

Timor-Leste National Basic Sanitation Policy Final Draft– 10/10/2011

PREAMBLE

A high priority of this government is for Timor-Leste to have a **healthy population and environment**. Sustainable improved access to sanitation, environmental health and hygiene behaviour are among the most important ways to achieve this.

Our most recently promulgated **Program of the IV Constitutional** Government

2007-2012 proposes to:

- Legislate for sanitation improvements;
- Rehabilitate existing sanitation facilities;
- Build new sanitation facilities;
- Perform maintenance on such facilities and
- Develop transversal policies that may have a bearing in human health such as: Environmental conservation, sanitary control of products, health education programs, programs to fight diseases originating in animals, nutritional programs and medicine programs.

This document describes the way we propose to achieve these objectives. It outlines the **National Basic Sanitation Policy**. The National Basic Sanitation Policy has been drawn up by all key actors, including government, civil society representatives, service provider NGOs, donors and business interests. It provides guidance, rules, and responsibilities for all stakeholders to contribute to improving sanitation in Timor-Leste. Immediately following this policy promulgation we still need to do more work on strategy formulation, medium term expenditure frameworks and on ensuring that all stakeholders work collaboratively in the implementation of the one long-term plan to reach our National Development Goals. We endorse this National Basic Sanitation Policy and commend all parties to use it in developing their own strategies, workplans and activities.

Eng. Pedro Lay da Silva Minister for Infrastructure Dr. Nelson Martins, MD, MHM, PhD Minister for Health

Table of Contents

DEFINITIONS

Basic Sanitation is defined as the access to adequate sanitation facilities including a latrine for defecation, handwashing facility, safe waste disposal, and drainage to eliminate standing water.

Excreta is defined as faeces and urine.

Hazardous waste is defined as any waste material that can damage the environment or be harmful to human health, such as ignitable, corrosive or reactive substances.

Sanitation is defined as the safe management and disposal of liquid and solid wastes, and the practice of healthy behaviours.

Sewage is defined as solid or liquid waste contaminated with excreta.

Sludge is defined as sewage sediment.

Solid waste is defined as any discarded material that has been discarded, abandoned, or disposed of.

Wastewater is defined as water disposed from domestic, institutional or manufacturing sources including clothes washing, bathing and latrines.

AusAID	Australian Agency for International Development
CVTL	East Timor Red Cross
DWASH	District Water and Sanitation Program
GDP	Gross Domestic Product
G-RDTL	Government of the Democratic Republic of Timor-Leste
INGO	International non-government organisation
МоН	Ministry of Health
Mol	Ministry of Infrastructure
MDGs	Millennium Development Goals
NGO	Non-government organisation
RWSSP	Rural Water Supply and Sanitation Program
SAS	Water and Sanitation Service
UNICEF	United Nations Children's Fund
WSP	Water and Sanitation Program

GLOSSARY

ACKNOWLEDGEMENTS

The National Basic Sanitation Policy has been developed in joint effort of the Ministry of Infrastructure and Ministry of Health with financial and technical support from the Rural Water Supply and Sanitation Program (RWSSP). A policy was prioritized by G-RDTL in 2007 during the development of the Rural Water Supply and Sanitation Strategy 2008-2012 and began full development in 2009. The policy development began with consultations with the Sanitation Working Group, sector donor agencies, and relevant Government Ministries. Since its conception the policy has completed 6 national, 4 regional, 4 topic specific national consultations as well as consultations with the Council of Directorates at the Ministry of Health and with the Ministry of Infrastructure.

We would like to thank several organizations individuals have been key to the policy development and approval stakeholders including: Ministry of Health.

Minster and Vice Minister of Health Cabinet for Policy Department of Environmental Health Department of Health Promotion

Ministry of Infrastructure

Minister of Infrastructure

Secretary of State for Electricity, Water and Urbanization

Directorate of water and sanitation

Department of sanitation

Rural Water Supply and Sanitation Program (RWSSP)

Sanitation Policy Advisor

Sanitation Advisor

All the sector stakeholders such as UNICEF, DWASH program, WSP, Oxfam, CVTL, Plan International, WaterAID Australia, Triangle G.H, the numerous local NGOs, district health officies, district SAS offices, and rural communities.

