Welcome to the virtual ILE 2022

Session on ‘Sustainable financing for WASH in Schools’
Sustainable financing for WASH in School

What is the cost to reach SDG basic service level? Introduction to different cost categories, budget lines and government financing streams

Stefan Listl, Rahul Nair, Faculty of Medical Science, Radboud University, Nijmegen, the Netherlands

Marvin Marquez, Fit for School Program, GIZ Philippines
Towards the Sustainable Development Goals: Service ladders for WASH in schools monitored by the WHO/UNICEF Joint Monitoring Programme

<table>
<thead>
<tr>
<th>SERVICE LEVEL</th>
<th>DRINKING WATER</th>
<th>SANITATION</th>
<th>HYGIENE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIC SERVICE</td>
<td>Drinking water from an improved source and water is available at the school at the time of the survey</td>
<td>Improved sanitation facilities at the school that are single-sex and usable (available, functional and private) at the time of the survey</td>
<td>Handwashing facilities with water and soap available at the school at the time of the survey</td>
</tr>
<tr>
<td>LIMITED SERVICE</td>
<td>Drinking water from an improved source but water is unavailable at the school at the time of the survey</td>
<td>Improved sanitation facilities at the school that are either not single-sex or not usable at the time of the survey</td>
<td>Handwashing facilities with water but no soap available at the school at the time of the survey</td>
</tr>
<tr>
<td>NO SERVICE</td>
<td>Drinking water from an unimproved source or no water source at the school</td>
<td>Unimproved sanitation facilities or no sanitation facilities at the school</td>
<td>No handwashing facilities or no water available at the school</td>
</tr>
</tbody>
</table>
Only a few countries are on track to reach the universal access to WASH services in schools by 2030

Low percentage of schools reaching all three basic service levels

<table>
<thead>
<tr>
<th>Country</th>
<th>Basic Drinking Water</th>
<th>Basic Sanitation</th>
<th>Basic Hygiene</th>
<th>Basic Wash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippines (2020 TSA)</td>
<td>51</td>
<td>68</td>
<td>74</td>
<td>34</td>
</tr>
<tr>
<td>India (SPV 2018)</td>
<td>66</td>
<td>58</td>
<td>51</td>
<td>30</td>
</tr>
<tr>
<td>Guinea-Bissau (2021 SUR)</td>
<td>63</td>
<td>37</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>Cambodia (2021 EMIS)</td>
<td>78</td>
<td>33</td>
<td>78</td>
<td>25</td>
</tr>
<tr>
<td>Ecuador (2020 CEN)</td>
<td>77</td>
<td>59</td>
<td>51</td>
<td>22</td>
</tr>
<tr>
<td>South Sudan (2017 SUR)</td>
<td>51</td>
<td>48</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td>Nigeria (2019 NORM)</td>
<td>33</td>
<td>30</td>
<td>11</td>
<td>0</td>
</tr>
</tbody>
</table>

Sustainability at the core

- Access to basic WASH in schools services need to be sustainable.
- The term ‘sustainable’ encompasses
  - Regular, institutionalized monitoring of WinS at school level
  - Regular maintenance and repair of physical infrastructure
  - Consistent provision of necessary consumables (like soap, water, etc.)
  - School personnel’s time and effort in managing WASH in schools on a daily basis, specifically time of teachers and school heads
- Information on the needed resources and related costs is essential for the allocation of funds making the WASH services sustainable
How to calculate the costs for reaching WASH in schools basic service level?
Cost categories considered

• One-time investment: infrastructure costs

• Annual recurring costs: operation & maintenance and related materials & supplies

• Annual recurring costs: Human resources: time for managing WASH-related tasks covered through salaries
Calculations and data required

• Calculation:
  • Costs for closing the infrastructure gap between the current status of WASH in Schools and for reaching basic service level
  • Cost for annual provision of O&M related material and supplies
  • Cost for annual allocation of certain % teachers time calculated in % of salaries of HR of MoE (janitors, teachers, school heads)

