The Independent State of Papua New Guinea
Water, Sanitation and Hygiene Policy
Development in Papua New Guinea

SYNTHESIS REPORT OF TECHNICAL ASSISTANCE

30 May 2014

TWIEA
EAST ASIA AND PACIFIC
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Papua New Guinea Water, Sanitation and Hygiene Policy Development Support

Synthesis Report

Final Report

30 May 2014
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### Abbreviations

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<tr>
<td>DNPM</td>
<td>Department of National Planning and Monitoring.</td>
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<td>Department of Health</td>
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<td>DPRT</td>
<td>Development Partners Round Table</td>
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<td>EU</td>
<td>European Union</td>
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<td>LLG</td>
<td>Local Level Government</td>
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<td>NCD</td>
<td>National Capital District</td>
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<td>NEC</td>
<td>National Executive Council</td>
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<td>NGO</td>
<td>Non-government organisation</td>
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<td>NWSHA</td>
<td>National Water, Sanitation and Hygiene Authority</td>
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<tr>
<td>PCN</td>
<td>Project Concept Note</td>
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<td>PNG</td>
<td>Papua New Guinea</td>
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<td>PPP</td>
<td>Public Private Partnerships</td>
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<td>PSP</td>
<td>Private Sector Participation</td>
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<td>RWSSP</td>
<td>Rural Water Supply and Sanitation Programme</td>
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<td>SDA</td>
<td>Service Delivery Assessment</td>
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<tr>
<td>SOE</td>
<td>State-owned enterprise</td>
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<tr>
<td>STC</td>
<td>Short Term Consultant</td>
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<td>TA</td>
<td>Technical Assistance</td>
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<tr>
<td>WaSH</td>
<td>Water, Sanitation and Hygiene</td>
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Executive Summary

This synthesis report details the process and outcomes of Water and Sanitation Program - World Bank (WSP) Technical Assistance (TA) to Policy Development Support and Capacity Building, Papua New Guinea Water Sanitation and Hygiene (WaSH), P144823.

Context: Papua New Guinea (PNG) has a population of 6.9 million people, 87% of whom live in rural environments. Access to improved water and sanitation has been declining in recent years and as a result PNG is not on track to meet either the Millennium Development Goals, or its own national development targets of 70% access by 2030, and 100% access by 2050. Joint Monitoring Programme (JMP) data for 2010 estimated that only 40% of the population had access to improved water supply and 45% to improved sanitation with significant rural-urban variations. Latest 2013 revised JMP data for sanitation suggests figures to be even lower, at 19% nationally, with only 13% access in rural areas. 1 With approximately two-thirds of the population of the Pacific region, Papua New Guinea falls far behind all its neighbours in providing access to improved water and sanitation. Poor service delivery – despite positive economic growth – is attributed to poor sectoral leadership, unclear roles and responsibilities, a lack of organisational capacity and limited government funding.

The government of PNG has been attempting to develop a national water and sanitation policy since 2005. In 2008 the National Executive Council (NEC) established a multi-agency Task Force for this purpose but due to a lack of leadership it made little progress.

Recent WaSH Policy History: A European Union (EU) funded programme, the Rural Water Supply and Sanitation Programme (RWSSP) operated for 6 years from 2006 and established examples of good practice for rural WaSH service delivery in PNG. However, with little additional funding in the sector and no institutional framework to support a nation-wide approach there was little opportunity for further application of what had been learned once the RWSSP programme ended. Acknowledging this possibility RWSSP organised, with WSP and WaterAid’s support, a National Water and Sanitation Conference in 2011 in order to explore ways forward. This workshop recommended that the Department of National Planning and Monitoring (DNPM) take the lead on developing a national Water, Sanitation and Hygiene Policy. The need for a national policy was further supported by the findings and recommendation in WSP’s 2012 Water and Sanitation Service Delivery Assessment (SDA). 2 Subsequently, in July 2012 the Secretary of DNPM requested technical assistance (TA) from WSP to assist in the policy development process. This request was approved and in November 2012, coinciding with the launch of WSP’s Service Delivery Assessment, the WaSH Policy Task Force reconvened, facilitated by the WSP TA.

Support to the WASH Policy Task Force: WSP provided TA between November 2012 and May 2014 to facilitate the work of the multi-departmental Task Force and to support the development of a

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1 Progress on Sanitation and Drinking Water 2013 Update WHO Unicef. 2013
comprehensive draft WaSH Policy for submission to the NEC. In addition, the objective of the TA was to develop capacity in WaSH sector agencies and improve service provision to the urban poor.

Early on in the TA, terms of reference for the Task Force were revised and the scope of the policy clarified thereby ensuring that it had a focus on improved service delivery of water, sanitation and hygiene. A time frame of 12 months for the preparation of a draft national policy was established. Using a policy template provided by the Department of Health (DoH) the Task Force developed key objectives and service delivery principles. The SDA provided a valuable tool for analysing the challenges and bottlenecks to effective service delivery which the Task Force were able to identify before moving onto the detail of identifying key policy strategies.

An early priority was to begin work on identifying a suitable institutional framework and financing pathways for service delivery and in February 2013 additional specialist TA was provided to support this endeavour. A local TA was also recruited in June 2013 to provide administrative support to the DNPM during the policy preparation process.

TA assisted both the DNPM as chair of the Task Force and the Task Force directly in order to facilitate development of the policy. Throughout this process three key principles were adopted to optimise success:

1) Ensuring the policy was developed based on the best information available
2) Promoting ownership and developing networks between implementing partners
3) Promoting political commitment.

In addition to many individual meetings the Task Force as a whole met nine times during the development of the policy to discuss and decide on content. In addition, the process was informed through field visits to identify challenges and options faced by implementing partners in the field.

Non-government organisations (NGOs) were also part of the Task Force and a strong partnership with WaterAid helped the process greatly, providing additional insights and on-the-ground experience to the process. In addition, the World Bank country office was invaluable in providing logistical support as well as strategic insights and promoting political and donor support.

A first draft WaSH policy was produced after 12 months. This was then circulated widely beyond the Task Force. Four regional consultation workshops on the first draft followed: in the National Capital District (NCD), and Wewak, Goroka and Kavieng Regions.

**Draft Policy Approved by the Task Force:** In March 2014 the WaSH Policy Task Force approved a draft policy document for submission to the NEC. This developed for the first time: disaggregated and revised WaSH targets, fundamental principles of service delivery, consolidated definitions and minimum standards and underlying issues restricting service delivery. Finally, the policy defines seven strategies to achieve the targets, along with resource implications and an implementation schedule.
The draft policy has been well received amongst implementing agencies and appears to have strong political and development partner support.

**National Water and Sanitation Authority (NWSHA):** A significant achievement has been the agreement, after lengthy consultation, of an institutional framework for improved service delivery through the establishment of a new authority, the National Water, Sanitation and Hygiene Authority (NWSHA). The Board of NWSHA – which will be comprised of representatives from the public and private sector as well as civil society – shall be responsible for planning, developing policy, building capacity and regulating the WaSH sector, with a particular focus in services in rural areas. NWSHA will have a head office in Port Moresby as well as Provincial and District offices. These will take an active role in identifying and helping to implement schemes through the provision of training, funding, monitoring and planning support to Provincial and District Governments.

**Capacity Building:** The policy outlines a consolidated approach to WaSH delivery which forms the basis for future capacity assessment. Capacity building based on this has been included as a key strategy in the new draft WaSH Policy. Support to the existing WaSH co-ordinating committee (WASHCOM) was provided, although this body only met rarely during the TA input.

Discussions were held with two provinces which are planning to implement WaSH activities. Both are supported by agencies or individuals involved in RWSSP and are working already to develop the capacity for improved service delivery.

**Piloting Improved Sanitation and Water Service Delivery to the Urban Poor.** A WSP has started formative research on water and sanitation situation in urban settlement areas in PNG which will be completed in mid-2014. In addition, initial support was provided towards the implementation of a water vending pilot but this initiative needed considerable adaptation for the socio-cultural situation in PNG as the communities did not agree to work with private water vendors. Adaptations of the approach were tried using a community management model, but were not successful. This, together with a change of priorities introduced by a new CEO for Eda Ranu, the state owned enterprise responsible for service delivery in Port Moresby, meant that the initial plan for water vending has not been able to proceed, and new pre-paid meters are being explored.
1. **Background**

PNG has a population of 6.9 million with a growth rate of 2.8% accounting for two thirds of the population of the South Pacific Region. The population is predominantly rural (87%) and the country is one of the most culturally diverse on the planet, with at least 841 different languages. Despite a period of positive economic growth which saw GDP increase from US$1,047 in 2007 to a forecasted US$2,255 in 2012, PNG struggles to transform increasing national revenues and per capita Gross Domestic Product into measurable improvements in household income, livelihoods or individual well-being. PNGs poverty headcount has not changed significantly over the last 15 years and development indicators have “stagnated” ranking low against many international comparisons.  

Between 1990 and 2010 access to improved drinking water and sanitation declined as service delivery failed to keep pace with population increase. In 2012, the WHO/UNICEF Joint Monitoring Programme’s (JMP) Progress Update estimated that only 40% of the PNG population had access to improved drinking water sources and 45% had access to improved sanitation facilities. People living in formal urban areas were better off in terms of access to improved drinking water sources (77%) and improved sanitation facilities (71%) compared with those living in rural areas for improved water (33%) and improved sanitation (41%). After revisiting baseline data in 2013 the JMP suggests a considerable and concerning revision to the sanitation coverage figures for 2011. In its 2013 update report the JMP estimates rural sanitation access at only 13%, urban access at 57% and national sanitation access at 19%. With two-thirds of the entire Pacific regions population, PNG lags far behind its neighbours in providing access to both safe water and sanitation. Little information is available regarding access to improved water source and sanitation in peri-urban settlements. PNG is off-track to meet Millennium Development Goal 7 of 70% access to water supply and 70% access to sanitation by 2015 as well as its own development targets outlined in the PNG Vision 2050 and Sustainable Development Plan 2030 that seek 70% access to improved drinking water sources and sanitation by 2030 and 100% access by 2050.

Low access to basic water and sanitation services in part explains (and also exacerbates) the poor gender inequality statistics in PNG as although this situation impacts whole communities, it is the lives and health of women and girls that suffer most from the lack of access to water and sanitation services. Recent research has also suggested that exposure to open defecation has a significant impact on child stunting and cognitive ability. This relationship appears to increase with density of population, making children living in higher density settlements more likely to suffer negative impacts from open defecation.

The Water and Sanitation sector in PNG has lacked the institutional framework and organisational co-ordination for effective service delivery and as such can be considered an ‘orphan’ sector. This is

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4 *The nutritional value of toilets: How much international variation in child height can sanitation explain*? Dean Spears. First circulated: 2012
reflected in the scorecards developed during the Service Delivery Assessment which reflect well in the urban water sector but poorly in the rural water supply and urban sanitation sectors against international comparators including the Central African Republic and the Democratic Republic of Congo. Water PNG is a state owned enterprise (SOE) responsible for delivering water and sanitation services to provincial and district towns on a commercial basis. Capacity and resource constraints mean that it currently operates in only 14 of the 19 Provinces and 6 of the 89 Districts. Eda Ranu, also an SOE, has responsibility for delivering metered water and sewerage to businesses and residents in Port Moresby. Responsibility for delivering water and sanitation services in rural areas is less clearly defined. Water PNG’s mandate includes the “promotion” of water and sanitation on a self-help basis, though there is little evidence of any activity in this regard. The DoH’s role is to develop policy at the national level, direct financial support and provide technical assistance and advice to Provincial Environmental Health Officers, over whom it has no management authority. It also has responsibility for monitoring and enforcing drinking water quality and sanitation standards delegated to it through the Public Health Act, though it lacks the resources to do this. The majority of rural WaSH activities are implemented by non-governmental organisations (NGOs) and church groups, but the scale of this intervention is small in relation to needs.

Inter-ministerial and inter-secoral co-ordination in PNG remains difficult in most sectors, despite the efforts of the government to promote this, for example through new the structures established in its Organic Law. Co-ordination of the many actors involved in WaSH was anticipated through the multi-agency WASHCOM chaired by the DoH, but this has unclear terms of reference, no actual authority and meets only on an ad hoc basis.

The result is that PNG’s WaSH sector development has largely focussed on urban services, as reflected in the access data. Rural areas are poorly served and a growing population in peri-urban and informal settlements also receive limited or no service due to the SOEs having an unclear mandate and lack of experience in working with informal communities.

The Government of PNG has been discussing the need for a National WaSH Policy since 2005 when, in the absence of any overall responsible department, the NEC instructed PNG Water to “a) develop a National Policy for Water Supply and Sanitation Services for the country” and “b) develop a proposal to restructure the Water Supply Services Program to expand and support the rural water supply services taking into account the operations of Eda Ranu and the Local Level Government Water Systems”. A draft policy was subsequently submitted but was not endorsed. In 2008, a Task Force on water policy development was established, however, little progress was made due to poor sectoral leadership arising from institutional ambiguity among stakeholders.

In 2006 an EU funded Rural Water Supply and Sanitation Programme (RWSSP) commenced providing grant funding to over 30 NGOs throughout PNG. The programme ran for 6 years during which time it developed a consensus of good practise in rural WaSH service delivery. In 2011 RWSSP organised a National WaSH conference, supported by the Water and Sanitation Program (WSP) and WaterAid,

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6 See for example WSP SDA examples from the Central African Republic and Democratic Republic of Congo.
to capture and build on the lessons learnt during programme implementation. An outcome from this workshop was that the DNPM should take the lead in a fresh attempt to develop a WaSH Policy.