Special thanks to the Australian Government for support of G-RDTL priorities and specialized assistance through the RWSSP.

SECTION 1: BACKGROUND

1.1 Situational Analysis

Basic sanitation coverage is low in Timor-Leste and the environment is contaminated with uncontained excreta, wastewater and solid waste. Only 39 percent of Timorese are using improved latrine facilities, including 25 percent in rural areas and 81 percent in urban areasⁱ.Excreta disposal is almost exclusively on-site in sewage pits with limited private sector emptying of septic tanks and disposal in pond system only in Dili. Public and Institutional sanitation facilities are constructed by many entities independent to water access and maintenance plans resulting in widespread disrepair and unused facilities. Essential hygiene behaviours such as handwashing with soap are practiced in less than 25 percent of householdsⁱⁱ. Improved access to water supply, which supports sanitation and hygiene improvements, is also low, with 57 percent access in rural areas and 91 percent in urban areasⁱⁱⁱ.

Safe management of solid and liquid wastes are also at extremely low levels, with poor practices including burning of solid wastes and indiscriminate disposal of untreated wastewater. Solid waste collection only exists in Dili through the District Administration, although community disposal, collection, and landfilling are unsafe and poorly managed. Drainage systems are old and poorly maintained combined with unclear roles and responsibilities and lack of resources causing recurrent flooding, especially in low-lying areas of Dili.

The IV Constitutional Government Program 2007-2012, states that the Government "is going to be specially committed ... in sanitary and nutrition promotion which is crucial especially in the most remote areas of the Country"^{iv}; basic sanitation shall be one of the Government's priority areas of infrastructure improvement^v; public investment is a priority in basic sanitation services^{vi}; and notes that the goal to improve the quality of life of the Timorese calls for drainage and sewage [disposal] systems and that, for this purpose, the Government assumes the commitment to develop this sector, and create the conditions to legislate on sanitation^{vii}.

Respiratory and diarrheal diseases remain the top two causes of infant and child mortality in Timor-Leste, both of which are strongly linked to inadequate sanitation and hygiene. Diarrhoea alone is responsible for more than 380 child deaths per year in Timor-Leste.^{viii} There are also strong links between inadequate sanitation, intestinal worms and malnutrition^{ix}, whose combined effects make young children susceptible to predatory diseases like pneumonia, malaria and measles, and can lead to lower school and work productivity, impaired cognitive function, and reduced learning capacity.

Timor-Leste is estimated to suffer economic losses of \$16.9 million a year due to poor sanitation and hygiene. This loss was estimated at 4.8% of GDP in 2006, equivalent to \$17.00 per person per year, based on the economic impact of the preventable mortality and morbidity attributed to inadequate sanitation.^x

Other impacts of inadequate sanitation concern hard-to-measure social issues such as lack of privacy, low social status, harassment, inconvenience, and discomfort. Sanitation users, particularly women and girls, often consider these social factors more important than the health or economic gains associated with improved sanitation due to the high social value and intangible benefits attached to self-respect, safety and cleanliness.

Rural population growth has been outpacing sanitation provision, and urban areas are expected to grow at an even faster pace, reaching 30%^{xi} of the total population by 2020^{xii}. The rate of sanitation improvement needs to accelerate in order to tackle population growth and achieve the objectives set out in the Millennium Development Goals (MDG) and the National Strategic Development Plan (PED):

- 55% rural sanitation coverage by 2015 (100% by 2030 PED)
- 80% urban sanitation coverage by 2015 (100% by 2030 PED)

Access to improved sanitation currently lags behind access to water, thus sanitation development needs to be decoupled from water supply development in order to allow the faster progress needed to close this gap. Water supply is important to the practice of improved sanitation and hygiene, particularly in urban areas, and these related interventions need to be complementary and coordinated; but everyone should use a hygienic toilet, practice improved hygiene and dispose safely of solid and liquid wastes, whatever their water supply situation.

Both urban and rural sanitation need to be addressed by government policy and programs, including excreta disposal, wastewater, solid waste, storm water drainage and hygienic practices. Effective targeting of sanitation and hygiene improvements is particularly important, both for equity reasons and because the bulk of the disease burden and costs of inadequate sanitation are carried by the poorest, most vulnerable and most disadvantaged individuals. Infective pathogens from unsafe excreta disposal will continue to contaminate the local environment if sanitation improvements fail to reach those with the highest disease burdens, thus disadvantaged groups need to be explicitly targeted by programs that aim for improved collective outcomes across entire communities.