• Data:
  • School-level data, usually available in the EMIS
  • WASH in schools monitoring data
  • Data on cost for construction and repair
  • Data on material and supply for O&M
  • Data on cost of salaries for teaching and non- teaching personnel
## Base for calculations and data needed

<table>
<thead>
<tr>
<th>Infrastructure cost</th>
<th>Operation &amp; Maintenance cost</th>
<th>Human resources</th>
<th>Cost reaching the national standard 1:50 ratio for usable toilet/handwashing facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of schools</td>
<td>No. of schools</td>
<td>Salary of teaching and non-teaching staff</td>
<td>No. of schools</td>
</tr>
<tr>
<td></td>
<td>No. of students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of schools with water supply</td>
<td>Cost of water, soap, cleaning &amp; disinfection material (use of O&amp;M App)</td>
<td>No. of school administrators No. of teachers No. of janitors/cleaning staff</td>
<td>No. of schools with usable toilets</td>
</tr>
<tr>
<td>No. of usable toilets per school</td>
<td>Cost of desludging services</td>
<td>Average time each category of staff spends on WinS activities</td>
<td>No. of schools with functional handwashing facilities (water outlet)</td>
</tr>
<tr>
<td>No. of toilets per school that need major repair</td>
<td>Average minor repair cost (e.g. spare parts, equipment)</td>
<td></td>
<td>No. of students (consider shifts)</td>
</tr>
<tr>
<td>No. of functional handwashing facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Infrastructure costs

Calculating the costs for closing the gaps between the existing infrastructure and basic service level for WASH needs school level data, usually available in the EMIS or WinS monitoring data and data on average cost for construction and repair:

<table>
<thead>
<tr>
<th>JMP core indicators for basic WinS services</th>
<th>Infrastructure needed per school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water</td>
<td>Water supply infrastructure</td>
</tr>
<tr>
<td>Sanitation</td>
<td>At least two usable toilets (to comply with gender segregation)</td>
</tr>
<tr>
<td>Hygiene</td>
<td>At least one handwashing facility and water supply</td>
</tr>
</tbody>
</table>
Different scenarios in schools for calculating basic sanitation services

- A school needs two (2) usable toilets to reach the basic sanitation service level - Prioritize repair over new construction.

- Costs for repair used where the toilets were non-functional, and new toilets were assigned for missing toilets until there were a total of two usable toilets.

- School-level data is essential

Categories of schools not reaching basic service level:

<table>
<thead>
<tr>
<th>Toilets needed per school basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 newly constructed toilets</td>
</tr>
<tr>
<td>1 existing (but needed repairs) &amp; 1 new constructed toilet</td>
</tr>
<tr>
<td>Need only one new constructed toilet</td>
</tr>
<tr>
<td>With 2 existing toilets but both need repairs</td>
</tr>
<tr>
<td>With 2 existing toilets but only one needs repairs</td>
</tr>
</tbody>
</table>
### Model of simplified calculation for infrastructure gap

<table>
<thead>
<tr>
<th>Infrastructure needed</th>
<th>Cost per to unit</th>
<th>No. of schools</th>
<th>Cost in USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 toilet repair</td>
<td>1000 $</td>
<td>41</td>
<td>41,000 $</td>
</tr>
<tr>
<td>2 toilet repairs</td>
<td>2000 $</td>
<td>233</td>
<td>466,000 $</td>
</tr>
<tr>
<td>1 new toilet (cubicle)</td>
<td>3000 $</td>
<td>1.269</td>
<td>3,807,000 $</td>
</tr>
<tr>
<td>1 new toilet + 1 repair</td>
<td>4000 $</td>
<td>55</td>
<td>220,000 $</td>
</tr>
<tr>
<td>2 new toilets</td>
<td>6000 $</td>
<td>813</td>
<td>4,878,000 $</td>
</tr>
<tr>
<td>No. of schools (repair or new construction of toilets)</td>
<td></td>
<td>2.781</td>
<td>9,412,000 $</td>
</tr>
<tr>
<td>1 functional handwashing facility</td>
<td></td>
<td>3.222</td>
<td>780,000 $</td>
</tr>
</tbody>
</table>
Operation & Maintenance costs

