needs.

b) Protection

The design and location of WASH facilities will be informed by all stakeholders, and protection issues specifically for women and vulnerable groups will be mitigated through consultation with these groups.

3.4 Sector strategy, plans and procedures

The National Rural WASH policy and objectives should be seen as a National setting for the intentions of the Solomon Islands Government. The Government, in cooperation with the sector stakeholders, will prepare:

- 1. The strategies which will set out how the policy should be implemented; and
- 2. The action plans which will quantify the strategies in terms of resources, utilization of manpower, time and costs. Such plans should follow the principles of integrated water resources planning and development.
- 3. Procedures and plans to underpin the implementation of this policy.

4 WATER, SANITATION & HYGIENE

4.1 General

RWASH shall work closely with other stakeholders involved in WASH to develop, update and enforce technical design and construction standards for WASH infrastructure, as well as the community preparation package. The technical standards are set out in the 'Solomon Islands Rural Water Supply & Sanitation Design and Construction Standards'. The community preparation requirements and procedures are set out in the 'Solomon Islands Rural WASH Community Engagement Guidelines'. These documents will be available at EHD/RWASH in electronic format.

School and health facilities present in a community are considered part of that community and must be included in community WASH projects. Vice-versa, school WASH projects must include the communities in the immediate surroundings to avoid tensions over water and sanitation between community and school. WASH infrastructure development in schools shall be undertaken in cooperation with MEHRD, according to their infrastructure standards. WASH infrastructure at health facilities shall be done in cooperation with MHMS and according to available standards.

Projects must be initiated based on request and project selection must be based on <u>needs</u> analyses. Project requests should be prioritized using the following criteria, in order of importance:

- 1. Health data: the occurrence of WASH related diseases:
- 2. *Disadvantaged areas:* f.e. areas more prone to natural hazards, atolls, areas without any surface or ground water source requiring travel to nearby islands etc.;
- 3. Fair regional/geographical spreading;
- 4. Ethnicity: fair distribution amongst ethnic groups;

Though population size affects disease prevalence, population size as a criteria should never outweigh the above. It may be used as a final deciding criteria. The MHMS will take the lead in refining the selection criteria in cooperation with the sector stakeholders.

Economic viability is an important design consideration but may not overrule nationally set standards and requirements, nor the project selection criteria; A maximum limit to project cost per recipient may not be set in order to avoid cutting corners in implementation quality (both technical and community preparation) and leaving out more needy communities;

4.2 Water supply systems

The rural WASH sector in the Solomon Islands can be characterized by challenging logistics, poor access to supply lines, limited financial resources and limited technical skills available at community level. To mitigate these challenges, the key design consideration for any water supply scheme is the preference for *basic*, *low-tech solutions* thus minimizing the resources required for O&M. High-tech solutions should only be considered if the recipient community is made aware of, and is capable to bear the financial and O&M requirements.

Common water supply systems for the Solomon Islands are:

- > Direct-gravity fed: relatively low-tech, and usually providing a high level of service (i.e. easily accessible, large quantity of water). In many cases they are the preferred technical solution, though landownership issues need to be taken into account;
- ➤ Hand-dug wells: Often shallow, cheap and easy to construct, and requiring little maintenance. Groundwater can be a reliable source of good quality water with high yields provided pollution sources (such as latrines) are not in the vicinity; Hand-dug wells are very suitable as a secondary or backup source;
- ➤ Rainwater harvesting: Low-tech system available and easy to maintain, but expensive per liter per person. Rainwater harvesting can provide very good quality water throughout the year provided the system is designed properly and water usage is controlled. The National Water and Sanitation Sectoral Plan promotes rainwater harvesting to augment water supplies.
- ➤ Hand pumps: Mostly fitted on hand-dug wells and boreholes. Preference for locally made simple hand pumps (such as the Solomon Hand Pump) over commercially available models, as the high usage demand durability and easy maintenance. Cheap commercially available hand pumps do not last but specialized commercial pumps (such as the Indian Mk4 and Nira) are not available locally and spare parts are hard to source.
- Pumped supplies: Relatively high-tech and O&M may be costly and requires high level of technical skills. The least preferred system for community water schemes unless the community is made fully aware and is considered able to manage it. Pumped supplies may be considered for institutions which have both the financial resources as well as dedicated skilled maintenance staff.