The National Basic Sanitation Policy is urgently required in Timor-Leste due to the low coverage of basic sanitation and the high health, social, economic, educational and environmental costs from inadequate sanitation and hygiene; the increased investments to the sanitation sub-sector; and the high variability of implementation of sanitation activities.

1.2 Policy Goal and Vision

Healthy East Timorese living in a clean and hygienic environment.

1.3 Policy Objective

To reduce death and disease and bring about social, economic, educational and environmental gains for all through the safe elimination of harmful waste from the environment and the practice of healthy behaviours.

1.3.1 Policy Outcomes

The policy objective requires the achievement of the following outcomes:

1. Outcome (Orange): An open defecation free environment.

2. Outcome (Yellow): All people practice improved hygiene behaviours all of the time, particularly use of a hygienic toilet, handwashing with soap, and ensure the safe disposal of child and infant excreta.

3. Outcome (Green): All people and institutions always practice safe management and disposal of solid wastes.

4. Outcome (Blue): All people and institutions always practice safe management and disposal of liquid wastes.

1.4 Purpose

The purpose of this National Basic Sanitation Policy is to provide guidance and define rules and responsibilities for sanitation investment and activities for all ministries and sector stakeholders.

1.4.1 What does the policy cover?

- The policy provides a broad framework for safe disposal of excreta and wastewater from domestic, institutional and public settings, the management of storm-water drainage and solid wastes, and the promotion of hygienic behaviours by women, men, and children.
- 2. The policy covers sanitation throughout Timor-Leste, including both urban and rural areas.
- 3. The policy covers all aspects of environmental sanitation in all areas, with a particular focus on safe excreta containment and disposal because human faeces are the primary source of diarrheal pathogens^{xiii}.
- 4. The policy is intended to provide broad guidelines and support the state organ, including its central and local governments, in the formulation of sanitation strategies, investment plans, programmes, projects, guidelines and bylaws.
- 5. The National Basic Sanitation Policy will utilize and be complemented by the National Water Supply Policy in order to provide guidance on improving access to water supply.

1.4.2 Who is the policy for?

The policy is for use by sanitation stakeholders, including the state organ and its central and local governments, development partners, non-government organizations, private sector and community stakeholders, who are involved in regulating, planning, financing, implementing, facilitating or monitoring sanitation and hygiene improvement programs and activities.

SECTION 2: POLICY COMPONENTS

- 1. SANITATION IMPROVEMENT FRAMEWORK
- 2. IMPROVED SANITATION AND HYGIENE
- 3. SANITATION FINANCING

COMPONENT 1: Sanitation improvement framework

Preamble:

Many development partners and Government Ministries specialize and implement activities in only one sector and with one methodology. Sanitation on the other hand requires an integrated series of activities throughout the sector in order to achieve sustainable outcomes for all Timorese. There is a need to ensure that all sanitation improvement consider the range of activities required to bring about change in behaviour, facilities, and operation and maintenance and reach all levels of society especially the most vulnerable. A simple framework for sanitation improvement will ensure support for all critical elements of a program.

Policy	Sanitation improvement shall be guided by a
	framework built on three pillars:
	 a) Increased demand for sanitation goods and services
	 b) Strengthened supply of sanitation goods and services
	c) Improved conditions to achieve sanitation for all

Strategies:

Increased demand for sanitation goods and services

Increased demand for sanitation goods and services shall be achieved through promotion to:

- a) Raise awareness of the costs of inadequate sanitation and hygiene;
- b) Generate demand for improved sanitation and hygiene;
- c) Increase willingness to pay capital and recurrent costs of sanitation services;
- d) Trigger sustainable sanitation and hygiene behaviour.

Strengthened supply of sanitation goods and services

The supply of sanitation goods and services shall be strengthened through sanitation and hygiene marketing and supply chain improvement to:

- a) Increase availability and desirability of sanitation and hygiene goods and services;
- b) Improve affordability of sanitation and hygiene goods and services by scaling up programs, and through the marketing of appropriate, lowcost facilities to poor, vulnerable and other disadvantaged households;
- c) Ensure that a wide range of appropriate sanitation options are available to all, including renters and people living in difficult locations;

- d) Encourage progress towards the sustained use of durable, hygienic facilities by all;
- e) Develop safe sludge management and waste disposal services for household, public and institutional sanitation facilities;
- f) Develop local goods and services through local sustainable markets;
- g) Build the capacity of local organizations, small enterprises and individuals to undertake lead roles in the improved supply of sanitation goods and services.