- Includes annual costs of consumable materials needed by the schools to meet conditions to effectively run the basic services for WASH in the schools.
- Budget need is based on # of school, # of toilets, # of students to be earmarked in existing budget lines for operational expenses

<table>
<thead>
<tr>
<th>JMP core indicators for basic WinS services</th>
<th>Operation &amp; Maintenance costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water</td>
<td>Annual cost for water supply (and water treatment)</td>
</tr>
<tr>
<td>Sanitation</td>
<td>Water for flushing and cleaning, materials and supply for regular cleaning and disinfection, tools for simple repair, locks or knobs to address privacy</td>
</tr>
<tr>
<td>Hygiene</td>
<td>Regular supply of soap and monthly water supply</td>
</tr>
</tbody>
</table>
Operation & Maintenance – calculate the cost
Example calculation

Categories based on cost per student per year
- Drinking water (bulk of cost for O&M)
- Cleaning and disinfection material and supply
- Hygiene supply

**Purified water from water refilling stations**
0.05 USD/L

**Piped water (Tested potable or filtered)**
0.12 USD/m³
Available for Download !!!

Google Play Store
bit.ly/OMappandroid

Apple App Store
bit.ly/OMappios

Factsheet: bit.ly/OMfactsheet
## Model calculation:
Recurring cost for operation & maintenance and related material and supplies

<table>
<thead>
<tr>
<th>Consumables needed (per year)</th>
<th>Unit cost per student/ year</th>
<th>Cost for the entire school population per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soap (500 g / student) (5g soap 5 x daily x 200 school days = 500 g)</td>
<td>3.30 $ / 500 g soap</td>
<td>27 Mio X 3.3 $ = 90 Mio $</td>
</tr>
<tr>
<td>Cleaning and disinfection (Rough estimation of cost for cleaning and disinfection of sanitation facilities, if national standard of 1 toilet for 50 students is considered)</td>
<td>1.0 $</td>
<td>27 Mio x 1.0 $ = 27 Mio $</td>
</tr>
</tbody>
</table>
School personnel costs (teaching and non-teaching staff)

- Costs for the time of school staff for managing & implementing all WinS activities
- Costs for salaries are already covered within the budget of the Ministry of Education, but are not specifically earmarked for WASH in Schools
- According to expert interviews, teachers spend around 6% of their time on WinS activities (bulk of HR cost for WinS)
- Janitors, cleaning staff and WinS Coordinators spent significantly more time on WinS-related tasks

Average time teachers spend on WinS for one school year

- 6%
- 94%
## Model calculation for human resources to manage WASH in schools

<table>
<thead>
<tr>
<th>No. of school staff</th>
<th>No. of staff x average annual salary</th>
<th>HR cost on national level</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of teachers (excluding WinS coordinator)</td>
<td>832,027 x 10,000 $</td>
<td></td>
</tr>
<tr>
<td>No. of WinS coordinator (1 per 1 school)</td>
<td>44,815 x 10,000 $</td>
<td></td>
</tr>
<tr>
<td>No. of janitor staff (1 per school)</td>
<td>44,815 x 1,500 $</td>
<td></td>
</tr>
<tr>
<td>Cost of estimated time for managing WinS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6% of teachers time (during pandemic)</td>
<td>600 $</td>
<td>500,000,000 $</td>
</tr>
<tr>
<td>15% of WinS coordinators time (during pandemic)</td>
<td>1500 $</td>
<td>67,222,500 $</td>
</tr>
<tr>
<td>50% of janitor staff time (during pandemic)</td>
<td>750 $</td>
<td>33,600,000 $</td>
</tr>
<tr>
<td>Total cost of HR of teaching staff to manage WinS on School level</td>
<td></td>
<td>~ 600,000,000 $</td>
</tr>
</tbody>
</table>
Learnings for infrastructure calculations

- **School-level data** of the current WinS status is needed to calculate the gap that needs to be closed to reaching basic service level for infrastructure.