Water supply projects should ensure that the environment is not adversely affected. Generally, rural WASH infrastructure development has little impact on the environment and careful planning and design is required to prevent common issues, such as fuel spillage, diverting the entire flow of a small source thus removing it from the local ecosystem, and drainage issues near water points.

All construction materials must be of common regionally available standards and as per the technical standards, to allow the sourcing of suitable maintenance parts from either local or international suppliers.

4.3 Sanitation

The Solomon Islands has a very low coverage of rural households using a toilet (18%, 2009), well below neighboring Papua New Guinea and Vanuatu. Cultural sensitivities, a poor approach to sanitation, and the inappropriate promotion of one technical solution only are some of the main causes for the low coverage. With the vast majority of the rural population practicing open defecation, accomplishing sanitation <u>behaviour change</u> is of paramount importance, requiring a new and innovative approach:

Creating demand through sanitation triggering is the first key principle of this policy.
 Appropriate technical solutions are well within the means and capabilities of most households in the Solomon Islands, but the demand for sanitation is largely absent.

Communities and households must be *triggered* to want and demand sanitation and to take initiative;

- A no-subsidy approach to sanitation is the second key sanitation principle of this policy.
 Decades of fully subsidizing sanitation has produced little to no results with many of the
 installed toilets not used anymore and households returning to practice open defecation,
 and has merely sustained the handout mentality. Promoting basic, low cost sanitation such
 as dry pit latrines and VIP latrines which have proven to be sustainable and effective
 worldwide, with no subsidy provided shall be the preferred option. Behaviour change
 cannot be achieved using a handout approach;
- Exception to the no-subsidy policy is given where the only environmentally appropriate technical solution falls outside the financial means of the average household (f.e.: compost toilets, toilets suitable for people living with disabilities), education facilities and health facilities. In those cases partial or full subsidization is allowed;
- Inclusiveness: all water supply projects must include sanitation triggering. Even though a
 community may only request a water supply system, sanitation triggering must be included
 in the project, unless the recipient community is already 100% open defecation free (ODF);
- Sanitation triggering must be done using *participatory and innovative methods* such as CLTS and PHAST or similar, as the more traditional methods of sanitation awareness have not been effective;
- Except for institutions and public places and buildings, sanitation development should focus on and promote *household level* facilities. Shared facilities by households are discouraged, as international experience shows poor maintenance and sustainability of the facilities.
- The focus of the National Program will be generating demand for improved environmental sanitation and creating a self-sustaining market for widespread construction of latrines. The program will also promote *sanitation marketing* at national, provincial and community level to increase the distribution and use of toilets.

Furthermore:

- Priority is given to systems that can easily be sustained by households at minimal cost and technical skills. In general household latrines should be based on the following:
 - > Dry Pit Latrine where access to sufficient water is limited and conditions dictate that only dry technology can be used;
 - > VIP Ventilated Improved Pit latrine where access to water is limited and conditions dictate that only dry technology can be used; together with the dry pit latrine the preferred option.
 - Pour-Flush Pour Flush Water Seal Pit latrine where access to reliable, continuous, and sufficient water for flushing is available and adverse environmental effects are avoided. Rainwater tanks are not considered to be a reliable, continuous and sufficient source for sanitation;
 - > Offset twin-pit pour-flush latrines provide several advantages over the standard pour flush design: the toilet house can be a permanent structure, the wastewater can be directed to the one pit until it is full then redirected to the other pit, and the waste