Improved conditions to achieve sanitation for all

The scaling up of sustainable improvements in sanitation and hygiene requires:

- a) Development of a strategy to achieve the National Basic Sanitation Policy objectives;
- b) Multi-year investment plans formulated to finance the strategy;
- c) Integrated planning of excreta disposal, wastewater, drainage, and solid waste services by all local governments;
- d) Multi-year budgets approved to support relevant ministerial execution;
- e) Implementation programs designed to achieve the policy and strategy objectives;
- f) Use of behaviour change approaches that target women, men, and children to improve awareness, healthy behaviour, and improved sanitation outcomes;
- g) Capacity development programs build new capacity and strengthen existing capacity;
- h) Formulation, promotion and enforcement of local government guidelines, rules and regulations;
- i) Effective coordination bodies mandated to align policy, integrate programs, and coordinate implementation;
- Provision of incentives and credit options for the supply of sanitation and hygiene goods and services to poor households in rural and urban areas;
- k) Establishment of performance monitoring systems and annual strategic reviews.

COMPONENT 2: Improved sanitation and hygiene

Preamble:

The international community has established a high level indicator of success for sanitation, improved sanitation, with the Joint Monitoring Program. Achieving and sustaining the objective of this policy requires further and more specific standards of measurement. Defining the minimum level of service for each area of sanitation in East Timor will help to direct implementers towards common goals and standardize measurements of success. It is important that the indicators and standards of service be set to be realistically achievable and be strongly aligned with the health benefits of sanitation improvement.

PolicyThe minimum level of service of every household,Statement 2:institution, and public place shall be improvedsanitation including a hygienic toilet, handwashingfacility, and safe solid and liquid waste management.

Strategies:

Improved Sanitation

Improved sanitation shall be achieved when all of the following conditions are met:

- a) Use and maintenance of hygienic toilets by everyone all of the time;
- b) Safe management and disposal of human excreta, including infant and child excreta;
- c) Safe management and disposal of wastewater, including septic tank sludge and wastewater from domestic, communal and institutional facilities
- d) Handwashing with soap at five critical times (after defecation, after cleaning a child's bottom, before preparing food, before feeding a child, and before eating);
- e) Preservation of a safe drinking water chain from source to consumption;
- f) Safe management and disposal of storm water;
- g) Safe management and disposal of solid waste;
- h) Safe management and disposal of animal excreta.

Hygienic toilets

The minimum requirements of a hygienic toilet are that it:

- a. Prevents human contact with human excreta;
- b. Prevents the discharge of human excreta into open spaces, drains and water bodies;
- c. Prevents fly, other insect vector, and animal contact with human excreta;
- d. Includes a solid, raised, platform with a smooth and easy-to-sweep finish
- e. Prevents the emission of bad smells.

Handwashing facilities

The minimum requirements of a handwashing facility must be soap and water, however in areas of scarce or unreliable water supply, alternatives may be used. All water points and water collection areas shall be provided with hygienic handwashing facilities, drainage and soakaway systems. A hygienic toilet shall include a handwashing facility wherever reliable water supplies exist.

Liquid and solid wastes

Safe management of liquid and solid wastes will include:

- 1. Solid waste collection and disposal of that minimizes harmful effects to the population and the environment;
- 2. Alignment with strategy that fosters the increasing use of Reduce, Reuse, Recycle principles;

- 3. Improves drainage to minimize flooding in urban areas;
- 4. Integrated management for excreta disposal and treatment;
- 5. Safe collection and disposal of toxic and dangerous wastes, including all medical, industrial and chemical wastes.