- When the *gap is known*, calculation of cost for closing the gap can be done.

- Calculation of recommended *toilet: student ratio* and recommended *handwashing facility: student ratio* serves as reality check.
Learnings O&M

- For operation & maintenance bulk of cost is provision of drinking water and has to be quantified on local level as the cost for drinking water differ tremendously, even in each country.

- Cost for daily cleaning is always underrated and needs proper estimation and budget allocation, otherwise paid out of teachers pocket or not done.
Learnings human resources

• Cost for WinS is time of teaching and non-teaching staff to manage WinS

• Only if budget needs for managing and implementing WinS are quantified, request for allocation can be done with proper justification

• Earmarking of teachers' time for WinS important to quantify investment covered by the Ministry of Education on WinS as
  • Teachers engagement and involvement is crucial for the success of WinS
  • Teachers time accounts for the bulk of cost
  • Teachers time needs to be acknowledged and quantified
Thank you!
LEVERAGING LOCAL GOVERNMENT FUNDS for Water, Sanitation and Hygiene in School (WinS) Infrastructure in Indonesia

Case Example: Tangerang Regency

Prepared by:
Working Group of Water, Sanitation, and Hygiene
Tangerang Regency
Strategies and Policies for Increasing Sanitation Financing in Schools

Efforts to Build the Best Generation

“BY MAKING THE SANISEK PROGRAM THE LEADING PROGRAM FOR THE REGIONAL MEDIUM-TERM DEVELOPMENT PLAN (RPJMD), THEN THERE IS POLICY GUARANTEE AND FINANCING ALLOCATION TO IMPLEMENT THIS PROGRAM AGREEMENT BETWEEN THE REGIONAL GOVERNMENT AND THE REPRESENTATIVE COUNCIL (DPRD)”
School Based Sanitation (Sanisek) Program as Collaborative Activity

The Role of Each Institution

<table>
<thead>
<tr>
<th>Institution</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAPEDA</td>
<td>Program Coordinator</td>
</tr>
<tr>
<td>DINKES</td>
<td>Water, Sanitation, and Hygiene Training</td>
</tr>
<tr>
<td>DISDIK</td>
<td>Socialization and Verification</td>
</tr>
<tr>
<td>DINAS PERUMAHAN, PERMUKIMAN DAN PEMAKAMAN</td>
<td>Development Supervision</td>
</tr>
<tr>
<td>UPTD LABORATORIUM</td>
<td>Waste Water Quality Check</td>
</tr>
<tr>
<td>DLHK</td>
<td>Construction of Infiltration Wells</td>
</tr>
<tr>
<td>UPTD PENGELOLAAN AIR LIMBAH DOMESTIK</td>
<td>Waste Water Treatment</td>
</tr>
<tr>
<td>IUWASH-USAID</td>
<td>Construction Design and Training</td>
</tr>
<tr>
<td>SEKOLAH</td>
<td>Program Implementer</td>
</tr>
</tbody>
</table>

“Each institution involved in the sanitation program has a specific role and has a special budget to support the sanitation program in school”
Tangerang Regent Regulation as the Basis for School Based Sanitation Program Development

This Regent Regulation regulates the governance of program implementation, starting from the planning, implementation, reporting and evaluation stages of program implementation.

This Regent Regulation serves as a guideline for all stakeholders who run the Sanisek Program, both within the Agencies, Development Partners and in the school environment.