- materials can be safely removed from a full pit and buried after it has been left to biodegrade for at least one year;
- > Septic systems the septic system includes both the toilet, septic tank, soak away pit or infiltration trench or evaporation bed as well as the means to dislodge the contents of the tank when full. Dislodging of waste material should be carried out by experienced operators using a septic truck (or alternatively a portable sludge pump) and the waste removed to an approved site or excavation pit which should be buried once the liquid has drained away. Manual dislodging in rural settings should be avoided, for hygienic reasons;
- Composting toilets Composting toilets are environmentally friendly but involve a considerable behavior change regarding sanitation. In certain conditions (f.e.: flood prone areas, atoll islands with small fresh groundwater lenses) composting toilets may be the only environmentally viable solution. This technology in particular requires adequate training and awareness on the proper use and maintenance;
- Water-based sanitation (pour-flush & septic tanks) not only require reliable water sources but place higher demands on operation and maintenance as well. Inappropriate cleansing materials (leaves, newspaper, coconut husk etc.) can cause frequent blocking of the toilet.
 Potential users must be made aware of the demands of the various types of sanitation;
- RWASH shall ensure households and villages have access to sanitation infrastructure by making available for purchase through PEHD, PVC water seal inserts, risers, and riser moulds.
- In the case of requests for improved sanitation infrastructure, the individual shall be required to meet all of the costs associated with materials and installation. Advice on siting and construction should be provided where possible.

HPU and EHD shall take the lead on developing an approach to *village solid waste management* as part of goal to achieve a clean living environment. Increasing population and increasing use in the rural areas of processed goods has increased the amount of packaging materials (tin cans, plastic bag etc.) prompting the need for such an approach.

4.4 Hygiene

As with sanitation, *hygiene awareness* must be included in every project. The three-pronged approach of water supply, sanitation and hygiene has the highest potential benefit to the health of the recipients, larger even than the sum of the individual components.

Improving hygiene and sanitation practices is a long-term process requiring effective stakeholder partnerships and a commitment to adaptive learning. All stakeholders require a comprehensive understanding of successful approaches that have led to improved practices and health, with a particular analysis of local gender and cultural issues as they relate to behavior change. Gender equity should be encouraged with particular attention to the needs of women and children being addressed in both hygiene and sanitation awareness.

EHD working with the Health Promotion Unit and in collaboration with stakeholders shall develop a strategic and innovative approach to improve community hygiene behaviour. In addition, the MHMS will work to develop a broad based national sanitation and hygiene campaign.

Sanitation and hygiene awareness programs shall be carried out through innovative approaches such as CLTS, PHAST, a combination, or other participatory hygiene approach. This approach also

addresses equity. The hygiene awareness approach shall complement/align with the *Healthy Settings* approach, as adopted by the Solomon Island Government and implemented by the HPU. Of key importance is community and household ownership of their (environmental) health and uniformity of the hygiene messages throughout the sector regardless of who delivers them.

Water, hygiene and sanitation awareness shall take place *before* and during or immediately after the introduction of improved WASH infrastructure to communities. Minimum key hygiene messages (but not limited to): *Germs* (what are they, how do they make you sick, and how do they reach humans), the *Faecal-Oral route*, *common WASH related diseases* with particular focus on diarrhea, Trachoma and Yaws; and *basic prevention* of common WASH related sicknesses.

HPU will, in cooperation with EHD/RWASH and sector stakeholders, take the lead in developing standard hygiene and sanitation education material/messages that are delivered to communities as well as for schools. For the latter RWASH will work closely with the Ministry of Education and Human Resource Development with the formulation of schools curriculum hygiene and sanitation awareness support materials. Education on water, hygiene and sanitation awareness undertaken in schools by the Environmental Health Division and Department of Health Promotion will follow the policy requirements of education for communities.