Sanitation for all

- 1. A wide range of hygienic toilet and sanitation facility designs shall be promoted to households in a manner that allows them to consider the relative costs, benefits, privacy and accessibility of the various alternatives by all men, women and children in the household.
- 2. Sanitation services shall reach all community members, and recognise the different sanitation needs and hygiene roles of men and women, with a focus on high-risk groups such as pregnant women, carers of infants, children under-five years of age, people with functional disabilities, and other disadvantaged families.
- Institutional and public toilets and other sanitation facilities shall be sexsegregated and accessible to disabled people, with all women's or girls' toilets designed for menstrual hygiene, including the safe storage and disposal of sanitary napkins.

Prohibitions for defecation or urination in public

All private, commercial and public institutions shall provide hygienic toilets and handwashing facilities for use when people are away from home. Open defecation and indiscriminate disposal of human faeces or urine shall be prohibited in public places.

COMPONENT 3: Sanitation Financing

Preamble:

A financing strategy for sanitation improvement must focus on achieving and sustaining the policy outcomes considering not just the construction of sanitation facilities but the critical aspects of operation and maintenance, and the behaviour of the user. Especially with households, but also public and urban facilities, financing of construction and operation and maintenance is integral to the appropriateness and sustainability where user investment in necessary. Additionally a financing strategy that maximises investment of households, civil society, and the private sector will achieve the outcomes quickly and more sustainably. Therefore households and the private sector have a key role to play in the financing of sanitation improvement where public finance should primarily be used to leverage these investments and ensure service for those who are disadvantaged.

PolicyPublic finance shall ensure public sanitation facilities,Statement 3:sanitation promotion, and urban services andinfrastructure while all households are responsible for
their own sanitation facilities.

Strategies:

Household sanitation

- 1. Households shall be responsible for the construction and maintenance of their own sanitation facilities, including a hygienic toilet and a handwashing facility.
- 2. The construction of household toilets and other household sanitation facilities shall not be subsidised except in specific situations where the households are disadvantaged and local government or community leaders identify:
 - a) Extreme poverty;
 - b) Severe disability due to age, disease, injury or other causes;
 - c) Disaster or conflict-affected households;
 - d) Significantly adverse ground conditions (necessitating expensive construction); or
 - e) Lack of space for private toilets.
- 3. Clear and objective national criteria for subsidy eligibility shall be set.
- 4. Suco Councils shall establish a fund sufficient to ensure appropriate subsidy provision to all eligible households.

Sanitation Promotion

- 1. Public finance shall be used to leverage sanitation investments by individual households, small-scale providers, private companies and non-governmental organisations.
- 2. Public finance shall be used to support public health worker and sanitation promoter costs, and for all related promotional activities such as communal incentives, advocacy, social marketing, behaviour change

communications, hygiene promotion, capacity building, demonstration activities and performance monitoring.

Institutional Sanitation

- 1. Public finance shall fund, and leverage investment by others, for the construction of institutional and public sex-segregated and disability accessible toilets and other sanitation facilities in schools, health centres, market places, prisons, transport stations, parks and other public sites.
- 2. The operation and maintenance of public toilets and any other public sanitation facilities shall be funded from user charges.
- No construction public sanitation facilities shall begin until sustainable and effective arrangements for operation and maintenance are agreed with the owners and managers of the facilities.

Incentives for sanitation improvement

- Incentives for the achievement of the different phases of sanitation development shall be provided in as many forms as possible, such as: performance grants, rewards, public awards, competition prizes, promotions, performance bonuses, discounts, fee waivers, tax credits, vouchers and rebates.
- 2. A broad range of incentive mechanisms shall be promoted and implemented by different institutions and stakeholders in order to provide strong and reinforcing incentives for sanitation and hygiene improvement.
- 3. External incentives, whether financed by national or local government, shall be directed at entire administrative units, such as the district, subdistrict, suco or aldeia, and be made available only after the desired sanitation behaviour change has been demonstrated and verified across the entire unit.
- 4. Incremental incentive systems shall be encouraged to reward sustained collective outcomes.
- 5. All communities that eliminate open defecation and achieve category 2, or go on to achieve total sanitation category 5, shall be publicly recognized and rewarded.
- 6. Independent teams shall be contracted to verify all applications for awards or incentives prior to the award and release of funds.

Urban sanitation infrastructure

- 1. Public finance shall be utilised to leverage investment by others and for direct investment in urban sanitation infrastructure such as stormwater drainage, wastewater treatment, sewage treatment and solid waste disposal.
- 2. The operation and maintenance costs of urban sanitation services shall be recovered from the users.
- 3. Investment in urban sanitation services shall be based on an integrated process of urban planning taking account of water supply, demographics and land use requirements, and supported by appropriate bylaws and regulations.