The Secretary DNPM formally requested technical assistance with this process in July 2012.

2. Overview of the Technical Assistance

This Synthesis Report details the process, activities and outputs of Technical Assistance (TA) P144823 Policy Development Support and Capacity Building, Papua New Guinea Water Sanitation and Hygiene (WaSH). A summary timeline of related activities is summarized in Box 1.

Specific outputs of the TA, which includes the current draft policy, are included in the annexes.

**Box 1: Timeline of WASH Policy Development**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>2005</td>
<td>National Executive Council (NEC) instructs the SOE Water PNG (then PNG Waterboard) to develop a policy to restructure the sector and improve service delivery, particularly to rural areas. The resulting policy document was not endorsed by government, for reasons which are unclear.</td>
</tr>
<tr>
<td>January 2006</td>
<td>The EU RWSSP commences. The programme runs until Sept 2011 providing grant funding to 30 national and international NGOs, community and faith based groups, throughout the country and works in 742 communities. During implementation the programme shares a significant pool of evidence based knowledge between its partners as its focus shifts from water and sanitation to hygiene promotion.</td>
</tr>
<tr>
<td>2008</td>
<td>NEC develops terms of reference for a policy Task Force. With limited sectoral leadership and a lack of common direction the Task Force proves ineffective.</td>
</tr>
<tr>
<td>May 2011</td>
<td>Brisbane WaSH conference. WSP hold introductory meetings with RWSSP team.</td>
</tr>
<tr>
<td>October 2011</td>
<td>WSP PNG Scoping study. recommends areas for WSP support including: “facilitating broader discussion on policy development – through supporting RWSSP to convene a National Conference. Proposes WSP support should be “strategic highly targeted and specific.”</td>
</tr>
<tr>
<td>November 2011</td>
<td>National WaSH conference in PNG. Sustaining achievements: Next steps in Water, Sanitation and Hygiene Development in Papua New Guinea. Organised by RWSSP with support from WSP and WaterAid. Strong support for the development of a WASH policy and identifies key components and DNPM as the lead agency. Conference supports the implementation of a Water and Sanitation Service Delivery Assessment which subsequently commences in early 2012.</td>
</tr>
<tr>
<td>July 2012</td>
<td>Secretary of the DNPM makes a written request to the World Bank for TA to support the WaSH policy development process.</td>
</tr>
<tr>
<td>November 2012</td>
<td>Launch of the Service Delivery Assessment and first TA mission to support WaSH policy development. Task Force reconvened and terms of reference and membership revised. Scope of policy to focus on service delivery confirmed.</td>
</tr>
<tr>
<td>November 2012 onwards</td>
<td>TA missions to PNG working with the Task Force and other sector partners.</td>
</tr>
<tr>
<td>February 2014</td>
<td>Draft WaSH policy prepared.</td>
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The overall objective of the TA was to support the development of a comprehensive draft WasH policy for submission to the NEC. This was to be achieved largely through working with a multi-agency WasH Policy Task Force which was to be re-established after a number of years of dormancy. In addition, the TA was to assist where possible in sharing the lessons learnt from RWSSP and to promote service provision to the urban poor.

The TA was led by Trevor Nott who was responsible for facilitating the Task Force and providing technical input. Trevor had previously worked for 5 years in PNG on the EU funded RWSSP. As such he had developed a close working relationship with many of the WaSH stakeholders and was familiar with country specific issues. This role was supported by Isabel Blackett as Task Team Leader and Penny Dutton, who advised on peri urban sanitation and was the author of the WSPs Service Delivery Assessment. An early priority of the Policy Task Force, chaired by the DNPM, was to clarify institutional responsibilities and in February 2013 Stuart King from Strategy and Economics (S) Pte. Ltd. was recruited to take the lead on institution and financing issues. Later the same year Linda Bade, a local consultant, was recruited to provide DNPM with administrative support.

The TA team was able to draw on support from two key partners to help with the facilitation of the policy development process. WaterAid had worked with WSP since the start of the SDA study and remained a valuable partner throughout, providing insights and support. In addition, the World Bank provided logistical support as well as extremely useful strategic guidance, linkages to a broader development agency network, as well as directly encouraging political support for the WaSH Policy.

A table of mission dates and TA inputs has been included in Annex 4.

2.1 Membership of the WaSH Policy Task Force

Task force membership had previously been determined by the NEC in 2008. This was revisited early on to ensure it remained relevant. It was important that membership was manageable but at the same time reflected key stakeholders in the sector.

The list of members is as follows:

- Department of National Planning and Monitoring (Chair)
- Department of Treasury
- Independent Public Business Corporation
- Department of Health
- Water PNG (SOE)
- Eda Ranu (SOE)
- World Health Organization (WHO)
- Department of Integrated Rural Development
- Department of Provincial and Local Level Government
- Department of Environmental Conservation
- Department of Works
- Representation from the NGO sector (WaterAid, World Vision and Child Fund)
- Additional specific technical assistance as required
2.2 Policy development process

The TA’s main role was both to assist the DNPM as chair of the Policy Task Force and the Task Force to achieve its terms of reference. This required developing appropriate pathways towards the policy completion and facilitating the exchange of knowledge and external information amongst the Task Force members by providing briefing notes, reports, papers and examples of good practice from the broader international WaSH environment, drafting sections of the Policy, commenting on drafts produced by the Task Force and logistical support for meetings. Throughout, the DNPM was an enthusiastic chair with total commitment to completing the policy process.

Organisations represented on the Task Force often had strong individual priorities so meetings required an open forum for discussion, along with many one-on-one meetings in order to address concerns and individual issues. Decisions were rarely made quickly and often required numerous drafts and rewrites to address outstanding issues as they arose. However, this iterative process has resulted in very high ownership for the final draft Policy, and developed a shared understanding of the health and other benefits of improved WaSH as well as the challenges faced by individual agencies.

Developing a policy that stood the best chance of being relevant and maintaining motivation in the Task Force to help ensure the policy will not only be approved by the NEC, but also implemented, required consideration of three key principles:

1. Ensuring the policy is based on the best information available and responds to a strongly felt need

Is there a consensus that a policy is required? Is there clear evidence of the benefits a policy will provide? Is it trust worthy and evidence based? Is the policy itself country specific and relevant and correspondent with in-country and international best practice?

How was this achieved?

Previous experience had demonstrated that there was a strong desire for a WaSH policy and this represented an invaluable starting point. This was supported by the recently completed SDA, which is a useful tool for identifying bottlenecks and the role that a policy would need to play in unblocking them.

It was important that the policy was developed based on the most relevant local data and information. Membership of the Task Force, including government departments, SOEs and NGOs, ensured that those with the most experience of implementing both rural and urban water, sanitation and hygiene initiatives were represented and able to share their experiences. The TA team was also able to share their in-country experience as well as their technical knowledge through the meetings and in written reports and policy discussion papers, and provided additional documents representing international best practice.

Three field visits and four regional consultation workshops helped inform the policy based on local, current experiences and realities.

The wealth of experience and commitment within the Task Force ensured a strong analysis of TA reports and discussion documents leading to informed decision making.
2. Promoting ownership, developing networks and raising awareness/expectation, addressing competing discourses and building trust

How was this achieved?

Promoting ownership was essential during the policy development process. The TA sought to guide and facilitate, ensuring that the authority of the DNPM was clearly established as the chair of the Task Force. The composition of the Task Force, dominated by government departments, also helped strengthen ownership, ensuring that the policy remained firmly government focused, but also had the input and ownership of both water utilities and NGOs’.

All decisions regarding the policy format and content were arrived at through discussion and consensus during Task Force meetings. Facilitating open dialogue during the Task Force meeting was essential in building trust and co-operation in the process.

The Task Force process was supported through regular on-on-one meetings with individual members and other staff in their Departments. When appropriate, meetings were held with more senior management within departments to update them on progress and ensure they were kept informed of policy progress.

It was important to promote networks beyond the Task Force as this would not only inform the process, but raise the profile of the Policy, develop expectations and assist in developing commitment to implementing the policy once it was completed.

In addition to meeting with other agencies in Port Moresby, three field project missions were conducted in order to better understand the challenges of service delivery from the perspective of key stakeholders in the field. Also, four regional consultation visits were conducted with Task Force members to present key policy outputs for comment and feedback. As well as contributing significantly to the policy development process these trips provided opportunities to meet stakeholders and promote ownership within the Task Force as members were required to explain and sometimes defend the policy drafts.

Table 1 below details organisation and individuals consulted and involved with the policy development process, in addition to the Task Force members.

Table 1: Consultations during the Policy Development Process

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<thead>
<tr>
<th>In Port Moresby</th>
<th>Institute of National Affairs</th>
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<tr>
<td>The European Union</td>
<td>Western Provincial Government Advisor (based in Port Moresby)</td>
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<td>National Authorising Office (NAO)</td>
<td>UNICEF</td>
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<td>Support Unit</td>
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<td>PNG Sustainable Development Fund</td>
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<td>ADB</td>
<td>Anglicare</td>
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<td>JICA</td>
<td>CIMC</td>
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<tr>
<td>National Aids Council</td>
<td>Office of Urbanisation</td>
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<tr>
<td>NCDC</td>
<td>Department of Works*</td>
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<tr>
<td>National Statistical Office</td>
<td>Department of Provisional and Local Government Affairs*</td>
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<table>
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<tr>
<th>Outside Port Moresby</th>
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<tr>
<td>Rigo District Local Government staff</td>
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<td>CARE International</td>
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<td>Appropriate Technology Projects (NGO Goroka)</td>
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<tr>
<td>Office of Member of Parliament (Goroka)</td>
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<tr>
<td>Touching the Untouchables (NGO Goroka)</td>
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<tr>
<td>Provincial Health, Kavieng</td>
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<tr>
<td>District Health Manager (Kavieng)</td>
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<tr>
<td>Wewak Provincial and District managers</td>
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*Whilst these two organizations were members of the Task Force they did not attend any meetings, so were consulted independently and as far as possible kept informed of progress.

3. **Promoting political commitment**

Policy decisions are based on political values and interests. Does the policy support existing government priorities/strategies? Is it part of the government narrative? In addition, organisations and donors have their own development agendas and priorities that determine the areas of policy with which they are likely to engage. Is WaSH policy on the donor agenda? Are they putting any pressure on government?

**How was this achieved?**

Developing commitment to the policy was important both to promote its passage through the approval process and to encourage and harmonise development partner projects in support of it in the future.

The WaSH Policy was developed as a means to achieve the government’s existing water and sanitation targets as identified in, for example, PNG Vision 2050, Strategic Plan 2010-2030 and MDG commitments. Separate targets also existed in service providers own development plans such as the Water PNG Master Plan 2012-2030 and the National Health Plan 2011-2025. One of the early achievements of the Task Force was to work through these various targets, include recommendations made in the SDA, incorporate new hygiene targets and, for the first time, produce clear consolidated targets relevant to the whole WaSH sector in a single document. Although these targets had previously existed, there had been no effective strategy or plan to achieve them, nor had institutions been clearly identified as being responsible for their implementation.

Throughout the process it was important to keep higher levels of government informed of progress and to ensure that the WaSH Policy remained in their political consciousness. To help achieve this the Secretary of DNPM was kept informed of progress through meetings and ‘Information Notes’ submitted to both the secretaries of office and the office of the Minister of DNPM updating them on key decisions and timescales. During departmental progress reviews, which the minister attended,
progress and direction of the policy was regularly reported in order to inform but also to ‘test the waters’. This was supported by the World Bank office which wrote to the Minister outlining the importance of the policy and their support for the process. Meeting a Minister can be difficult to arrange, but when the occasion afforded, chance meetings were used to further promote the Policy. This dialogue was essential during the process since the policy was advocating the establishment of a new Authority, with an associated budget, representing a significant commitment of resources. Informal, tacit approvals were received as the process progressed which should help ensure that significant opposition is not met later on.

As a significant supporter of WaSH in PNG, the EU was regularly updated on progress of the Policy, which fortunately coincided with programming for their EDF11 round of funding. Whilst willing to commit significant funds to the WaSH sector, programming was difficult with a perceived limited absorptive capacity, poor sectoral leadership and lack of policy and strategic direction. TA and Task Force members were fortunate to be able to attend an EDF11 programming workshop early on in the process. Later, as the policy became more defined, a briefing note to the EU delegation was prepared outlining key areas of possible support. Finally, a draft copy of the policy was sent to the EU delegation who have responded favorably to supporting implementation of the policy through EDF11 funding.

In addition, with support from the World Bank Country Manager, the TA was able to make a presentation on the recently published SDA to the broader development community at the Development Partners Round Table (DPRT). This was well received and helped raise awareness about the need for a WaSH Policy.

Also contributing to the political/organizational commitment is the recent decision of the DoH to develop a sub policy for WaSH access in hospitals and medical centres, which it is hoped will directly contribute to the WaSH Policy goal of 100% access in all medical centres by 2030.

2.3 Summary of key documents developed for the Policy Task Force and partners

The following documents were developed during the policy dialogue. The aim of the TA was to provide information in a concise and consolidated format that facilitated dialogue and decision making within the Task Force.