5 Operation & Maintenance

The estimate of 50% of all installed water supply schemes not functioning now, the majority of which due to lack of maintenance, clearly demonstrates the challenge the sector faces with regards to the sustainability of WASH infrastructure. Several aspects contribute to the lack of sustainability, including: sporadic awareness of communities of their responsibility to maintain the system, lack of resources at (government) level to effectively maintain systems, inappropriate or absence of design and construction standards, lack of technical and managerial skills in communities, challenging logistics, and poor access to supply chains.

EHD with the sector stakeholders will research and trial innovative O&M approaches to develop and apply best practices for the varying circumstances and locations in the Solomon Islands. This may include increased partnerships with the public and private sector, the use of 3rd party maintenance service providers, and others.

It is acknowledged that <u>solely</u> relying on communities for O&M is not sustainable. However, with the limited financial resources available to the government, part of the financial burden will have to be met by the recipient communities. While other possibilities are explored, the responsibility for O&M must be shared, and as a general rule the recipient community is responsible for <u>minor</u> maintenance and the financing thereof.

<u>Minor</u> maintenance is defined as being within the communities' financial means and within technical skills that can easily be transferred during the duration of the water supply project to assigned caretakers. This includes simple pipe repair, basic concrete works, tap repair or replacement, replacing of guttering and similar. <u>Major</u> repairs are defined as falling outside the financial and technical expertise available within a community and may include intake box replacement, tank collapse repair/replacement, etc.

Furthermore:

- 1. Though self-financing of operation and minor maintenance by rural communities as a general rule shall always apply, there may be cases where a transparent arrangement may apply, f.e. systems combining urban and rural areas. Community responsibility and contribution should always be part of any arrangement however;
- 2. Institutions in the main shall be responsible for financing of WASH. However schools, clinics and health centers may be incorporated into agreements for funding through the National WASH Program where management capabilities and funding mechanisms allow.
- Ongoing O&M and the financing thereof of education and health facilities are the responsibility
 of the institutions in the main. Contribution levels may differ from community schemes, pending
 discussions between the institutions and the communities using the facility and provisions in the
 institutions' respective recurrent budgets;
- 4. Implementing agencies must ensure both management and technical skills are transferred during the project;

- 5. An agreement between the community and the relevant authorities setting out mutual, accepted responsibilities and commitments shall be a prerequisite for government support, including community contributions;
- 6. The water supply scheme shall be managed by the community, usually through a committee. This committee may be set up specifically for the purpose or an existing committee may take up the task.
- 7. All water supply projects must include a *basic tool kit*. This tool kit shall become the property of the responsible committee to enable basic maintenance to be undertaken on the WASH infrastructure by the community members. The list of tools is included in the *'Solomon Islands Rural Water Supply & Sanitation Design and Construction Standards'*.
- 8. Outside involvement in repair as a result of vandalism will not take place; Vandalism should be reported to the village chief(s) and/or police where appropriate;
- 9. The Provincial WASH branches must work with communities and suppliers to assist in the access to parts and fittings required to keep their rural water supply systems operational and safe.
- 10. The National RWASH Unit may need to assist in the initial stages by providing some assistance for the procurement and storage of high turnover parts and fittings. At the earliest possible stage, the National RWASH shall encourage the PEHD to invest in operations supporting the operation and maintenance of WASH systems.
- 11. Correct inventory and financial records shall be kept by RWASH Provincial and Head Office stores for all transactions undertaken for the purchase of maintenance materials. Materials allocated to the annual WASH Program shall not be available for purchase as maintenance materials.

6. Community Preparation and Training

It is essential that the recipient community has the required skills and knowledge to effectively own and manage their scheme, as well as awareness aimed to ensure sustainability and water security. Implementing agencies must ensure that their projects and programs comply with the procedures and components as set forth in the 'Solomon Islands Rural WASH Community Engagement Guidelines'.