SECTION 3: INSTITUTIONAL APPROACH

3.1 Policy implementation

- 1. A national sanitation strategy shall be developed for the implementation of the National Basic Sanitation Policy during each five-year period following its promulgation.
- 2. A national sanitation investment plan shall be developed to finance each five-year national sanitation strategy.
- 3. A national sanitation program shall be developed to implement each national sanitation strategy, including separate components for urban sanitation and rural sanitation.
- 4. Implementation guidelines shall be formulated to guide the development of sustainable sanitation infrastructure, goods and services in all parts of Timor-Leste.
- Dissemination of the National Basic Sanitation Policy shall be conducted through targeted communication campaigns, training events and workshops.
- 6. Annual policy reviews shall be held to evaluate stakeholder alignment with the National Basic Sanitation Policy, and its effectiveness and relevance.

3.2 Roles and Responsibilities

- National government shall be responsible for ensuring, coordinating and directing investments in sanitation following the policy principles, instruments and financing rules detailed herein, through the following Ministries with the following specific responsibilities:
 - a. **Ministry of Health** through the Directorate of Community Health shall be responsible for sanitation and hygiene including:
 - i. Leading coordination at the national and district level for sanitation and hygiene;
 - ii. Leading development of national strategies, national guidelines, and national research in sanitation and hygiene;
 - iii. Facilitation for the building and use of sanitation and hygiene facilities in households;
 - iv. Sanitation facilities in all health facilities;
 - v. Vector control in both urban and rural areas;
 - vi. Demand creation for improved sanitation and hygiene;
 - vii. Sanitation and Hygiene promotion campaigns.
 - b. **Ministry of Infrastructure** shall be responsible for sanitation and hygiene through the National Directorate of Basic Sanitation for:
 - i. Maintaining the standards for improved sanitation;
 - ii. Strengthening the supply of sanitation goods and services in rural and urban areas;
 - iii. Setting and collection of sanitation tariffs;
 - iv. Integrated planning, development and management in urban areas of:
 - a. Collection, disposal and treatment of excreta and wastewater from septic tanks and pits;
 - b. Operation of centralised and decentralised sewerage systems;

- c. Consultation with the Ministry of State Administration and Territorial Management regarding solid waste;
 and through the General Directorate of Public Works for the integrated planning, development and management of urban storm water drainage systems 0.5 meters or larger in coordination with National Directorate for Basic Sanitation.
- c. **Ministry of State Administration and Territorial Management** through the Directorate of Local Development and Territorial Management, National Directorate of Local Administration and National Directorate of Suco Assistance and Administration shall be responsible for sanitation and hygiene including:
 - i. Suco Competition for sanitation and hygiene;
 - ii. Solid waste management in urban areas, including in markets and public places (except tourist areas);
 - iii. Creating local targets and monitoring systems for sanitation;
 - Public validation and awarding of achievements or incentives for sanitation improvement following monitoring and evaluation framework;
 - v. Public sanitation including operation and maintenance of facilities (excluding schools and health posts);
 - vi. Create and control local sanitation and hygiene by-laws;
 - vii. Invest in community sanitation and hygiene; and
 - viii. Integrate work with Ministry of Infrastructure.
- d. **Ministry of Economy and Development** shall be responsible for sanitation and hygiene including:
 - i. Secretary of State for Environment is responsible for sanitation and hygiene including pollution control and hazardous wastes.
 - ii. Secretary of State for Rural Development and Cooperatives is responsible for sanitation and hygiene including:
 - a. Empowering and developing the private sector for sanitation goods and services;
 - b. Motivating small traders to utilize sanitation and hygiene facilities.
- e. **Ministry of Education** shall be responsible for sanitation and hygiene in schools, including:
 - i. Planning, development and management of sanitation and hygiene facilities in schools;
 - ii. School sanitation and hygiene curriculum;
 - iii. Educating children about improved sanitation and hygiene;
 - iv. Training teachers, and staff on improved sanitation and hygiene.