- Institutional Evaluation of PNG’s Water and Sanitation Sector. March 2013, Stuart King
- Water Sector Financial Review. July 2013, Stuart King
- WaSH Policy Task Force discussion document. Policy Proposals on Rural WaSH. July 2013, Trevor Nott
- WaSH Policy Task Force discussion document. Policy Targets. 10th July 2013. Trevor Nott
- Opportunities for EU support to strengthen water, sanitation and hygiene service delivery in PNG. Briefing note to the EU delegation. September. 2013 Trevor Nott
3. Overview of WASH Policy

The draft WaSH policy provides a sector background, disaggregated and revised WaSH targets, articulated fundamental principles of service delivery, consolidated definitions and minimum standards and addressed underlying issues restricting service delivery. In addition, the policy defines seven strategies to achieve the targets, along with resource implications and an implementation schedule.

The goal of the National WaSH policy is to contribute towards improving the quality of life, specifically:

1. Reduction in morbidity and mortality caused by water-related diseases.
2. Improved livelihood opportunities and economic growth through improved health and reduced economic and financial losses.
3. Increased equity of services between rural, peri-urban and urban areas, and to disadvantaged groups.

This will be achieved through the objective of “providing equitable access to safe, convenient and sustainable water supply and sanitation, and to promote improved hygiene practices and long term hygiene behaviour change at the personal, household, community and institutional level, particular to rural and urban settlement areas that are currently under-served”.

In order to measure progress against this objective, the policy identifies clearly defined targets:

For water supply:
- In rural areas, 70% of the population has access to a safe, convenient and sustainable water supply.
- In urban areas, 95% of the population has access to a safe, convenient and sustainable water supply.
- 100% of educational institutions and medical centres across the country have access to a safe, convenient and sustainable water supply.

For sanitation:
- In rural areas, 70% of the population has access to safe, convenient and sustainable sanitation facilities.
- In urban areas, 85% of the population has access to safe, convenient and sustainable sanitation facilities.
- 100% of educational institutions and medical centres have access to safe, convenient and sustainable sanitation facilities.
For hygiene:

- 100% of educational institutions and medical centres have handwashing facilities with running water and soap.
- 100% of the households that have access to an improved water supply practice total sanitation

The policy presents clear definitions for all terms used. These targets are recognised as being ambitious and aspirational. They were developed by the policy Task Force considering existing targets included in the PNG Vision 2050, Development Strategic Plan, the Medium Term Development Plan, corporate plans of the SOEs and the Millennium Development Goals, as well as the targets proposed in the WSP Service Delivery Assessment and stakeholder feedback. They are disaggregated, and marginally more ambitious than existing government targets for the sector.

In order to achieve these targets the policy identifies seven strategies;

1. Improved sector coordination and leadership, through the establishment of a new Authority known as the National Water, Sanitation and Hygiene Authority. (NWSHA)

2. Increased WaSH sector funding.

3. Develop and manage an effective management information system.

4. Improved and consistent approaches to WaSH service delivery.

5. Appropriate technology promotion.


7. Sector capacity building and training.

Finally, the policy outlines resource implications in terms of the investments required to establish NWSHA, the investments in infrastructure and the additional human resources required, along with an implementation schedule.

4. National Water, Sanitation and Hygiene Authority

Strategy 1 of the Draft WaSH policy refers to the establishment of the National Water, Sanitation and Hygiene Authority (NWSHA). WaSH service delivery in PNG has been restricted due to the lack of an effective organisational framework. More specifically:

- The absence of any senior policy making body for the sector except for the Department of Health (DoH) which, historically at least, has exerted limited influence over water and sanitation service delivery and IPBC which, as the historic shareholder of the state owned enterprises (SOE), exerts some corporate control over Eda Ranu and Water PNG but no real policy making influence.
• Even if there was a sector-wide, WaSH policy making function there is also limited policy coordination across the different agencies involved in the WaSH sector. This translates into a lack of alignment between national policy and provincial or district implementation (as well as between provincial and district level government) and an absence of momentum or pressure in relation to policy implementation. Rural WaSH development is the biggest loser here but the sector as a whole suffers from this lack of centralised policy formulation, coordination and execution.

• The absence of any firm or direct relationship between WATSAN utility operators and most urban (outside of the NCD) and rural customers. This is particularly true for the rural sector where the Provincial and District government generally fail to make WaSH development a priority and the DoH has only a limited impact. In urban areas, which are the responsibility of Water PNG, the vast majority of district towns and a significant proportion of provincial towns remain un-served by the utility despite its monopoly service mandate.

In March 2013, the WaSH Task Force was presented with an Organisational Report setting out four institutional options that could potentially help overcome these challenges presently confronting PNG’s WaSH sector. These options were discussed at WaSH Task Force meetings held in March and May 2013 and, although there was not full consensus among stakeholders on the best institutional model to adopt, it was agreed that one of the approaches – the establishment of a National Water, Sanitation and Hygiene Authority (NWSHA)– should be further developed to both better understand how it would be structured and operate and, allied to this, whether this model can manage to meet the multifarious demands it would likely face in order to successfully progress the development of PNG’s rural and urban water and sanitation sectors.

A second Organisation Report containing a detailed description of how NWSHA would be structured and operate as well as a high level implementation plan was prepared in May 2013. The Report was discussed with the WaSH Task Force at a series of meetings held in June, September October and November 2013 until consensus was reached on NWSHA’s operational remit and how this ought to be represented in the WaSH Policy document. Key elements of NWSHA’s operating mandate include:

• As illustrated in the Figure below, the NWSHA will have a central headquarters as well as offices in Provinces and Districts, established in accordance with the implementation of a Development Plan that NWSHA will produce upon its establishment.

• The Board of NWSHA – which will be comprised of representatives from the public and private sector as well as civil society – shall be responsible for developing and implementing policy for the WaSH sector. The Board may choose to do this by itself or it may set up special purpose working groups to deal with particular issues or concerns. The Board will replace the existing national WASHCOM.
The NWSHA’s role with respect to National co-ordination and leadership will include:

i. Disaggregating national targets /goals in relation to WaSH development.

ii. Translating these targets / goals into a phased Development Plan that sets out in detail how water and sanitation system development will be implemented and coordinated among relevant stakeholders. The Development Plan will contain a clear prioritisation strategy for how WaSH targets will be achieved and the budgetary requirements associated with Policy implementation.

iii. Ensuring adoption and mainstreaming of all WaSH Policy principles.

iv. Identifying and allocating funding support to WaSH development activities (including Community Service Obligation (CSO) mechanisms).

v. Assuming responsibility for appropriate regulation that will include water quality regulation, other technical regulation and, solely in relation to non-state-owned-enterprises, economic and competition regulation. The application of regulation oversight will be applied at a level appropriate for the scale and size of the water and/or sanitation utility concerned.

vi. Increasing private sector engagement in relation to WaSH infrastructure development and service delivery.

vii. Maintaining the WaSH Monitoring Information System (MIS) to help monitor and evaluate WaSH sector development and the achievement of National WaSH Policy objectives and targets.
viii. Developing alternative/innovative service provision programmes such as franchising schemes, output based aid (OBA) schemes, etc.

ix. Conducting communication activities in support of WaSH sector development such as raising awareness of the role of the NWSHA, informing stakeholders of ongoing and planned WaSH sector investment activities and promoting understanding of the importance of WaSH service delivery.

- The NWSHA’s role with respect to urban WaSH service delivery will include:
  i. Providing support to existing and new operators to develop and implement plans to extend service provision to new urban areas through identifying potentially commercial locations and assisting with funding sources and appropriate service provision approaches.
  ii. Ensuring that all new interventions in urban areas include clearly identified strategies for providing services to poor and urban settlement areas.
  iii. Developing and assisting in implementing specifically targeted strategies, in partnership with service providers, to ensure services are developed and improved to currently unserved customers in existing territories, particularly urban settlements. Developing strategies will involve:
     a. Identifying opportunities for CSO funding and providing assistance with applications.
     b. Identifying potentially commercially viable service delivery options.
     c. Helping identify new and additional sources of financing.
     d. Supporting the development of new approaches to better serve peri-urban settlements.
     e. Assisting SOEs and other service providers in dealing with issues of non-payment and non-revenue water reduction.
  iv. Identifying and supporting new operators to provide water and sanitation services to urban customers.
  v. Providing support to all urban WaSH operators with respect to issues that have broad stakeholder or sector relevance.

- The NWSHA’s role with respect to rural WaSH service delivery will include:
  i. Providing assistance to rural WaSH facilitation and implementation organisations, including provincial, district and local level administrations, provincial health offices, NGOs and the private sector to support the planning and implementation of water, sanitation and health infrastructure at rural community level.
  ii. Assisting in the development of water and sanitation investment and service support plans to be submitted to local and district level government authorities.
  iii. Ensuring Service Improvement Program (SIP) support includes sustainable WaSH activities.
  iv. Providing funding support in relation to rural WaSH development in the absence of sufficient SIP support.
  v. Working with development partners to increase finance and support rural WASH development initiatives.
vi. Working with the SOEs and other operators to identify opportunities to extended existing urban service areas to surrounding communities and identifying other support that utilities can provide to rural communities

This last set of responsibilities relating to helping to extend WaSH service delivery in rural areas is particularly important. Essentially the NWSHA provincial or district field office will take an active role in identifying and helping implement rural schemes through the provision of training, funding, monitoring and planning support.

5. Overview TA Achievements against PCN Outputs and Outcomes

A summary of outputs against the project concept note is included in Table 2.
Table 2: Summary of Achievements against Outputs anticipated in the PCN

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<th>Intermediate Outcome</th>
<th>Outputs</th>
<th>Achievements</th>
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| A WaSH sector Policy, including urban and rural subsectors, developed and adopted by Government of PNG. | • Advice to a multi-stakeholder Task Force in developing key policy documents including vision, principles, objectives and targets.  
• Recommendations provided for appropriate organizational and institutional responsibilities and processes for implementing the Policy.  
• Identification of opportunities to pilot key policy processes and integrate gender appropriate approaches. | • Draft WaSH Policy developed and approved by Task Force.  
• Revised institutional options discussed and agreed and summarized in the policy and supporting documentation.  
• It is still too early to pilot the policy processes. This needs to happen after the policy has been approved and represents a critical initial stage of the policy roll out. |
| WaSH service delivery capacity improved across sector agencies.                      | • Assessment of the key skills and capacity required for rural WaSH implementation.  
• Capacity development of rural WaSH implementing organizations through lessons learned in the recent EU funded RWSSP.  
• Support to strengthen the capacity of the National Water, Sanitation and Hygiene Committee (WASHCOM).  
• Support through advice, training and examples of best practice to provincial governments departments implementing rural WaSH programs. | • Policy contains a consolidated approach to WaSH service delivery. This will form the basis of a capacity assessment and has been included in the TORs of NWSHA.  
• Currently there is little funding for WaSH outside of DFAT (Australia) Community Sector Organization (CSO) WaSH funding which is being implemented by ex RWSSP NGOs. Will form part of NWSHA TORs.  
• Attempts were made to support WASHCOM, but few meetings were scheduled. Expectation is that NWSHA will largely replace WASHCOM.  
• Discussion held with two provinces (New Ireland and Western) to assist with implementation of their WaSH programmes. Linkages facilitated between Western Province and World Vision to improve WaSH service delivery. New Ireland yet to start. |
| Improved service provision to the urban poor.                                        | • Formative research undertaken on the status and needs of peri-urban sanitation in PNG with a gender focus and dissemination of results.  
• Assistance provided to Eda Ranu on monitoring pilots to reduce non-revenue water, by serving low income urban communities though water vending. | • The peri-urban settlements research has been designed, started and is ongoing.  
• Eda Ranu had a change of senior management during the TA period In addition, a decision was made early on to stop the water vending Programme and identify possible alternatives. |
5.1 Draft WaSH sector Policy developed and adopted by Government of PNG

5.1.1 Facilitation of the WaSH Policy Task Force

During the TA period between November 2012 and completion of the WaSH Policy draft for submission, the Task Force met nine times. In addition, three field visits were conducted to Goroka District, Wewak District and Rigo District in order to better understand the challenges of service delivery, and four Regional consultation workshops were held by Task Force members in NCD, Goroka, Wewak and Kavieng in order to present early drafts and discuss comments and observations.

In its early meetings the Task Force revised their Terms of Reference and membership. Subsequent meetings looked at the Purpose, Objectives and Principles of the policy before looking at how these would be achieved.

Policy Strategies became clearer during the Task Force discussions, as members discussed the challenges they faced in delivering services and, with the TA, identified potential solutions. These were consolidated by the TA under summarized headings for discussion.

Finally seven policy strategies were approved by the Task Force:

1. Improved sector co-ordination and leadership
2. Increased WaSH sector funding
3. Develop and implement effective management information systems for the WaSH sector
4. Improved and consistent approaches to WaSH service delivery
5. Appropriate technology promotion
6. Enhanced private sector participation and partnership
7. Increased sector capacity building and training

The Task Force used a raft of existing documents, TA produced materials and international examples to reach its decisions. The SDA provided an invaluable support for identifying the key issues and bottlenecks and to provide financial estimates on costs for improving service delivery.

There exists no standard government template for a policy paper and so an example was provided by the DoH and approved for use by the Task Force. A first draft of the WaSH Policy was prepared in November 2013 in line with the original Task Force commitment made at its first meeting for a draft policy to be made available within 12 months. This was then informed through one–on–one meetings with all Task Force members and through the four Regional consultations. A final second draft was approved, in principal, with minor modifications at the Task Force meeting held on the 12th March 2014.