The following general principles apply to all community training/awareness:

- A focus on and preference for *participative* training methods where applicable;
- Inclusiveness: members of all levels within a community must be involved men, women, children and vulnerable groups such as people living with disabilities. To effectively target these groups, separate sessions/groups if necessary. The role of women in the decision making process, management, operation and maintenance shall be encouraged and developed as water and sanitation infrastructure often has the most positive impact upon the lives of women and children.
- To be done prior to construction of the infrastructure, with repeat messages/sessions
 allowed during or immediately after the construction. This is to ensure communities are
 aware, prepared and can implement newly gained skills during the remainder of the project;

RWASH will take the lead on the development of the training/awareness components.

7. Cross-cutting issues

7.1 Climate change

The National Water and Sanitation Sector Plan states that while global evidence of climate change (CC) is increasing, there remain uncertainties regarding the magnitude and timing of climate change, its impacts and details of impact on ecosystems in Pacific Islands Countries (PICs). The best adaptation strategy therefore is to develop the general capacity of a society by building up its institutional structures and human resources while maintaining and enhancing the integrity of ecosystems.

There is considerable capacity to adapt to climate change in PIC communities with their well-developed local institutions, resilient social systems, sensitivity to environmental change, their high degree of equity, and their kinship-based transnational networks.

This mainstreaming of climate change adaption links well with the Integrated Water Resource Management (IWRM) approach, which is based on recognition of the interconnectedness of the hydrogeological, geographical, health, economic, social, cultural, governance, legal and political aspects of water and the importance of an integrated, collaborative approach to achieving sustainable, equitable and fair outcomes. The MMEWR is leading the IWRM approach and its more PIC-relevant "ridge-to-reef" concept, which includes all of Solomon Islands its environments and all levels of society, from community to cabinet.

As changes in climate are amplified in the water environment, the rural WASH sector needs to:

- Closely collaborate with national and international stakeholders in climate change adaptation. This includes broadening the WASH Stakeholders Group (WSG), a sector coordination committee consisting of sector stakeholders, with representatives from relevant ministries (MMEWR, MECDM, MID) involved in CC, and EHD being the leading representative for the rural WASH sector in CC discussions and collaboration;
- 2. Incorporate climate change references in the *Solomon Islands Rural Water Supply & Sanitation Design and Construction Standards* and adopt a flexible approach to technical design and construction standards, acknowledging that simple technical fixes do not exist and technical standards may require adjustments;
- 3. Make us of the opportunity to create awareness at community level on climate change and related subjects such as water security, water use efficiency and disaster preparedness, by including in the *Solomon Islands Rural WASH Community Engagement Guidelines* training modules to this effect;
- 4. Include climate change in M&E of all aspects of the sector's activities, including technical standards, community engagement practices, and management;

7.2 Gender

In the Solomon Islands, as in many parts in the world, collecting water is traditionally the role of women and children (girls). Many household tasks, such as cleaning, cooking, laundry, and looking after young children is also commonly the responsibility of women. Women are therefore the prime users of WASH facilities.

However, equally traditionally, women are often not involved in the decision making process or in management activities. Consequently, WASH projects and facilities may not be best suited to those who use it the most, and women may not have adequate access to those managing the facilities or scheme when issues arise. Thus the sustainability and impact (improved health and livelihood) of the WASH scheme are adversely affected.

Recent studies in Melanesia on gender in rural WASH programs, showed that participatory planning processes (explicitly involving women and men) and advocacy of gender equity in water and sanitation committees resulted in increased rights to, space for and trust in women's involvement in decision making. Together with an increased appreciation and acknowledgement of women's tasks in a community, this may lead to increased sustainability of the WASH scheme.

The sector stakeholders must ensure that gender is a key component of every WASH project and program. Through participatory approaches, the involvement of women must be encouraged and promoted at every stage of a project and for all activities and roles, from survey & design to implementation and (financial) management and O&M. Women's participation in WASH committees should be encouraged but should be seen as more of an indicator of effective gender approaches than an objective or a criteria for assistance.