Every year (2013-2018) around 20 billion is budgeted for the construction of school sanitation.
**Forms of Activities of School Sanitation Program**

**School Community Empowerment**

**Construction of Sanitation and Clean Water Facilities**

**Facilities Built:**
1. Toilet
2. Clean Water Facilities
3. Wastewater Treatment Plant
4. Hand Washing Facilities

**Development Target:**
All elementary and junior high schools spread across 29 sub-districts
CASTLE PHILOSOPHY
IN SCHOOL SANITATION CONSTRUCTION

"HEALTHY SANITATION FACILITIES IN SCHOOLS WILL BE A STRONGHOLD OF HEALTH DEFENSE AND GOOD QUALITY HUMAN RESOURCES IN THE FUTURE"
In this Regent Regulation, one of which regulates the use of School Operational Costs to carry out maintenance of existing sanitation facilities in schools.

In 2022, no less than 12.8 billion will be allocated by all schools in Tangerang Regency for the maintenance of sanitation facilities.
“Each school principal is required to sign a statement stating that he is able to maintain and finance the school sanitation facilities that have been built.”
Sanisek Program Financing Sustainability

“Financing for desludging of sewage is carried out periodically to maintain the quality of the wastewater treatment plant”
“The Environment Agency, periodically finances checking the quality of wastewater from school sanitation facilities”
“Increased awareness of the school community about the importance of Sanitation (this good practice is expected to be carried over to the family and community environment)”
Continuation Program After Sanisek
(School Waste Reduction Program / Kurassaki)

“The Kurassaki program provides knowledge to the school community to reduce the waste generated by schools as much as possible”
Biodiversity School Program

“In this program, the entire school community is given knowledge to conserve biodiversity, especially in the types of food trees, medicinal plants and fruit and vegetable trees”
Menstrual Health Management Program

“In this program, the entire school community is given knowledge to understand the menstrual cycle, how to handle and maintain hygiene during menstruation”
“The Tangerang Regency Government has integrated the IKL (Environmental Health Inspection) Database with Dapodik (Education Principal Data) as a guide for assessing schools that have achieved the Sustainable Development Goals in the field of Sanitation”
Thank You
Integrating WASH Expenditures in the Existing Government Funding Stream

JASON REIONG
Acting Director
Department of Education
Chuuk State, Federated States of Micronesia
The FSM was formerly a part of the Trust Territory of the Pacific Islands (TTPI), a United Nations Trust Territory under U.S. administration, but it formed its own constitutional government on May 10, 1979, becoming a sovereign state after independence was attained on November 3, 1986, under a Compact of Free Association with the United States.
Chuuk State, FSM – A Brief Overview

- Chuuk is the state with the largest population with about 53,000 people.

- It is comprised of the collection of volcanic islands within the Chuuk Lagoon and some 24 outer-island atolls --some 290 islands total.

- It has 74 public and private schools with a total enrolment of 10,581.

**AVAILABILITY OF GENDER-SEGREGATED TOILETS:**
- 18% No
- 75% Yes
- 7% Shared Toilet

**NUMBER OF FUNCTIONAL TOILET PAN FOR BOYS:**
- 11% 0- Not available
- 64% 1 available
- 20% 2 available
- 5% 3 available

**NUMBER OF FUNCTIONAL TOILET PAN FOR GIRLS:**
- 16% 0- Not available
- 59% 1 available
- 20% 2 available
- 5% 3 available

**PRACTICE OF DAILY SUPERVISED GROUP HANDWASHING:**
- 84% YES
- 16% NO

**WATER SOURCE:**
- 3% Unprotected Spring
- 97% Rainwater

**AVAILABILITY OF HAND SANITIZERS or HAND WASHING FACILITY W/ SOAP:**
- 42% in classrooms
- 4% in halls
- 14% in principal/teachers office
- 13% in toilets
- 10% in entrance/exit
- 17% others

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- It has 74 public and private schools with a total enrolment of 10,581.
Financing Streams

1. **Sector Funds**

The Office of Insular Affairs administers and oversees federal assistance under the Compacts of Free Association to the FSM

- Under this, the U.S. provides the FSM with economic assistance. Annually, DOE receives Education Sector Grant (ESG) and Suplemental Education Grant (SEG) and these Sector Funds are the source of the school-based budget, including for WinS

- **Compact Fund Control Commission (CFCC)** - established for fiscal control and accounting procedures of any and all expenditures of funds deriving from the Compact.