For the first time, PNG has a draft policy document that details disaggregated and revised WaSH targets, establishes fundamental principles of service delivery, provides consolidated definitions and minimum standards, identifies underlying issues that cause blockages in the service delivery pathway, describes strategies to address them and, in so doing, aligns thinking as a sector, builds consensus, improves co-ordination and creates common objectives.

5.1.2 Recommendations for organizational and institutional responsibilities

In March 2013, the WaSH Task Force was presented by the TA lead on Institutions with an Organisational Report setting out four institutional options that could potentially help overcome
challenges presently confronting PNG’s WaSH sector. These options included establishing a new WaSH Department, formally allocating WaSH responsibilities to an existing government department, establishing a WaSH Authority and establishing a Rural WaSH Agency. These options were discussed at WaSH Task Force meetings held in March and May 2013. As one would expect, the views of Task Force members reflected their particular concerns and interests – the Department of Health for example, were particularly anxious that rural WaSH be made a priority. Although there was not initial consensus among stakeholders on the best institutional model to adopt, the discussions culminated in the decision that the establishment of a WaSH Authority (National Water, Sanitation and Hygiene Authority) would be explored further.

A second organisation report containing a detailed description of how NWSHA would be structured and operate as well as a high level implementation plan was prepared in May 2013. The Report was discussed with the WaSH Task Force at a series of meetings held in June, September, October and November 2013 until consensus was reached on NWSHA’s operational remit and how this ought to be represented in the WaSH Policy document. Key discussion points during these meetings that were later adopted in the final policy document included:

- The recognition that hygiene promotion is intrinsic to achieving effective water and sanitation outcomes led to the proposed name of the organisation changing from the National Water and Sanitation Authority to the National Water, Sanitation and Hygiene Authority and a broadening of the scope of responsibility for the Authority.
- Identification of Board members – organisations such as the Chamber of Commerce were added to the multi-stakeholder Board.
- A description of how the NWSHA would help extend WaSH services to rural areas. This led to the formulation of a rural policy intervention framework that is illustrated and described in the Report and summarised in the Policy
- The proposal that NWSHA should establish one (or more) WaSH Funds controlled by an independent board chaired by the NWSHA that is dedicated to finance the extension, rehabilitation and maintenance of WaSH service delivery, particularly in rural and peri urban settlement areas. The Government of PNG would be expected to contribute a minimum annual amount to this Fund.
- How NWSHA and its facilitation / implementation partners will work with provincial, district and local level government to ensure that funding dedicated to WaSH service delivery activities is included in the Service Improvement Program (SIP) funding process and that the money earmarked for WaSH investment is utilised efficiently and effectively.

5.1.3 Review of sector financing, tariff setting and operational efficiency
A Report was produced that analysed the financial status of PNG’s water and sanitation sector. The Report reviewed the financial status of the two State Owned Enterprises (SOEs) – Water PNG and Eda Ranu – that operate in the sector as well as analysing the scale and scope of national government and development partner funding that is directed towards the WaSH sector. The principal objective of the Report was to highlight the relative lack of funding that has historically been directed towards water and sanitation infrastructure development and service delivery and to assess the capability of the two SOEs to help address this problem.
More specifically, the Report sought to assess how funding may be sourced to finance the considerable amount of new investment that will be required to extend service delivery to the estimated 4.2 million Papua New Guineans (59% of the population) that presently do not have access to safe water as well as the approximately 3.8 million people (55% of the population) that do not have access to improved sanitation.

This investment can realistically come from a number of sources including:

- Self-generated funds from Eda Ranu and Water PNG.
- Eda Ranu and Water PNG (or other licensed entities) utilising commercial loan finance.
- National budget expenditure which may take the form of loans or grants provided to the WATSAN sector operators.
- National budget expenditure directed towards the Department of Health (DoH) that, according to the National Health Plan 2011-2020, is formally allocated responsibility for rural water and sanitation service provision.
- National budget expenditure provided to provincial, district and local level government under the Service Improvement Programme (SIP) that is expected to be used principally for infrastructure development (including WaSH) purposes.
- Development banks providing grant or loan financing to WaSH sector operators.

Unfortunately, none of these funding sources stands ready to deliver the required investment. The SOEs (and Water PNG in particular) have limited capability to fund system expansion and rely on national government budget support. The national government expects the utilities to act in a commercial manner and provide their own investment funding, whilst the development partners (principally the ADB, EU and JICA) intermittently fund some important water and sanitation programmes but these meet only a fraction of the full need. Meanwhile, the Department of Health (DOH) directs very little money towards water and sanitation infrastructure development outside of hospitals and clinics. Regional and local government authorities have no systematic programme for water and sanitation funding spending, relying instead on district and local level government to include such provision in their development plans which occurs on a seemingly random basis.

The Report was circulated to WaSH Task Force members and some limited feedback was incorporated into the document.

5.1.4 Potential for private sector engagement in PNG’s WaSH Sector

A Note was produced that provides an overview of the potential for Private Sector Participation (PSP) and/or Public Private Partnerships (PPP) in PNG’s WaSH sector, the key barriers that stand in the way of successfully expanding the role of the private sector in the sector and some possible solutions to these impediments.

The Note is intended for use by the WaSH Policy Task Force and, ultimately, the National Water, Sanitation and Hygiene Authority as it considers how private sector engagement in the WaSH sector may be enhanced.

The motivation for producing the Note is strongly linked to the sector funding issue discussed above – in the absence of sufficient government funding for water and sanitation infrastructure investment
and extension of service delivery to both urban and rural customers, then what potential is there for the private sector to step in and fill the gap?

The note was finalised in February 2014 and distributed to the WaSH Policy Task Force members shortly thereafter. No feedback or discussion has taken place at the time of writing.

5.2 WaSH service delivery capacity improved across sector agencies

5.2.1 Capacity development

During its six years of implementation the RWSSP process developed a considerable understanding of current best practise in the PNG WaSH sector. Opportunities were explored to share this learning during TA missions. Unfortunately, very little funding was available to implement WaSH activities post RWSSP so the sector was rather quiet. Options to implement WaSH activities for the DoH were limited, with no institutional instruction to do so and no funding available. The TA did discuss options with the WHO representative in the DoH, who had funding, and instigated a programme of Community Led Total Sanitation (CLTS) training for Provincial Health Advisors which is currently on going. Outside of a few NGOs implementing rural WaSH (all of whom had already been involved in RWSSP) the only significant rural WaSH plans were in Western Province and New Ireland where Provincial governments had committed to implementing significant programmes. Discussions were held with the Western Government’s principal advisor. World Vision, a key implementing NGO under RWSSP, had already expressed a desire to work in Western Province as part of its AusAID (DFAT) funded CS WaSH submission and so advisor and World Vision were put in contact with each other and it is understood that discussions with the provincial government have significantly increased World Vision’s original scope of work.

Discussions were also held with the New Ireland Provincial government who provided a copy of their WaSH programme outline for comment. This programme had not started by the end of the WSP TA input. Within the private sector, the Digicel Foundation construct classrooms and community centres throughout the country. An ex-employee of the RWSSP TA is now employed at the Foundation and is rolling out a programme of water supply, sanitation and hygiene promotion for all these venues.

Lessons learnt from RWSSP also contributed significantly to the development of the Policy, particularly Strategy 4 (Improved and Consistent Approaches to WaSH Service Delivery) which reflects the lessons learnt and best practise identified during RWSSP implementation. As funds become available to implement WaSH activities more widely this will form a basis of the identification of capacity needs.

5.2.2 Support to strengthen the capacity of the National Water, Sanitation and Hygiene Committee (WASHCOM)

The WASHCOM is chaired by the DoH. Only one meeting was held during the TA period principally because during the policy development process it became clear that the proposed authority, NWSHA, would effectively replace WASHCOM. As a result there was little enthusiasm from the DoH during this period to call a meeting.
5.2.3 Support to provincial governments departments implementing rural WaSH programs

This outcome was largely dependent on activities, or detailed programming, having started. Discussions were held with two provincial governments (Western Province and New Ireland). Neither province had begun implementation during this TA period. Western Province were being supported by World Vision, which had an excellent track record of WaSH implementation during RWSSP, and New Ireland by an ex-employee of the RWSSP team.

5.3 Improved service provision to the urban poor

5.3.1 Formative research on peri-urban sanitation with a gender focus

Research is currently ongoing into the existing sanitation and water conditions and barriers to sanitation in urban settlements. Locations for conducting the research have now been identified in Port Moresby and Wewak and the surveys have started. The scope of the research has been decided together with stakeholders interested in the findings (Eda Ranu, Water PNG, National Capital District Commission, and NGOs) who are also contributing staff to the research. Settlement profiling and focus group discussions commenced in five Port Moresby settlements during March 2014. Research in three settlements in Wewak will take place during May 2014.

5.3.2 Monitoring pilots on reduce non-revenue water in Port Moresby

Eda Ranu had been intending to implement a pilot scheme using water vendors in order to reduce high levels of non-revenue water\(^7\). This was supported by WSP through arranging a Water Service Providers Knowledge Exchange in Port Moresby by the President National Water and Sanitation Association of the Philippines in February 2012. In addition a study tour was organised to Manila by Eda Ranu, private sector and community members in April 2012.

In November 2012, WSP was briefed that Eda Ranu had initiated similar pilot activities in Port Moresby. This pilot was short lived and unsuccessful due to particular social conditions in PNG based on clan and tribal affiliations and deeply held concepts of resource ownership, benefits and management. These require very considered and resource intensive participatory approaches. As a result a new community management approach was developed in order to reduce non-revenue water costs, but this too proved unsuccessful. As these pilots were being implemented an unexpected change in leadership at Eda Ranu resulted in a change in priorities for the organisation and less support for the pilots. Eda Ranu are now considering a pre-paid token scheme.

6. Summary

Finalising the draft WaSH Policy represents a significant achievement for the Task force. The policy consolidates, for the first time, government and organisational service delivery targets, disaggregated into rural and urban environments. In addition, it develops new, and consolidates existing, definitions and minimum standards along with agreed service delivery principles across the whole sector, and raises the profile of hygiene behaviour change as the ultimate goal of WaSH

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\(^7\) Non-revenue water refers to water that is ‘lost’ in the system - either used by consumers or lost through leakages etc, and not paid for.
interventions. Finally, it clearly identifies key blockages to effective service delivery and promotes clear strategies in which to address them and achieve the policy objectives. In so doing, the policy aligns sector thinking, builds consensus, improves co-ordination and creates common objectives. This should significantly improve the ability of the Implementing agencies, the government as well as the donor community to work together in order to achieve WaSH access targets.

Success has been the result of a number of key factors. Firstly, whilst not high on the government agenda, the government was committed to the policy development process and proactive leadership was provided from the DNPM. Consequently, WSP was able to respond in a timely way to a growing momentum for policy change by providing additional evidence through the SDA and appropriate TA. Secondly, the TA facilitated a highly inclusive and interactive consultation approach to the policy development, based on the facilitation of the Policy Task Force and chairmanship by DNPM which allowed for open, frank and detailed exchanges of opinions and ideas.
Annexes

Annex 1. PNG National Water, Sanitation and Hygiene (WaSH) Policy

Annex 2. Institutional Evaluation of PNG’s Water and Sanitation Sector

Annex 3. Establishing a National Water, Sanitation & Hygiene Authority

Annex 4. Dates of TA Inputs and Missions

Annex 5. Task Force meeting dates and key decisions
PNG National Water, Sanitation and Hygiene (WaSH) Policy

2014-2030

Version: 09.05.14
Second Draft
Foreword


Access to improved water sources and safe sanitation has been declining in recent years as services fail to keep up with population growth and demand. This has resulted in the increased incidence of disease and hardship felt most acutely by the more vulnerable in our society. The Papua New Guinea WaSH policy aims to reverse that trend and improve water, sanitation and hygiene service delivery for the benefit of the people of Papua New Guinea, and in doing so improve personal health, productivity and well-being. Access to these services is a vital component of sustainable development and the alleviation of poverty.

The policy prepares the framework for better services and is to be used by all WaSH stakeholders who are involved in regulating, managing, planning, financing, implementing, facilitating or monitoring water supply, sanitation and hygiene improvement programs and activities. Through this collaborative approach we will be working together to achieve the government’s Development Strategic Plan target of 70% accessibility to water supply and sanitation by 2030.

The successful implementation of this policy will contribute towards improving the lives of the majority of PNG’s citizens, enhancing their productivity and participation in the reconstruction of our country through better water, sanitation and hygiene services in Papua New Guinea.

________________________  ______________________________
Hon. Charles Abel, CMB, MP,  Hon. Michael Malabag, CMB, MP,
Minister for National Planning  Minister for Health
Acknowledgment

A multi-agency Task Force, including government and non-governmental agencies, was established to prepare this policy document. The Task Force members included:

- Department of National Planning & Monitoring (as Chair)
- Department of Treasury
- Independent Public Business Corporation
- National Department of Health
- Water PNG
- Eda Ranu
- Department of Implementation and Rural Development
- Department of Environment and Conservation
- Department of Provincial and Local Level Government Affairs
- WaterAid (PNG)
- Child Fund
- World Vision
- World Health Organization (WHO)

Technical assistance to the Task Force was provided by the Water and Sanitation Programme (WSP) of the World Bank.

The Task Force sought opinions from a broad range of sector stakeholders across the water, sanitation and hygiene sector.