- f. **The Ministry of Tourism, Commerce, and Industry** shall be responsible for the promotion of clean areas and monitoring sanitation and hygiene in tourist, commercial, and industrial areas including places of trade.
- g. **The Ministry of Finance** shall be responsible to guarantee the planning and provision of integrated budgets following national and local necessities and priorities.
- h. **The Ministry of Social Solidarity** shall be responsible for sanitation and hygiene including:
 - i. Provision of assistance to vulnerable people, households, communities including private and public areas for access to sanitation and hygiene facilities;
 - ii. Setting criteria to identify the extreme poor, vulnerable and disadvantaged households.
- 2. All non-government stakeholders shall be responsible for supporting the government implementation of the policy and operating within its rules and principles.

SECTION 4: MONITORING AND EVALUATION

4.1 Monitoring and evaluation framework

In order to encourage the phased development of community sanitation and hygiene services, and focus initial investments and resources on the primary barriers to faecal-oral disease transmission, the following framework is proposed to monitor progress towards improved sanitation and hygiene:

- a) Category 1 (Red) Zero Sanitation Sucos: with defecation or effluent discharges into open spaces, drains and water bodies; indiscriminate solid waste disposal; inadequate drainage; insufficient institutional toilets; and insufficient handwashing with soap;
- b) Category 2 (Orange) Open Defecation Free (ODF) Sucos: with excretafree open spaces, excreta-free drains, excreta-free water bodies, and excreta-free institutional buildings;
- c) Category 3 (Yellow) Hygienic Sucos: with 100% coverage of hygienic latrines and hand-washing stations with soap; universal safe disposal of infant and child faeces; and verification of continued 'ODF' status;
- d) Category 4 (Green) Litter Free Sucos: free of indiscriminate solid waste disposal, including all household, animal, agricultural, municipal and industrial solid waste; and verification of continued 'ODF' and 'hygienic hands' status; and
- e) Category 5 (Blue) Foul water Free Sucos: free of indiscriminate wastewater run-off and stagnant water bodies; and verification of continued 'ODF', 'hygienic hands' and 'litter free' status.

REFERENCES

¹ Directorate of Statistics (2010), *Timor-Leste Population and Housing Census 2010*, Ministry of Finance, Timor-Leste. Note: these sanitation coverage figures include private or shared use of improved sanitation facilities, but not public sanitation facilities.

ⁱⁱ Calculation based on less than 50% of households with toilets observed with presence of soap¹ and water and sanitation coverage

^{III} Directorate of Statistics (2010), *Timor-Leste Population and Housing Census 2010,* Ministry of Finance, Timor-Leste.

^{iv} p.9, RDTL (2007) IV Constitutional Government Program 2007-2012

^v p.10, *ibid*.

^{vi} p.33, *ibid*.

^{vii} p.56, *ibid*.

^{viii} Calculation based on the following statistics: 46,037 live births per year (Ministry of Health Projection, 2009); Under five mortality rate of 64 per 1,000 live births (Directorate of Statistics, 2009 *Timor-Leste Demographic and Health Survey*); and 13 percent of under-five deaths caused by diarrhoea in Timor-Leste (WHO, 2010 *Global*

Health Indicators Geneva: World Health Organization).

^{ix} Prüss-Üstün & Corvalán (2006) *Preventing disease through healthy environments: towards an estimate of the environmental burden of disease,* WHO, Geneva: Note: WHO estimates that inadequate water, sanitation and hygiene are responsible for 50 percent of the indirect health effects of malnutrition.

^x World Bank (2009) *Timor-Leste: Country Environmental Analysis,* Sustainable Development Department, East Asia & Pacific Region, World Bank.

^{xi} RDTL (April 2010) *Timor-Leste Strategic Development Plan,* RDTL, Timor-Lete. Note: The urban population will grow to over 50% by 2030.

^{xii} Directorate of Statistics (2004) Timor-Leste Census of Population and Housing, Ministry of Finance, Timor-Leste.

^{xiii} Keusch, et al. (2006). *Diarrheal Diseases* Chapter 19 in Jamison, et al (eds.) *Disease Control Priorities in Developing Countries*, 2nd Edition. Oxford University Press and the World Bank.

¹Directorate of Water and Sanitation and Directorate of Community Health (2010), *Sanitation Marketing Research Report*, Ministry of Health and Ministry of Infrastructure, Timor-Leste.