7.3 People living with disability

A survey conducted in 2005 recorded 14,400 people with a disability of which approximately 85% (12,240 people) live in the rural areas. Thirty percent of the people with disability are physically impaired (3,672 persons), 80% of which (2,938 persons) have a wheel chair.

People with special needs are often overlooked in projects. With a significant portion of the physically disabled population using wheelchairs, and a policy to provide more, access to appropriate WASH infrastructure is of great importance.

For rural WASH projects, the following applies:

- People living with disabilities in the target community must be identified at the initial stages of the project, and the type of disability recorded so that appropriate measures can be included in the project design;
- 2. Appropriate WASH facilities must be constructed for the person living with a disability. The MHMS will take the lead on the development of appropriate technical standards;
- 3. The no-subsidy rule for sanitation does not apply to most, if not all, toilet facilities for persons with special needs, as the cost of adapted facilities quickly fall outside the financial and technical means of the average family;
- 4. Clear discussions and understanding between the project implementer/designer and the disabled person, his/her household *and* community must take place. Often specially constructed facilities for disabled people may be of higher standard or be more convenient and as a result are being used extensively by others in the community or household. This may lead to the disabled person in question not having the access to the facility as required.

8 Responsibilities of stakeholders

The main functions and responsibilities of the stakeholders are:

8.1 Community

Communities shall:

- 1. Identify needs, request, participate in the planning and implementation, manage and maintain their WASH facilities;
- 2. Be responsible for minor repairs and maintenance of the infrastructure, such as tap repair and replacement, pipe repair, replacement of broken pipe joints, repair of small concrete works, and similar;
- 3. Contribute to the WASH project through the provision of food and accommodation for project staff, village labor, and appropriate raw materials, free of charge. Contributions in cash will not release the community of this responsibility;
- 4. Keep safe the materials supplied by the implementing agency and delivered to the project site. Materials remain the property of the implementing agency until project handover.
- 5. Land and resource disputes that arise in the community remain the responsibility of the community to resolve without damage or impinging access to infrastructure.
- 6. All community members have a right to participate in activity consultation and all community members have a responsibility to ensure everyone's right to participate.
- 7. Ensure that the project design allows access to those with special needs.
- 8. Coordinate with and seek endorsement from the PEHD or implementing agency regarding extensions or modifications to the system to safeguard the technical integrity and sustainability of the system. At all times, extensions/modifications need to be reported to the PEHD;
- 9. Major damage to systems, and instances of vandalism must be reported to the relevant authorities (PEHD, Police); Vandalism may also be dealt with through community structures (chiefs);

8.2 Provincial Environmental Health Divisions (PEHD)

PEHD are responsible for and shall:

- Assist communities in their province to design and plan their WASH facilities and advise them on the community's responsibility to self finance the operation and maintenance of their WASH infrastructure;
- 2. Ensure communities are well trained and educated with the objective of improved hygiene and sanitation practices gained by the use of improved WASH infrastructure;
- 3. Ensure communities are trained in basic maintenance of the water and sanitation infrastructure:
- 4. Ensure timely reporting in the format as required by RWASH;

- Plan annual works programs and, in consultation with the Provincial Authorities, coordinate
 and execute program works in line with the annual work program, the Provincial
 Development Plan, Constituency Development Plans, and within set budget and time
 constraints;
- 6. Be responsible for the overall management of materials supplied by the National Program for community WASH infrastructure once in their respective Province;
- 7. Provide to MHMS project, program and financial reports in the requested format and as per regulations;;
- 8. Prioritize the design, planning and execution of works associated with the National Program;
- 9. Assist, coordinate and cooperate with non-government sector stakeholders;
- 10. Ensure adequate coordination and information sharing with the Provincial Authorities;
- 11. Draft, review, and endorse Provincial Water and Sanitation Ordinances.
- 12. Carry out M&E activities;

8.3 Provincial Government

Respective Provincial Governments shall be responsible for and shall:

- 1. Implement and support sustainability of WASH development to rural communities, health clinics, and schools. Where Provincial Government resources are not able to provide these services they will continue to be supported by the Environmental Health Division, RWASH through the Solomon Islands Government.
- Support the PEHD with Provincial revenue annual budget funding, where available, allocated
 to support the operation and logistics of the National Program implementation in their
 respective provinces;
- 3. Develop infrastructure to support both personnel and the aims of the National Program in the delivery of WASH services to rural communities;
- 4. Support the training and capacity building of Provincial WASH personnel;
- 5. Ensure all vacant Provincial positions (direct employees) within the PEHD are filled with suitable personnel funded under the Provincial budget;

8.4 National Rural Water Supply, Sanitation and Hygiene Unit

The RWASH shall be responsible for and shall:

- 1. Coordinate the WASH sector and act as the secretariat for the WASH Stakeholder Group (WSG), to ensure infrastructure is provided in a consistent, equitable, efficient and effective manner by all sector stakeholders;
- 2. Develop and maintain technical design and construction standards for WASH structures and ensure that all WASH projects are designed and constructed according to national standards and are endorsed by MHMS
- 3. Develop, maintain, and enforce community development training and awareness requirements;
- 4. Develop and maintain a WASH database containing both government and non-government development activities;

- 5. Plan and coordinate the National Program, mobilize national and international funding and support, monitor and evaluate sector projects and programs and service coverage.
- 6. Coordinate with and advise the Ministry of Education and Human Resource Development, and church organizations on appropriate water and sanitation infrastructure in schools.
- 7. Ensure adequate and ongoing training for RWASH personnel and increase staffing levels and numbers to facilitate the execution of the National Program and the implementation of this policy, to meet the increasing demand for improved WASH;
- 8. Ensure a safe working environment and enforce safe working practices and facilities for its staff;
- 9. Facilitate a culture of learning by sharing of experiences of stakeholders through the WASH Stakeholder Group;
- 10. Ensure accurate records are kept of the National Program in financial year format for the purpose of reporting and recording;
- 11. Make available its management, technical and information services to the National Disaster Management Office when required;
- 12. Promote and develop partnerships with sector stakeholders to improve and increase service delivery;
- 13. Provide guidance and support in drafting and reviewing Provincial water and sanitation ordinances as appropriate.
- 14. Pursue agreement with Provincial Governments for the implementation of a nationwide policy on community contribution values with the view to ensure all communities across the Solomon Islands are contributing equal effort in the delivery of WASH infrastructure.
- 15. Support research and evaluation of evidence based practices as a basis for decision making;
- 16. Develop IEC materials and an information dissemination strategy to promote WASH in the Solomon Islands:
- 17. Be responsible for the procurement and disbursement of materials needed for the implementation of the works program;
- 18. Be responsible for planning and coordination of the assets and inventory in coordination with relevant ministries and provinces;
- 19. Respond to and adjust the sector's regulations and practices to local and international WASH related developments;
- 20. In cooperation with other relevant ministries and departments pursue optimal financial management systems;
- 21. Develop, review and refine project selection criteria in cooperation with sector stakeholders;

Over time, RWASH envisages to take a more regulatory and monitoring role across the sector and move implementation and construction of projects to sector partners. This has several positive effects in that:

• The capacity of the RWASH and PEHD are not over stretched allowing more time for planning and community education;

- Increase of the skills base of the country as a whole in the WASH sector;
- Potential increased implementation efficiency.

8.5 Aid Donors and Non-State Actors

Aid Donors/funding agencies and Non-State Actors (NGOs, CBOs and FBOs) involved with the delivery of WASH development shall comply with the intent of this policy.