Thank you all.
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ANNEX ONE: NWSHA ...........................................................................ERROR! BOOKMARK NOT DEFINED.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<tr>
<td>CACC</td>
<td>Central Agencies Coordinating Committee</td>
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<tr>
<td>CLTS</td>
<td>Community Led Total Sanitation</td>
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<tr>
<td>CSO</td>
<td>Community Service Obligation</td>
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<tr>
<td>DEC</td>
<td>Department of Conservation</td>
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<td>DNPM</td>
<td>Department of National Planning and Monitoring</td>
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<td>DoH</td>
<td>Department of Health</td>
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<tr>
<td>DSIP</td>
<td>District Services Improvement Programme</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>GoPNG</td>
<td>Government of Papua New Guinea</td>
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<tr>
<td>ICCC</td>
<td>Independent Consumer and Competition Commission</td>
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<td>IPBC</td>
<td>Independent Public Business Corporation</td>
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<td>IWC</td>
<td>International Water Centre</td>
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<td>JICA</td>
<td>Japanese International Co-operation Agency</td>
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<td>JMP</td>
<td>Joint Monitoring Programme</td>
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<td>K</td>
<td>Papua New Guinea Kina</td>
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<td>LLG</td>
<td>Local Level Government</td>
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<td>MDG</td>
<td>Millennium Development Goals</td>
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<td>MIS</td>
<td>Management Information System</td>
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<td>MTDF</td>
<td>Medium Term Development Framework</td>
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<td>NCD</td>
<td>National Capital District</td>
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<td>NEC</td>
<td>National Executive Council</td>
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<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>NWSHA</td>
<td>National Water, Sanitation and Hygiene Authority</td>
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<td>O&amp;M</td>
<td>Operation and Maintenance</td>
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<td>OBA</td>
<td>Outputs Based Aid</td>
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<td>ODF</td>
<td>Open Defecation Free</td>
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<td>PHAST</td>
<td>Participatory Hygiene and Sanitation Transformation</td>
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<td>PPP</td>
<td>Public Private Partnership</td>
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<td>PSIP</td>
<td>Provincial Services Improvement Programme</td>
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<td>PSP</td>
<td>Private Sector Participation.</td>
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<td>SIP</td>
<td>Services Improvement Programme</td>
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<td>SOE</td>
<td>State Owned Enterprise</td>
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<tr>
<td>VIP</td>
<td>Ventilated Improved Pit Latrine</td>
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<td>WASCOM</td>
<td>Water and Sanitation Committee</td>
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<td>WaSH</td>
<td>Water, Sanitation and Hygiene</td>
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<td>WASHCOM</td>
<td>Water Sanitation and Hygiene Committee (formerly WASCOM)</td>
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<tr>
<td>WHO</td>
<td>World Health Organisation</td>
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<td>WSP</td>
<td>Water and Sanitation Programme</td>
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Executive Summary

Papua New Guinea (PNG) has never previously had a water, sanitation and hygiene (WaSH) policy.

In urban areas, responsibility for providing piped water and sewerage services in the nation’s capital, Port Moresby, lies with Eda Ranu; and for the remaining provincial and district towns, responsibility for water and sanitation services lies with Water PNG (formerly the PNG Water Board). Service provision to these areas is reasonable (87% access to safe water, 71% access to safe sanitation), but has been declining in real terms in the face of rapid urban population expansion.

Papua New Guinea’s peri-urban and rural areas, representing over 87% of the population, remain poorly served. Water PNG has a mandate to ‘promote access to water and sanitation in rural areas’, but has been largely inactive due to its urban priorities. As a result, the Department of Health has taken on the responsibility but has had limited impact due to a shortage of government funds and the absence of a clear national strategy. A consequence of the government’s limited investment and activities in the sector is that the majority of WaSH services in rural and peri-urban areas are provided by the non-government sector. These are mostly national and international NGOs as well as community and church based organisations. The total impact of such schemes, however, is limited due to a lack of both national and international funding and the absence of a clear government strategy that incorporates a coordinated and consolidated approach.

As a result PNG will miss its MDG water and sanitation targets for 2015 and, unless considerable improvements are made, will also miss national targets identified in the government’s Development Strategic Plan 2030.

The consequences of low access to water and sanitation and poor hygiene practices are well documented and evident in terms of increased incidences of water borne disease, most notably diarrhoea, typhoid and cholera leading to higher morbidity and death, poorer educational attainment, and economic impacts at both the household and national level.

The purpose of this Policy is to reverse the current decline and significantly accelerate access to water and sanitation services and to promote long term hygiene behaviour change. It establishes clear disaggregated targets for 2030, as well as minimum standards and principles for implementation. To achieve these targets the policy identifies seven distinct strategies. Whilst supporting existing activities in urban areas, the policy’s focus is on providing services to the large unserved populations in rural and peri-urban environments.

Principle among the proposed strategies is the establishment of a National Water, Sanitation and Hygiene Authority (NWSHA). This will drive forward implementation of the policy, providing leadership and coordination within the sector. This initiative is supported by six additional strategies: improved
funding to the sector; development of an effective management information system; improved and consistent approaches to WaSH; appropriate technology promotion; enhanced private sector participation and partnerships; and sector capacity building. Together, these strategies will seek to ensure that each year services are delivered to an additional 453,000 people in order to meet the policy targets.  

To reach 2030 water and sanitation targets, an estimated K302 million (US$120 million) annual investment in infrastructure, operations and maintenance is required. This funding requirement is to be met from public government funds, the private sector, household contributions and international development contributions. In addition there will be costs for additional human resources in the sector, the majority of which is most likely to be met by recruitment from the private sector.

Establishing the NWSHA head office is estimated to cost K1.8 million per annum with an additional K2.6 million per annum for salaries. It is proposed to establish subnational offices in each province. Each sub-national NWSHA office will cost approximately K500,000 each to establish with a further K260,000 each per annum in salaries.

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8 This is an ambitious and aspirational target requiring delivery to an additional 6% of the population per year. It exceeds the delivery achieved in other developing countries but reflects the governments commitment to providing services as detailed in the Vision 2050

Section One - BACKGROUND

1.1 Intent of Policy

The National Water, Sanitation and Hygiene (WaSH) Policy has been formulated to provide a framework to substantially improve access to water and sanitation services and to change hygiene behaviours, particularly to the currently underserved rural and peri-urban settlement areas. It aims to provide direction for planning, management, investments and activities for all sector stakeholders in order to achieve the policy objectives.

1.2 Audience

The policy is for the benefit of all people of Papua New Guinea – men, women and children. It serves to guide WaSH stakeholders, including national, provincial and local governments, state owned enterprises (SOEs), development partners, non-government organizations, private sector and community stakeholders, that are involved in regulating, planning, financing, implementing, operating, facilitating or monitoring water supply, sanitation and hygiene improvement programs and activities.

1.3 Policy Development Process

Papua New Guinea has not previously had a WaSH policy.

In 2005, National Executive Council (NEC) Decision No. 72/2005 instructed PNG Water Board (now Water PNG) to develop a national water policy. However the resulting output was never endorsed. A subsequent NEC decision, No. 51/2008, established a specific Task Force for the purpose of establishing a WaSH policy.

The importance of a national policy was further endorsed during the first National WaSH conference in November 2011. Soon after, based on a request from government, the Water and Sanitation Program (WSP) of the World Bank provided technical assistance to support the work of the Task Force.

An early decision made by the Task Force was that water, sanitation and hygiene issues should be addressed in a single policy, and that this policy should apply to urban, urban settlement and rural areas. It was also decided that the policy would focus on issues relating to the delivery of water and sanitation services, rather than water resources management.

The Task Force met regularly during 2012 and 2013 and, in close consultation with relevant stakeholders (including a number of regional workshops), produced this WaSH policy document.
Section Two – DEFINITIONS AND MINIMUM STANDARDS

Urban
The urban environment includes areas within the legally gazetted town boundary, as well as urban settlements and urban villages which may be part of the broader peri-urban environment, but are economically and socially dependent of the gazetted urban area.

Rural
The rural environment includes all non-urban areas.

Safe Drinking Water
These must meet PNG standards as outlined in the Public Health (Drinking Water) Regulation 1984, adopted from the WHO International Standards for Drinking Water, 1971. In summary:

- For chlorinated and otherwise disinfected supplies the water entering the system must have a zero coliform count. Once in the system 90% of samples taken shall not contain any coliform organisms in any sample of 100ml and no sample should contain more than 10 coliforms/100ml.
- There should be no E. Coli in any sample.
- For non-disinfected supplies there should be no E.Coli in any sample and no sample shall contain more than three coliform organisms per 100ml.
- Additional toxic contaminant and aesthetic standards apply and are detailed in the Regulations.

Where an emergency situation has been declared, WHO minimum standards will be temporarily replaced by the Sphere minimum standards for emergencies.

Convenient and sustainable water supply
This includes a number of elements:

- For household piped water, the minimum service delivery norms are 150 litres per capita per day (l/c/d) continuous supply with a service pressure of 60 Kpa.
- For standpipes and hand pumps, the designs should accommodate for 50 l/c/d with a maximum of 50 users per water point no further than 150m from the household.
- Where rain catchment is used, designs must accommodate for a minimum of 5 l/c/d for drinking water with a maximum of 50 users per water point no further than 150m.

Designs for all schemes must ensure adequate water re-charge on a continuing basis.

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10 Coliforms are bacteria that live in the intestines of warm-blooded animals (humans, pets, farm animals, and wildlife). Fecal coliform bacteria are a type of coliform associated with human or animal wastes. Escherichia coli (E. coli) is part of the group of fecal coliforms.
All water points should be constructed with suitable drainage to ensure no pooling of stagnant water.

Appropriate operation and maintenance procedures and schedules for both rural and urban systems need to be developed during construction.

**Improved sanitation facilities**
An improved sanitation facility is one which is safe, convenient and sustainable.

**Safe**: All sanitation facilities should hygienically separate human excreta from human contact and prevent faecal material from entering the wider environment. They should also be constructed in a manner that prevents polluting the environment, particularly existing ground water and surface water sources.

**Convenient**: Latrines should be easily and safely accessible for all household members, particularly women and children, and used by no more than 5 families, or 30 persons, whichever is fewer.

**Sustainable**: Sanitation facilities must be maintained to ensure they remain safe.

Appropriately constructed ventilated improved pit latrines (VIP) are considered the minimum standard for an improved sanitation facility.

**Improved hygienic practices**
Long term behaviour change practices, which as a minimum must include:

- Safe handling, storing and use of drinking water. Water is treated where the water quality is untested or known to be contaminated by bacteriological agents.
- All infant excreta is safely disposed in an improved sanitation facility, followed by hand washing with water and soap.
- Hand washing with soap is practiced by everybody at critical times: before cooking and eating, after defecation, and post defecation cleaning of infants and children.
- All solid waste is disposed of safely and appropriately.

**Open Defecation Free (ODF)**
A community is open defecation free when, over a sustained period of time, all members of that community use an improved sanitation facility, and there is no human excreta visible in the environment.

**Total Sanitation**
This means that all households have stopped open defecation and use improved sanitation facilities. In addition, all households adopt improved hygienic practices.
3.1 Goal

The goal of the National WaSH policy is to contribute towards improving the quality of life, specifically:

1. Reduction in morbidity and mortality caused by water-related diseases.
2. Improved livelihood opportunities and economic growth through improved health and reduced economic and financial losses.
3. Increased equity of services between rural, peri-urban and urban areas, and to disadvantaged groups.

3.2 Objectives

The objective of the WaSH policy is to provide equitable access to safe, convenient and sustainable water supply and sanitation, and to promote improved hygiene practices and long term hygiene behaviour change at the personal, household, community and institutional level, particular to rural and urban settlement areas that are currently under-served.

This objective will be measured against the following targets to be achieved by 2030:

For Water Supply:
- In rural areas, 70% of the population has access to a safe, convenient and sustainable water supply.
- In urban areas, 95% of the population has access to a safe, convenient and sustainable water supply.
- 100% of educational institutions and medical centres across the country have access to a safe, convenient and sustainable water supply.

For sanitation:
- In rural areas, 70% of the population has access to safe, convenient and sustainable sanitation facilities.
- In urban areas, 85% of the population has access to safe, convenient and sustainable sanitation facilities.
- 100% of educational institutions and medical centres have access to safe, convenient and sustainable sanitation facilities.

These targets were developed by the policy Task Force considering existing targets included in the PNG Vision 2050, Development Strategic Plan, the Medium Term Development Plan, corporate plans of the SOEs and the Millennium Development Goals, as well as the targets proposed in the WSP Service Delivery Assessment and stakeholder feedback. They are disaggregated, and marginally more ambitious than existing government targets for the sector.
For hygiene:

- 100% of educational institutions and medical centres have handwashing facilities with running water and soap.
- 100% of the households that have access to an improved water supply practice total sanitation

3.3 Principles

Implementation of the national water sanitation and hygiene policy is based on the following fundamental principles:

1. Access to sufficient safe water and sanitation facilities is a human right. As such the GoPNG has an obligation to ensure basic water and sanitation facilities are available for the benefit of all.

2. The right to a basic safe water supply and sanitation does not imply a right to free services. With the exception of emergency situations, users will be expected to contribute in part or full to the cost of providing and maintaining services.

3. Water supply should not be considered in isolation from improved sanitation and long term hygiene behaviour change as these are recognized as the most important factors to achieve the policy goals.

4. The significant role that women and girls play in the provision and management of household water and in promoting improved hygiene and sanitation practices is recognized. The different gender roles and needs of men and women must be considered when planning, implementing and monitoring WaSH strategies, programmes and projects.

