CASE STUDY TITLE


SUMMARY

The objective of the case study is to demonstrate how Samoa National Drinking Water Standards which are grounded upon the WHO Global Guidelines for Drinking Water Quality, have been used to monitor water quality compliance performance of utilities and water service providers. This directly contributes to SDG target 6.1 on achieving universal and equitable access to safe and affordable drinking water for all by ensuring that the people of Samoa receive good quality and safe water for consumption. The policy agencies involved were the Ministry of Natural Resources and Environment, in cooperation with other line ministries, the Samoa Water Authority, Independent Water Schemes, and other agencies and NGOs.

BACKGROUND

The provision of safe water supply systems is a vital part of Samoa Water Authority and Independent Water Schemes, water supply services, ensuring that relevant people receiving their services are supplied with quality and safe water, free of any substance, organisms, chemicals or radioactive materials at a level of concentration which could endanger consumers. The Samoa National Drinking Water Standards ensures that the quality of water supplied by SWA and IWS are compliant with the regulatory standards.

SWA supplies water to about 83% of the population of Samoa with more than 70% of these connections treated. Water Quality Compliance to the SNDWS continues to be maintained for the main Urban and Rural Schemes (Malololele, Alaoa, Fuluasou JR and Fuluasou EU) with the monthly average for the fiscal year 2016/2017 at a 99% level of compliance as per SNDWS 2016 (MOH Water Quality Report 2016/2017). Despite compliance at Urban sites, inconsistency and low compliance from rural sites are often affected by power disruptions and remoteness of sites.

AT A GLANCE

COUNTRY
- Samoa

LEVEL
- National

SDG ADDRESSED
- SDG 6 - Clean Water & Sanitation

Independent Water Schemes (IWS) supply water to about 15% of the population. As part of the SNDWS, water safety plans have been enforced and are to be implemented to each of the 34 schemes under the IWS Association.

Water Safety planning uses a comprehensive risk assessment and risk management approach that encompasses all steps in water supply from the catchment to consumer. As part of the Water for Life Agenda 2016-2020, four water safety plans will be developed every year. A total of 10 water safety plans are now in place. Home Treatment filter systems have also been installed within 200 households with monitoring of water quality being carried out monthly/quarterly by the Ministry of Health.
**STRATEGY**

The following standards were used: The *Samoa National Drinking Water Standards 2008* (1st edition), *The Samoa National Drinking Water Standards 2016* is the 2nd edition of the National Drinking Water Standards 2008 in line with the WHO Global Guidelines for Drinking Water Quality. This is also in line with all legislations and regulations, strategic plans, policies and other relevant documents that guide the implementation of drinking water-related activities and programs of the Water and Sanitation Sector.

**RESULTS & IMPACT**

The SNDWS has been used as the basis for development of Water Quality Compliance Key Performance Indicators which measure the quality of water provided by SWA from year to year in the water sector planning process and strategy. The following table provides a snapshot of water quality performance of SWA for main urban treated schemes (Malololele, Alaoa and Fuluasou) in compliance with standards and Key Performance Indicators (Water for Life Sector Plans 2008 and 2016 from 2014/2015-2016/2017). Table 1: SWA Water Quality Compliance Results as per SNDWS

<table>
<thead>
<tr>
<th>Year</th>
<th>WfL Sector Plan Target</th>
<th>Water Quality Compliance by SWA as per SNDWS</th>
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</thead>
<tbody>
<tr>
<td>2014/15</td>
<td>75% monthly compliance</td>
<td>All 12 months compliant with target with an average annual compliance of 99%</td>
</tr>
<tr>
<td>2015/16</td>
<td>80% monthly compliance</td>
<td>All 12 months compliant with target with an average annual compliance of 99%</td>
</tr>
<tr>
<td>2016/17</td>
<td>85% monthly compliance</td>
<td>All 12 months compliant with target with an average annual compliance of 99%</td>
</tr>
</tbody>
</table>

Methodology used: % of water samples tested by the Ministry of Health at user/ household level under the defined SWA service areas (Malololele, Alaoa and Fuluasou JR systems) complying with the Samoa National Drinking Water Standards 2008 at a minimum in every month of the monitoring period.

**CHALLENGES & LESSONS LEARNED**

Whilst there are still many areas in water quality services to be fully realised by the water sector, the implementation efforts in the past five years are evident. Samoa’s commitment to improving the quality of drinking water has not been an easy task as it involved strengthening collaboration with all water service providers. However, they all responded well and tried over the years until the reviewed SNDWS 2008 became an integral norm to their work. Furthermore, the capacity of staff to implement such standards need to be refreshed and upgraded from time to time especially the technical capacity of utilities and water service providers to implement and meet the standards.
POTENTIAL FOR REPLICATION

The Water and Sanitation Sector continues to strive for the realisation of its main long-term outcome which is to provide reliable, clean and affordable water supply to all the people of Samoa. Hence, the availability of safe drinking water for all Samoans, irrespective of where they live, is a fundamental requirement for public health and a human right. Therefore, the case study is applicable to small island development states (SIDS) and can be replicated in other countries with the same context.

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