  - CFCC reviews all government requests for procurement utilizing the Sector Fund. CFCC is only present in Chuuk State.

2. **The Infrastructure Maintenance Fund (IMF)**

This budget is used for maintenance and repair only. The budget provided by the government can be supplemented by the IMF with the same amount to what is initially invested through matching funds.
Financing Chuuk WinS Supply

Procurement of WASH in Schools supplies is through the School Based Budget with the following particulars:

✓ WASH should first be integrated in the School Improvement Plan
✓ In School-Based budget, every child is allocated around 200 USD per year
✓ WinS items are considered **School Supplies and Instructional Materials** as WASH practice is part of the curriculum
✓ WASH items are procured before the start of the school year or at the start of the new fiscal year
✓ Every school spends around 10 USD per child for the WASH supplies. This could cover soaps, toothbrushes, toothpastes, and nail clippers.
Key Issues and Actions Taken

Issues encountered

• Lack of WinS-related policy

• Procurement of WASH supplies (hygiene kits, water bottle, etc) is not included in the DOE budget

Actions taken

• Lobbied to the FSM Association of Chief State School Officers (FACSSO) for the issuance of resolution supporting WinS implementation.

• DOE provided justification to the Office of Insular Affairs on the importance of WASH supplies in schools.

• Advocated for the state proclamation on localized celebration of WASH events.

• Lobbied to consider WinS supplies as part of schools supplies and instructional materials which have a budget line in the school-based budget
Procurement of WASH in Schools Supplies

Can you share the process to procure WASH materials for schools?
What Went Well

- Endorsement of the National DOE on the nationwide implementation of WinS
- Support of State DOE in integrating WinS as part of the curriculum and accreditation
- State proclamation on the local celebration of Global Handwashing Day and World Toilet Day
- Approval of Office of Insular Affairs and Compact Fund Control Commission in accessing DOE Sector funds to procure WASH supplies
- School principals prioritize the procurement of WASH items, especially during the start of fiscal year
- Schools included WASH activities in the class schedule which demands for the availability of WASH items
Way Forward

• Improvement on the efficiency of the purchase and delivery of WASH supplies

• Establish inventory systems

• Procurement of Menstrual Health and Hygiene supplies
Support of key leaders from multi-level governance (national, state, region, schools, and communities) is essential to successfully access existing government funds.

Advocate WASH in Schools as a health intervention that adds value to school’s efforts to improve its school’s accreditation.

Organized and collective efforts of different key partners facilitate an efficient completion of target WinS activities.
Thank you!
Q&A

Please type your questions in the chat
The WinS Network
www.winsnetwork.org

Who we are?
Global inter-agency network
winsnetwork@giz.de

Objectives:
✓ To harmonize efforts in WinS
✓ To support ministries of Education to improve WinS services by aligning efforts among development partners and NGOs

Our core group members: UNICEF, GIZ, Save the Children, WaterAid, the WHO/UNICEF Joint Monitoring Programme (JMP), London School of Hygiene and Tropical Medicine, Emory University, UNESCO

Working streams:
• Advocacy, policy, and system strengthening
• Monitoring and reporting
• Research and evidence-building
• Gender including MHH
• WinS programming
• Knowledge management, capacity development, learning and exchange

Join as an individual or an organisation. See website for details!
https://www.winsnetwork.org