5. WaSH activities will take into account the specific requirements of disadvantaged and marginalized groups, including the very poor, women, infants and children, the elderly and people with disabilities.

6. Partnerships between service providers, both government and non-government, are essential for effective and sustainable service delivery.

7. Users are essential partners in planning, implementing and managing WaSH services. Active participation and responsibility for WaSH services by the users is important for long term WaSH benefits and sustainability.

8. The delivery of WaSH services will follow the principles of decentralized planning, implementation and operation developed by the government and detailed in the Organic Law.

9. Water is a finite, vulnerable resource and must be used sustainably.

10. The delivery of services will adhere to strict minimum standards.

11. Continuous hygiene and sanitation promotion and capacity building must be part of any WaSH intervention in order to promote long term behaviour change and realize the goals of the policy.
12. The ability of shared water schemes to either promote harmony, or to increase vulnerability and conflict, is recognised and should be considered for every intervention.

13. All existing laws, policies and regulations relating to water quality and quantity, sanitation and hygiene will be adhered to.

3.4 Core Government Legislation and Policies

Existing Relevant Policies

1. **Public Health Act 1973**
   Established water quality standards, and delegated responsibility for monitoring and regulation to the National Department of Health.

2. **National Water and Sewerage Act 1986**
   Gives the PNG Water Board responsibility for providing water and sanitation services in urban areas and promotion in rural areas

3. **NCD Water Supply and Sewerage Act 1996**
   Gives responsibility to NCDC for Port Moresby Water and Sewerage

4. **National Health Administration Act 1997**
   Gives power to provincial governments to make laws on rural water supply and environmental hygiene.

5. **1998 Organic Law on Provincial Governments and LLGs**
   Decentralises planning. Local Level Governments (LLGs) may now make laws on the provision of water supply.

6. **Environment Act 2000**
   The management of the water resources in PNG is administered through this Act. This includes provision of water use in terms of water abstraction and discharge of waste into the receiving water bodies.

7. **PNG Development Strategic Plan 2010-2030**
   Established development targets of 70% access for water and sanitation

8. **National Health Plan 2011-2020**
   Identified the Department of Health’s responsibility for promoting rural WaSH.

9. **Millennium Development Goals/post MDG goals**
   These detail international development obligations.

10. **Community Service Obligation 2013**
   Provides government subsidies to state owned enterprises for operations in non profitable areas.
11. On-lending policy
PNG law states that state owned enterprises that receive government funding should do so on terms that do not give them an unfair advantage over private sector organisations so as to help ensure a “level playing field”.

Required New Legislation
For this policy to be implemented, new legislation is proposed to establish the National Water, Sanitation and Hygiene Authority (NWSHA). This will address the most significant barrier to effective service delivery caused by the current lack of an overall responsible agency, particularly for rural and peri-urban areas.
Section Four - POLICIES AND STRATEGIES

4.1 Current Situation

Papua New Guinea is the largest and most populated Pacific island nation. In 2010 the population was 6.9 million, and with a growth rate of 2.8% this figure is expected to double in the next 20 years. Six million people – 87% of the population – live in rural areas, many considered remote with poor access to roads and basic services.

Responsibility for the provision for water and sewerage in urban areas is reasonably clearly defined. In the capital, Port Moresby, water and sewerage is the responsibility of Eda Ranu, with water and sanitation in other urban areas (88 district towns and 20 provincial towns) being the responsibility of Water PNG. Both are state owned enterprises (SOEs) mandated to operate on a commercial basis.

This commercial responsibility means that (perceived) non-commercial peri-urban and settlement areas as well as many district towns remain unserved, Indeed Water PNG is currently operating in only 14 provincial and 6 district towns.

Responsibility for delivering water and sanitation services in the rural areas is less clearly defined. Water PNG’s mandate includes the promotion of water and sanitation on a self-help basis, though there is little evidence of any activity. The National Health Plan 2011-2020 designates the Department of Health (DoH) to plan and coordinate safe community water supplies and waste disposal systems in rural areas, though this is a departmental document rather than a national government mandate. Whilst the DOH has been active in hygiene and sanitation promotion through PHAST, CLTS and the Healthy Islands programme, the DoH lacks resources to implement WaSH programmes on any scale. The majority of rural WaSH activities are implemented by non-governmental organisations and church groups, but the scale of these is small in relation to the needs.

In the past, multi departmental Water and Sanitation Committees (WASCOMs) chaired by the Department of Health were established at the provincial and national level to help coordinate and deliver water and sanitation services. However, these are now largely inactive due to a lack of funding, clear purpose and coordination.

12 PNG has 22 provinces and 89 districts in total. Eda Ranu is responsible for 1 province, NCD, and its 1 district. Goroka Town manages its own water and sanitation.
13 PHAST, (Participatory Hygiene and Sanitation Transformation), CLTS, (Community Led Total Sanitation) and Healthy Islands are all participatory approaches that encourage communities to look at their current hygiene and sanitation behaviours and to develop a programme to improve them.
14 The national WASCOM still meets occasionally to share information between key implementing agencies. In 2013 WASCOM changed its name to WASHCOM (Water, Sanitation and Hygiene Committee).
Papua New Guinea is not on track to meet the government’s water and sanitation targets detailed in its Strategic Development Plan 2010-2030. This aims for 70% access to water and sanitation nationwide, and 100% access in education establishments, by 2030. Joint Monitoring Programme (JMP) data indicate that access to improved water and sanitation actually declined in the period 1990-2010 – from 41% in 1990 to 40% in 2010 with respect to access to safe water, and from 47% in 1990 to 45% in 2010 for access to improved sanitation. Each year access to water and sanitation services fails to keep pace with population increase, meaning that more people are without water supply and sanitation today than they were two decades ago.

The disparity between rural and urban household access is significant, with 87% of the urban population having access to improved water sources compared to 33% in rural areas. For sanitation, 71% of the urban population has improved access compared with 41% of the rural population.

Low access to WaSH is reflected in the health of the nation. Papua New Guinea currently ranks at the bottom of Pacific countries for all WaSH related health statistics. Diarrhoea is a major cause of morbidity in the country and WaSH related deaths are estimated at 6,164 per year. In 2009 cholera re-emerged in PNG after an absence of 50 years. At 44%, the early childhood height to age ratio (2005) is poor compared to the rest of the region.

Although no specific economic studies have been completed in PNG, studies in the region have shown that poor access to WaSH has a significant national economic impact, as well as causing considerable hardship for individual households and communities.

4.2 Analysis of Issues

There are a number of core issues that need to be addressed if the policy targets are to be met.

4.2.1 Increase government prioritization of WaSH

While government development plans do include targets (for 2030 and 2050) for water and sanitation there are currently no policies, strategies or plans as to how these could be achieved. Historically, WaSH has not had the attention from government that is required to help ensure that targets are met. Although the government is committed to a process of decentralised development through the Organic Law, and subsequent decentralisation of funding through the Service Improvement Programme (SIP), there are currently no guidelines for using this to improve access to WaSH.

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15 The Joint Monitoring Programme (JMP) of the United Nations Children Fund and the WHO collects data from PNG based sources to generate estimates of the population that have access to water and sanitation facilities.
16 Institute for Sustainable Futures Papua New Guinea WaSH sector brief.
17 As above.
19 7.2% of annual GDP in Cambodia, 5.4% of annual GDP in Lao PDR, and 2.3% in Indonesia. Water Aid presentation to the National WaSH conference Port Moresby, November 2011
Departments that could be more active in the sector, such as the Department of Health, lack directives and incentives.

As a result, progress has largely been driven from outside government, by community based organisations, NGOs and foreign donors, particularly the ADB and the EU. Better coordination by government and commitment to the sector could potentially significantly increase financial support and improve the focus of WaSH implementing agencies.

### 4.2.2 Develop sector leadership

The absence of a single body charged with overall responsibility for developing and implementing policy for the national water and sanitation sector is a major impediment to the development of the sector. The result is a lack of drive where strategic planning, sector investment planning, budget allocation and programme coordination are all neglected. Implementation responsibility remains vague and initiatives are largely reactive to available resources, largely uncoordinated, unmonitored and poorly reported.

### 4.2.3 Improve funding for infrastructure

Existing funding for the sector is insufficient to make any real progress and the new policy will need to attract additional funds to enable development to take place. Government investment to date through the Development Budget has been modest – approximately K45m in 2011, K44m in 2012 and K35m in 2013. In addition, loans and grants from development partners (principally the EU, JICA and the ADB) increase total budget allocation to the sector in recent years to approximately K83m in 2011, K72m in 2012 and K71.6m in 2013. The majority of both GoPNG and development partner funding is allocated to a few urban WaSH initiatives, such as the Port Moresby sewerage upgrade and District Town Water Supply projects. Funding to the two SOEs, whether from the government Development Budget or from donor partners in the form of grants and loans, is insufficient to enable the SOEs to expand their services significantly, and they struggle to maintain existing service levels through income received from tariffs. In rural areas, none of the recurrent or development budget allocated to the Department of Health is specifically earmarked for WaSH except in relation to these services being made available in hospitals and clinics.

Estimates suggest that in order to achieve government targets an annual investment of K250m (US$100m) every year from now until 2030 is required.

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20 Development Budget money is used for capital expenditure on specific projects. This encompasses activities such as acquiring fixed assets, purchasing land, etc. It does not include operational costs of government departments which are covered under the Recurrent Budget.

21 Water Sector Financial Review 2013. WSP. Stuart King

22 Eda Ranu has estimated its non-revenue water from illegal connections and tariff collections for 2009 to 2011 to be about 50% of total water production.
for capital expenditure, and a further K50m (US$20m) is needed per annum for operation and maintenance.\textsuperscript{23}

The government’s (provincial, district and local level government) Services Improvement Programme comprises approximately K1.4 billion worth of funding per annum and therefore represents a potential source of WaSH sector financing. However, as indicated above, to date very little has been used to increase access to water and sanitation.

### 4.2.4 Increase human resource capacity within the sector

There are insufficient numbers of staff employed in the sector, across all relevant disciplines, and a limited supply of new graduates from existing institutions.\textsuperscript{24} In addition, the lack of common established implementation guidelines results in a broad spectrum of implementation approaches, and skills capacities. Uncoordinated activities means valuable knowledge sharing and skill transfer opportunities between agencies are missed. All of these issues impact on current effectiveness in the sector as well as its ability to absorb additional funds were they to become available.

There are no current estimates of the numbers of staff required to meet the government’s 2030 targets but a substantial increase in staff will be required. As a guide, IWA has calculated that in order to meet the more ambitious 2015 MDGs several thousand new personnel would needed.\textsuperscript{25}

### 4.2.5 Develop monitoring and evaluation systems for the sector

Access to safe water and sanitation is estimated through the demographic health surveys and the household income and expenditure surveys, both of which are used by the JMP to develop reports on estimated access to improved services. Access is not included in the national census data. Challenges in collecting information and providing accurate estimates are reflected in figures for sanitation which, for example, in 2012 recorded national access to improved sanitation at 45% but in 2013 put this figure at just 19%.

Whilst accurate estimates are useful for national summaries they do not provide the depth of information required for accurate planning, progress monitoring impact assessment or operation/maintenance follow up.

Water PNG and Eda Ranu have reasonably well established monitoring systems for service delivery to clients; however very little is known about the situation in urban areas outside their area of operations. This includes a


\textsuperscript{24} A recent report, Meeting the Water and Sanitation targets. A study of the Hunan Resource requirements in Papua New Guinea. International Water Association (IWA) March 2013 estimated that in 2013, 1,215 personnel from various disciplines were employed in the WaSH sector, though this does not include technical capacity available from within the Department of Health.

\textsuperscript{25} Meeting the Water and Sanitation targets. A study of the Hunan Resource requirements in Papua New Guinea. International Water Association (IWA), March 2013
number of provincial towns, the vast majority of district towns, as well as unserved urban areas such as peri-urban and settlement areas around Port Moresby and other main urban centres.

Very little monitoring takes place in rural areas, beyond the specific activities of individual service providers, and there is no consolidation of data. There is no central record of WaSH schemes, implementing agencies, coverage, functionality or capacity within the rural sector. This has an impact on the ability for any kind of strategic planning, coordination or reporting against specific WaSH targets.

4.3 Policy Response

This policy document aims to significantly accelerate the delivery of services, particularly to rural, peri-urban and settlement areas to achieve the policy targets. It will achieve this through the following seven strategies:

8. Improved sector coordination and leadership.  
9. Increased WaSH sector funding.  
10. Develop and manage an effective management information system.  
11. Improved and consistent approaches to WaSH service delivery.  
12. Appropriate technology promotion.  
14. Sector capacity building and training.

Strategy One: Improved Sector Coordination and Leadership

In order to improve sector coordination and leadership a National Water, Sanitation and Hygiene Authority (NWSHA) will be established. The NWSHA will have a central headquarters as well as offices in provinces and districts, established in accordance with the implementation of a Development Plan. (A NWSHA organisational diagram is included as annex 1).

The NWSHA’s role will encompass national, urban and rural endeavours, working together with existing sector institutions and organisations as summarized in Section Five. The Board of NWSHA – which shall comprise representatives from the public and private sector as well as civil society – shall be responsible for developing and implementing policy for the WaSH sector. The Board may choose to do this by itself or it may set up special purpose working groups to deal with particular issues or concerns. The Board will replace the existing national WASHCOM.