Aid donors shall:

- Seek written endorsement from relevant PEHD offices for any direct requests for WASH support;
- 2. Report all direct WASH support activities to the national and provincial EHD/RWASH office in the formats as stipulated by RWASH for its record keeping and WASH database entry;
- 3. Closely coordinate with RWASH in the planning, designing and implementation of any rural WASH Program;
- 4. Actively participate in the WASH Stakeholder Committee to contribute to sector development and coordination;
- 5. Ensure compliance with the minimum (technical and community preparation) standards as adopted by the Solomon Islands Government;

Non-State Actors shall:

- 1) Ensure compliance with minimum (technical and community preparation) standards as adopted by the Solomon Islands Government;
- 2) Where involved in construction be responsible for the procurement and logistics of the construction materials;
- 3) Coordinate with the RWASH on planned investment strategies and/or areas of investment;
- 4) Report all WASH project activities to the national and provincial EHD/RWASH office in the formats as stipulated by RWASH for its record keeping and WASH database entry;
- 5) Actively participate in the WASH Stakeholder Committee to contribute to sector development and coordination;
- 6) Obtain relevant MoUs with EHD/RWASH and provincial authorities;
- 7) Closely collaborate with EHD in case of disasters;

9 Monitoring and evaluation

With the Ministry's intention to shift its focus from project implementation to regulation of the rural WASH sector, monitoring and evaluation (M&E) will be a key function of the RWASH Program.

M&E is essential to assess project and program progress and success, to improve on the sector's performance, and to adapt to social and environmental changes. EHD/RWASH shall develop and implement an effective and sustainable M&E approach, covering all sector stakeholders' projects.

Key components of the M&E approach are:

- Coverage of WASH: sustainable functioning water supplies, sustainable used sanitation
 facilities, and long-term hygiene behavioral change. This may include getting a 'snapshot' of
 the Solomon Islands WASH coverage every 10 years;
- *Community management*: sustained and effective management and maintenance of schemes by the communities, effectiveness and relevance of the community training package;
- Construction and design: construction progress and compliance, efficiency, appropriateness
 of technical standards in relation to expected service delivery, design life, O&M and
 management needs, and environmental factors (including climate change effects);
- Project identification: fair and transparent project identification;
- Program management, logistics and procurement: efficiency and effectiveness.

Though a water quality monitoring scheme is in place for Honiara, the capacity and resources to extend water quality monitoring to other urban centers and the rural areas are lacking. EHD will take the lead in investigating possibilities to conduct basic water quality testing and monitoring of rural water supply schemes. Initially this may involve testing for basic parameters (pH, temperature, turbidity, and e-coli presence) through the use of portable testing equipment and H2S detection kits, possibly with future expansion through setting up (basic) testing facilities at provincial level. Specific water quality standards for the Solomon Islands do not exist as yet – WHO standards are applied.

10 Information management

Up to date information on the location and operational status of WASH schemes is essential for the planning and coordination of the sector and for M&E purposes. RWASH shall in conjunction with the National Health Information System (HIS) and the sector stakeholders develop and maintain a database. The database will record data of all stakeholders' projects in a basic format to allow for easy management and access to it by all users.

The current HIS format (since 2008) gathers information from each health facility in the Solomon Islands but does not include data per community. The HIS records information relevant to the WASH sector, including: occurrences of diarrhea, eye infections, skin diseases, healthy island/healthy village activities, village health committees and other health promotion activities.

To assist the sector in gathering and maintaining information, reporting requirements will be set, including:

- Quarterly update on completed and planned/ongoing projects in the required format coinciding with the WSG meetings;
- Standard survey & design report format;
- Project Proposal, to be forwarded to the RWASH Headquarters once a WASH project has been accepted for funding;
- Project completion report, in specified format, is to be forwarded to the RWASH
 Headquarters on project completion and including actual scheme costs, infrastructure built,
 location, funding agency and implementation agency among others. This form will allow
 gathering of information on a financial year basis and allow the tracking of trends in the
 sector. The Ministry of National Planning and Development Co-ordination may also benefit
 from inclusion as a recipient of this information.

This reporting will inform and assist in the review and updating of the sectors regulations and standards regarding the future sustainability and growth of rural WASH services.