The NWSHA’s role with respect to national coordination and leadership will include:

1. Disaggregating national targets /goals for WaSH development.  
2. Translating these targets / goals into a phased Development Plan that sets out in detail how water and sanitation system development will be implemented and coordinated among relevant stakeholders. The
Development Plan will contain a clear prioritisation strategy for how WaSH targets will be achieved and the budgetary requirements associated with Policy implementation.

3. Ensuring adoption and mainstreaming of all WaSH policy principles.

4. Identifying and allocating funding support to WaSH development activities (including CSO mechanisms).

5. Assuming responsibility for appropriate levels of regulation which is likely to include water quality regulation, other technical regulation and, solely in relation to non-state-owned-enterprises, economic and competition regulation.

6. Increasing private sector engagement in WaSH infrastructure development and service delivery.

7. Maintaining the WaSH Monitoring Information System (MIS) to help monitor and evaluate WaSH sector development and the achievement of National WaSH policy objectives and targets.

8. Developing alternative/innovative service provision programmes such as franchising schemes, output based aid (OBA) schemes, etc.

9. Conducting communication activities in support of WaSH sector development such as raising awareness of the role of the NWSHA, informing stakeholders of ongoing and planned WaSH sector investment activities, and promoting understanding of the importance of WaSH service delivery.

The NWSHA’s role with respect to urban WaSH service delivery will include:

1. Providing support to existing and new operators to develop and implement plans to extend service provision to new urban areas by identifying potentially commercial locations and assisting with funding sources and appropriate service provision approaches.

2. Ensuring all new interventions in urban areas include clearly identified strategies for providing services to poor and urban settlement areas.

3. Developing and assisting in implementing specifically targeted strategies, in partnership with service providers, to ensure services are developed and improved to currently unserved customers in existing territories, particularly urban settlements. Developing strategies will involve:
   - Identifying opportunities for CSO funding, and providing assistance with applications.
   - Identifying potentially commercially viable service delivery options.
   - Helping identify new and additional sources of financing.
   - Supporting the development of new approaches to better serve peri-urban settlements.
   - Assisting SOEs and other service providers to deal with issues of non-payment and non-revenue water reduction.

4. Identifying and supporting new operators to provide water and sanitation services to urban customers.

5. Providing support to all urban WaSH operators with respect to issues that have broad stakeholder or sector relevance.
The NWSHA’s role with respect to rural WaSH service delivery will include:

1. Providing assistance to rural WaSH facilitation and implementation organisations, including provincial, district and local level administrations, provincial health offices, NGOs and the private sector to support the planning and implementation of water, sanitation and health infrastructure at rural community level.
2. Assisting in the development of water and sanitation investment and service support plans to be submitted to local and district level government authorities.
3. Ensuring Service Improvement Program (SIP) support includes sustainable WaSH activities.
4. Providing funding support for rural WaSH development in the absence of sufficient SIP support.
5. Working with development partners to increase finance and support rural WaSH development initiatives.
6. Working with the SOEs and other operators to identify opportunities to extend existing urban service areas to surrounding communities, and identify other support that utilities can provide to rural communities.

**Strategy Two: Increased WaSH Sector Funding**

Increased funding shall be allocated to support WaSH sector infrastructure development, service delivery and promotion through a number of mechanisms including:

1. The NWSHA will produce an annual business plan that will identify the money it requires to cover its operational expenses. The business plan shall also set out the NWSHA’s proposed activities and associated goals for the following five years.
2. The NWSHA shall identify, through its Development Plan, the funding required from the GoPNG to finance WaSH infrastructure and service development. This national budget funding shall be provided to the NWSHA, which will develop clear, transparent funding guidelines and determine how this money shall be spent in accordance with the implementation programme contained within the Development Plan.
3. The NWSHA shall establish one (or more) WaSH Funds controlled by an independent board chaired by the NWSHA that is dedicated to financing the extension, rehabilitation and maintenance of WaSH service delivery, particularly in rural and peri-urban settlement areas. The GoPNG will be expected to contribute a minimum annual amount to this fund.
4. The NWSHA and its facilitation / implementation partners will work with provincial, district and local level government to ensure that funding dedicated to WaSH service delivery activities is included in the Service Improvement Program (SIP) funding process and that the money earmarked for WaSH investment is utilised efficiently and effectively.
5. NWSHA will coordinate development partner programme funding and synchronise with the Development Plan. This funding may be added to
the WaSH Fund(s) or provided directly to facilitation / implementing agencies, utilities or communities.

6. The NWSHA shall work with and assist state owned enterprises, as well as any other eligible organisations engaged in water and sanitation sector activities, to apply for and utilise funding provided through the Community Service Obligation (CSO) framework.

**Strategy Three: Develop and Implement an Effective Management Information System for the WaSH Sector**

1. The NWSHA Development Plan will establish a baseline of WaSH service access and need for the country that will include projections until 2030 associated with population growth and migration. From this, a prioritisation plan will be identified for WaSH service rollout.

2. The NWSHA will develop and maintain a WaSH Management Information System (MIS). Centralised information in the MIS will be used by NWSHA and other agencies for coordinating WaSH service delivery as well as measuring progress against the goals set out in the Development Plan and policy targets.

3. The NWSHA will support and coordinate existing data collection activities, both from implementing agencies such as the SOEs and the NGOs as well as the national census, household income and expenditure surveys, etc., to optimise data collection for the MIS and avoid duplication. Where suitable data cannot be collected in this way NWSHA will collect its own data.

4. As a minimum, data required for the MIS will include:
   a. Existing water and sanitation infrastructure and functionality.
   b. Funding and sources assigned for WaSH sector development
   c. A register of past, ongoing and planned activities targeted at water and sanitation development, together with details of the organisations and individuals involved in implementation.
   d. WaSH resource capacity within the sector, including human resources and skills, and spare parts providers.
   e. Other relevant information, such as population, consolidated WaSH related morbidity /mortality patterns, needed to assist in prioritising areas and measuring the impact of WaSH interventions.

5. Whilst the NWSHA shall be responsible for establishing and maintaining associated records and databases, it will be the responsibility of all service providers to ensure their activities are recorded. Service providers include:
   a. Provincial, district and local level government offices.
   b. Rural communities.
   c. Water PNG and Eda Ranu.
   d. NGOs, private sector organisations and other facilitation and implementation partners.
   e. Other public and private utilities.
   f. Other government departments including the Department of Health and Department of Education.

6. The MIS shall be used to:
a. Identify and prioritise locations and communities in high need of WaSH interventions.
b. Measure progress towards the policy targets.
c. Coordinate maintenance, particularly in relation to rural schemes.
d. Provide information to assist the Department of Health in the monitoring of water quality in completed schemes.
e. Advocate for scheme funding and better coordinate existing funding.
f. Coordinate interventions between service providers.
g. Assist in joint training and capacity building initiatives.
h. Contribute to the Provincial Human Resource Plan.

7. Data collected from the WaSH monitoring system will complement existing secondary data, for example the National Census, Household Income and Expenditure Survey and the Demographic Health Survey, to evaluate impacts against the broader policy goals relating to improved health, livelihood opportunities and equity of access.

Strategy Four: Improved and Consistent Approaches to WaSH Service Delivery

1. All WaSH interventions should aim for 100% total sanitation.
2. In order to achieve this, WaSH services should be delivered in an integrated manner with the aim of changing hygiene behaviours through hygiene promotion, the provision of a convenient and sustainable water supply, use of improved drinking water sources, and the promotion of safe sanitation facilities, leading to zero open defecation.
3. NWSHA staff shall work with relevant agencies such as the Department of Health to design and deliver national, regional and local promotion and awareness raising activities, to extend and improve understanding of the importance of WaSH. Attention will focus on the use of hygiene promotion and communication approaches rather than hygiene education, which has proved largely ineffective in changing adult behaviour.
4. Hygiene promotion should be seen as a continuous process leading to long term behaviour change, rather than a one-off intervention, and mechanisms for hygiene promotion and reinforcement through established institutions such as medical centres, schools, government offices should be explored.
5. Participatory approaches should be adopted to promote appropriate planning, operation, management and maintenance. This is particularly important in areas where water and sanitation schemes are likely to be community managed.
6. Participatory approaches should be fully inclusive to consider the involvement, priorities and needs of women and adolescent girls, people living with disabilities and HIV/AIDs, infants and children and the elderly.
7. In order to maximise the potential of improved hygiene practices, individual household water supply connections should be promoted where possible, taking into consideration sustainability, community preferences, technical practicalities and affordability.
8. All private, commercial and public institutions, including district and provincial markets, should be expected to provide hygienic toilets, with a water supply, soap and handwashing facilities. Toilet facilities should be sex segregated and have disabled access.

9. All WaSH programmes should be accompanied by a sustainability plan. This should justify the proposed intervention in terms of:
   a. Environmental suitability and sustainability.
   b. The spare parts supply chain.
   c. Financial sustainability, tariffs and methods of collection.
   d. Operation, maintenance and management agreements.
   e. Long term hygiene promotion strategies.
   f. Relevant land use agreements and memorandums of understanding.
   g. The roles and responsibilities of community-based committees, whether existing (such as the water users groups and Ward Development Committees) or new, should be clearly outlined.

10. All land use agreements must be clearly outlined and formally agreed. For rural community managed systems, compensation should not normally be considered.

11. In order to promote and accelerate rural service delivery in rural communities and non-commercial urban areas, users will not be expected to pay for the total capital investment required for a water supply, but should be expected to make a cash and in-kind contribution. Tariffs should be calculated to cover the expected operation and maintenance costs and these should be included, along with the proposed method of payment and management arrangements, in the sustainability plan.

12. Subsidies for sanitation should be limited, but can be considered if carefully targeted to promote access to the disabled, for improved menstrual hygiene, for innovation, for sanitation in challenging environments where VIP may not be feasible, and for access for the very poorest.

13. All institutions, such as government buildings, schools, health centres etc., should expect to pay the full cost of their water and sanitation schemes.

14. Minimum standards detailed in this policy should be adhered to by all service providers.

15. NWSHA will assist the DoH, and other relevant partners in developing emergency response plans to react effectively to WaSH related emergencies such as cholera and typhoid outbreaks.

**Strategy Five: Appropriate Technology Promotion**

The selection of appropriate technologies has important implications for affordability and sustainability.

1. This policy promotes a “some for all”, rather than “all for some” approach. Sustainable low cost options should be considered wherever possible in order to improve national coverage. Suitable alternatives to sewerage should be investigated and adopted wherever possible in urban areas.
2. Technology choices must consider environmental sustainability and be robust to short and long term anticipated climate changes.
3. Technology choices must be socially acceptable and affordable to the consumers, both in terms of capital investment and operating costs.
4. Where water or sanitation schemes are designed that will depend on community management, the design must consider, and reflect in the sustainability plan, the capacity and willingness of the community to operate, maintain and manage it successfully.
5. The NWSHA will develop and promote technical standards and best practice implementation approaches for delivering water and sanitation services and promoting hygiene behaviour change to help ensure the quality and sustainability of system development and service delivery. Specifically, the NWSHA shall be responsible for:
   a. Production of a Technology Implementation Manual that contains:
      o Water, sanitation and hygiene promotion planning tools and associated implementation guidelines in order to implement WaSH activities as described under Strategy Two
      o Design and quality standards (for a range of technologies).
      o Service level expectations.
   b. Promotion, incentivisation and communication of appropriate innovative technology and approaches.
   c. Dissemination of relevant international good practice.
   d. Helping ensure that the water and sanitation supply chain is properly coordinated with the recommended system implementation approaches contained within the Technology Implementation Manual, and that any gaps in the supply chain are filled using public or private providers.

**Strategy Six: Enhanced Private Sector Participation and Partnerships**

Partnerships with private sector organisations, which includes the NGO sector, will be encouraged to extend and improve the delivery of WaSH services to communities through improved programme implementation and the strengthening of supply chains for improved sanitation marketing and the sustainable provision of essential services. Specifically:

1. Responsibility for promoting partnerships should rest with all implementing agencies including the NWSHA, state owned utilities and provincial, district and local level government.
2. Increasing the presence of the private sector in the WaSH sector will be encouraged. This could be at a number of different levels including:
   - Asset construction. This may range from developing large scale treatment and network assets in urban areas to assisting in the building of small scale, community based water and sanitation systems.
• System operation. This may range from operating major assets (such as treatment facilities or urban water and sanitation networks) through to running one or more small scale systems on a part time basis.

• Outsourcing. Private sector organisations could be contracted to provide specific services such as billing, meter reading, maintenance, etc.

• Materials supply. The private sector will be expected to provide the majority of the supply chain resources and materials required to develop and operate WaSH assets.

• Other services. There is potential for a wide range of other interventions by the private sector, such as offering system design services, building community awareness, delivering WaSH skills training, etc. The non-government sector (NGOs in particular) already perform an important role in this area, especially to rural communities, and building and maintaining partnerships with these organisations will be critical for the GoPNG going forward.

3. Private Sector Participation (PSP) and Public Private Partnership (PPP) models will be considered for enabling improved private sector engagement. This may include approaches such as Design-Build-Operate (DBO), Build-Own-Operate (BOO) and Build-Operate-Transfer (BOT) schemes for construction and operation activities as well as concessions, leases and management contracts for systems operations only. Alternative approaches may also be sought, such as seeking to attract private investment in the domestic construction industry.

Strategy Seven: Increase Sector Capacity Building and Training

Significant strengthening of the human resource capacity of the sector will be achieved in order to improve service delivery. This will require ensuring all existing and new staff working in the sector have the necessary skills, and encouraging new staff into the sector. Specifically:

1. The key skills and competencies required for WaSH programme implementation shall be identified by the NWSHA as part of its Technology Implementation Manual.

2. The NWSHA shall conduct a provincial human resource assessment. This will detail existing staff and competencies working in the sector, along with additional staff and competencies required to achieve policy targets.

3. A subsequent capacity building programme will be developed to improve the skills of existing staff and the development of new skilled human resources. This may include:
   a. Identifying how existing competencies can be shared successfully between organisations, for example through training, seminars, job secondments, joint implementation plans etc.
b. Reviewing, and if necessary, improving the information and skills taught by academic and training institutes.

c. Providing updates and sharing information between provinces.

d. Establishing ties with international organisations and disseminating information on international best practice.

e. Facilitating attendance at relevant international meetings and seminars.

4. Staff numbers in the sector need to be increased significantly to achieve the policy objectives. The NWSHA will try and close that gap through a number of mechanisms including:

a. Identifying relevant staff vacancies in government departments and advocating for their recruitment in prioritised provinces based on completing WaSH plans.

b. Increasing funding into the sector, increasing the number of WaSH interventions and developing organisational capacities, which together shall help draw staff into the public sector through increased NGO and private sector activity.

5. The delivery of these capacity building, training and WaSH promotion activities will be carried out principally by government departments and both public and private agencies and training institutes with the support of the NWSHA. However, where appropriate, NWSHA staff will also be expected to contribute to the delivery of capacity building initiatives.

4.4 Resourcing

Establishing the NWSHA

The National Water, Sanitation and Hygiene Authority will have a head office in Port Moresby. This will employ approximately 26 staff. Establishing and running the office will cost approximately K1.8m p.a., with a salary expense of around K2.6m p.a. at current prices.

Provincial offices will then be established based on prioritisation criteria developed by the Authority. It is expected that provincial offices will be established gradually, probably at a rate of 2/3 per year. In larger provinces it may also be necessary to establish a number of district offices. Provincial and district offices are expected to have 3 staff each, with an establishment/running cost of approximately K500,000 p.a. each and an annual salary cost of approximately K260,000 each.


27 The staffing of NWSHA is illustrative rather than prescriptive and will be decided once the NWSHA board and Chairman has been appointed. Staff costs have been estimated based on existing pay scale data. See Institutional Evaluation of PNG’s Water and Sanitation Sector: Establishing a National Water, Sanitation & Hygiene Authority. Stuart King, September 2013.
**Additional WaSH sector staffing**

Significant additional human resources are required if the policy targets are to be achieved. Personnel are required to implement water, sanitation and hygiene initiatives, and to support operation and maintenance. These will need to be recruited in both the public and the private sector through the methods identified under policy strategy seven.

**Funding requirements for infrastructure development**

Achieving the policy targets will require significant investment in infrastructure construction. The WSP Service Delivery Assessment (SDA) estimates that the funding required in the sector, based on current approaches. The report uses targets that are similar to, but not exactly the same as, the policy targets; nevertheless they represent an indication of the level of investment required.

The following required investments have been calculated:

<table>
<thead>
<tr>
<th></th>
<th>2030 targets from WSP report</th>
<th>Annual Capital investments required (US$million/year)</th>
<th>Annual O&amp;M investments required (US$million/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rural water supply</strong></td>
<td>66%</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td><strong>Urban water supply</strong></td>
<td>94%</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td><strong>Water supply total</strong></td>
<td>70%</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td><strong>Rural sanitation</strong></td>
<td>68%</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td><strong>Urban sanitation</strong></td>
<td>84%</td>
<td>58</td>
<td>14</td>
</tr>
<tr>
<td><strong>Sanitation total</strong></td>
<td>70%</td>
<td>70</td>
<td>15</td>
</tr>
</tbody>
</table>

This translates as a total investment of US$ 2.09 billion (approximately K5.25 billion) between now and 2030. Significant savings are possible with the identification and implementation of more suitable and lower cost technology alternatives, as described in policy strategy five.

In line with the policy principles detailed in this document, and regulations governing the state owned enterprises, users will be required to meet some of these costs, particularly for O&M. This would be in the form of tariff payments...
to the SOEs or, in rural areas, from community based management arrangements. The majority of funding, however, will need to come from public funds, international donor support and private sector investment.
Section Five – ORGANISATIONAL RESPONSIBILITIES

The table below summarises the roles and responsibilities that are expected to be carried out by the organisations and agencies principally engaged in WaSH sector service delivery.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Role &amp; Responsibility</th>
</tr>
</thead>
</table>
| National Water, Sanitation and Hygiene Commission (NWSHA) | • Responsible for sector policy development and implementation  
• Attracts and directs financing to support urban and rural WaSH delivery  
• Develops and implements technical regulation for the WaSH sector  
• Delivers economic regulation (except for SOEs) for the WaSH sector  
• Monitors and evaluates WaSH sector development  
• Establishes an information database on WaSH service delivery  
• Provides advisory and knowledge support to WaSH implementing bodies |
| Department of National Planning & Monitoring (DNPM) | • Chairs NWSHA’s Board  
• Responsible for WaSH sector budgetary allocation  
• Sets national targets for WaSH development in consultation with the NWSHA |
| National Department of Health (NDoH)               | • Sets water and sanitation quality standards in consultation with the NWSHA  
• Provincial, district and community environmental health officers assist with rural WaSH service delivery  
• Responsible for public health initiatives such as the Healthy Island Approach, which promotes safe drinking water, sanitation and hygiene |
| Treasury                                           | • Allocates financing to support NWSHA’s operational activities  
• Allocates development budget to support WaSH sector development  
• Allocates Provincial, District and Local Level Government Services Improvement Program (PSIP) funding |
<table>
<thead>
<tr>
<th>Organisation</th>
<th>Role &amp; Responsibility</th>
</tr>
</thead>
</table>
| Department of Environment and Conservation (DEC) | • Responsible for water resource management, licensing and fee collection.  
• Sets water quality standards for water bodies (including bulk water abstraction) |
| Department of Provincial and Local Government Affairs. | • Has statutory responsibilities over matters of local government pursuant to in accordance with the Organic Law on Provincial Governments 1995 and Local-level Governments and the Local-level Governments Administration Act 1997.  
• Responsible for the dissemination of policy.  
• Reports on performance of provinces and LLGs  
• Links top down strategies with bottom up needs |
| Department of Implementation and Rural Affairs. | • Responsible for disbursement and monitoring of SIP funding.  
• Maintains a database monitoring assets and services in local government. |
| Independent Consumer and Competition Commission (ICCC) | • Responsible for economic regulation (tariff setting) for SOEs – which includes Eda Ranu and Water PNG – as well as competition monitoring |
| Independent Public Business Corporation (IPBC) | • An Eda Ranu and Water PNG shareholder  
• Develops the Public-Private Partnership (PPP) policy framework  
• Develops Community Service Obligation (CSO) policy |
| Eda Ranu | • Responsible for water and sewerage service provision in the National Capital District (NCD) |
| Water PNG | • Responsible for water and sanitation service provision in provincial and district urban areas outside the NCD.  
• Promotes water and sanitation on a self-help basis in rural areas |
| Provincial and District Administrations | • Responsible for planning and delivering WaSH infrastructure and services to communities |
| Donors | • Provide funding support for the NWSHA  
• Provide funding support for rural and urban WaSH programmes |
| NGOs | • Implementers of rural and peri-urban WaSH programmes |
The Implementation Plan comprises three phases:

- The activities and tasks leading up to the legal establishment of the NWSHA, as presented in the Phase 1 table.

- The ‘operationalising’ activities undertaken by the NWSHA, such as staff recruitment and the production of the Development Plan and Operations Manual, that will equip the Authority to carry out its remit. The NWSHA may also be expected to establish a taskforce (the WaSH Sector Review Group in the Phase 2 table) to assist it in developing, reviewing and monitoring WaSH sector development. This group will include representatives from a broad selection of stakeholders not just board member organisations.

- The NWSHA conducting its operational activities in accordance with its Development Plan. Detailed implementation activities comprising this last stage cannot at present be described as they will be defined in the Development Plan. However, some key events (see Phase 3 table) can be identified including:
  
  - The NWSHA will produce an annual report detailing its activities over the past twelve months, its achievements in reaching its goals and targets and its priorities for the forthcoming year.
  
  - The NWSHA will be expected to contribute to the WaSH sections of future 5-year medium term development plans prepared by the DNPM.
  
  - The entire WaSH policy will likely need to be reviewed approximately five years after it has been implemented.
## Implementation Phase 1

<table>
<thead>
<tr>
<th>Implementation Activities</th>
<th>Year 1</th>
<th>Responsible Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finalise National Water, Sanitation and Hygiene Policy (NWSHP)</td>
<td></td>
<td>DNPM</td>
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<tr>
<td>Submit NWSHP to NEC for clearance</td>
<td></td>
<td>DNPM</td>
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<tr>
<td>Issue decision to proceed with enabling the NWSHP</td>
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<td>NEC</td>
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<tr>
<td>Obtain Certificate of Necessity</td>
<td></td>
<td>Office of the State Solicitor</td>
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<tr>
<td>Commence drafting of legislation for establishing NWSHA</td>
<td></td>
<td>DNPM</td>
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<tr>
<td>Carry out stakeholder legislation consultation process</td>
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<td>DNPM</td>
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<tr>
<td>Submit legislation to Central Agencies Coordinating Committee</td>
<td></td>
<td>DNPM</td>
</tr>
<tr>
<td>CACC reviews draft legislation &amp; consultation process</td>
<td></td>
<td>CACC</td>
</tr>
<tr>
<td>CACC submits legislation to NEC for approval</td>
<td></td>
<td>NEC</td>
</tr>
<tr>
<td>Legislative Council issues a Certificate of Compliance</td>
<td></td>
<td>Legislative Council</td>
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<tr>
<td>Policy and legislation tabled at parliament</td>
<td></td>
<td>Parliament</td>
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<tr>
<td>NEC adopts parliamentary approved NWSP</td>
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<td>NEC</td>
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<tr>
<td>Policy gazetted</td>
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<td>NEC</td>
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### Implementation phase 2

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<tr>
<th>Implementation Activities</th>
<th>Year 2</th>
<th>Responsible Agency</th>
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<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
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<tr>
<td>NWSHA Board appointed</td>
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<td></td>
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<tr>
<td>NWSHA Board appoints Chief Executive Officer (CEO)</td>
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<td></td>
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<tr>
<td>CEO commences NWSHA staff recruitment</td>
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<td></td>
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<tr>
<td>NWSHA produces Development Plan</td>
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<tr>
<td>NWSHA produces Operations Manual</td>
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<td></td>
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<tr>
<td>NWSHA develops TNA Capacity Building Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NWSHA establishes Planning Database and M&amp;E framework</td>
<td></td>
<td></td>
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<tr>
<td>WaSH Sector Review Group established and meeting</td>
<td></td>
<td></td>
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<tr>
<td>NWSHA produces Annual Report</td>
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</table>

### Implementation phase 3

<table>
<thead>
<tr>
<th>Implementation Activities</th>
<th>Years 3 – 12</th>
<th>Responsible Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>4</td>
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<tr>
<td>NWSHA implements its Development Plan</td>
<td></td>
<td></td>
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<tr>
<td>NWSHA produces Annual Report</td>
<td></td>
<td></td>
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<tr>
<td>NWSHA contributes to MTDP 2016-2020 &amp; 2021-2026</td>
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<tr>
<td>5-Year NWSP Review</td>
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</table>

NWSHA, stakeholders

NWSHA

NWSHA, DNPM

DNPM
Section Seven - MONITORING AND EVALUATION

The NWSHA will compile WaSH monitoring data and produce summary reports as part of its annual reporting process.

This data will be used to measure progress against the Development Plan and WaSH policy targets. Achievements will be compared against additional development indicators, such as health, to evaluate impact and progress towards the policy’s broader goal.

This information will be made available in a timely manner to contribute to the regular updating of the MTDF.

This policy will be reviewed every 5 years following its approval.
ANNEX ONE: NWSHA

Organisational structure

[Diagram showing the organisational structure of NWSHA, including branches such as Department of Works, Department of Planning, Department of Health, Treasury, Department of Environment, Development Partner Representative, Department of Provincial & Local Government Affairs, Division Head Operations Planning & Monitoring, Division Head Sector Regulation, Division Head External Relations, Department Head Finance & Administration, and phased roll-out of regional representation units at provincial and district level.]
NWSHA Intervention points

**NWSHA Secondary Intervention Point:**
- Review of PSIP for WaSH plan inclusion
- PEC Members given WaSH training
- Monitoring of PSIP fund disbursement / utilisation

**NWSHA Principal Intervention Point:**
- Review of DSIP for WaSH plan inclusion
- Programme coordination (NGOs, devt. partners, etc.)
- Focus for WaSH training / capacity enhancement (multi-party)
- Monitoring of DSIP fund disbursement / utilisation
- Water PNG / government water system support

**NWSHA Secondary Intervention Point:**
- Review of LLGSIP for WaSH plan inclusion
- LLG members given WaSH training
- Monitoring of LLGSIP fund disbursement / utilisation

**NWSHA Secondary Intervention Point:**
- Ward Councillors given WaSH training
- Source of monitoring data for WaSH project implementation

**NWSHA Tertiary Intervention Point:**
- Occasional monitoring of WaSI project implementation

Interagency linkages