



UNIVERSITY OF
OXFORD



Institute for
Sustainable
Futures



University of
BRISTOL

Indicators, Measures and Methods for Monitoring Climate Resilient WASH – Final Short List (Set B)

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Set B indicators

This document includes the 59 indicators that comprise the Set B (Version 5.4) indicator list. The set B indicators are those that were considered valuable and with potential for future development, but were not prioritized for global monitoring by the JMP and GLAAS teams. Some Set B indicators require more detail and context than are appropriate for global monitoring, and would be better suited for national or subnational monitoring. Numbering in set B is sequential following on from the sequential numbers in set A.

Code: Each indicator in the version 5.4 shortlist has an updated unique reference number in the format CCDD where:

CC = framework component number (from 01 to 22)

DD = sequential reference for indicators within framework component

Tables are colour coded as follows:

Set B: other candidate indicators with potential for further development	
Water, sanitation and hygiene	
Water	
Sanitation	
Hygiene	

1: Adaptation actions by national and subnational government – policy

5.4 code	Objective	Indicator
0106	Access to a minimum service level is maintained	Water resources regulations mandate that sufficient quantities of domestic water supply be provided as a priority before allocations to other water uses are made
0107	WASH policies and planning incorporate current and future climate risk	Proportion of population for whom (a) maps of areas at risk from climate hazards have been produced; (b) risk maps have been formally incorporated into WASH climate adaptation plans; and (c) maps have been updated within the last [reference period to be determined]

2: Adaptation actions by national and subnational government – institutions

5.4 code	Objective	Indicator
0205	Coherence and cooperation between agencies to deliver climate-resilient WASH	Multisectoral coordination mechanisms for climate adaptation processes (a) include the WASH sector; (b) include solid waste, drainage, water resources stakeholders; and (a) are subject to an MOU; (b) are subject to defined roles and responsibilities
0206	Workforce is adequate for climate-resilient WASH systems	Capacity development plans for climate-resilient WASH service delivery are (a) included in National Adaptation Plans (NAPs); (b) included and costed within NAPs; (c) a budget is formally allocated for implementation; and (d) expenditure is actually made on the planned activities

3: Adaptation actions by national and subnational government – regulation

5.4 code	Objective	Indicator
0304	Regulatory system supports climate resilience	Regulators allow / specify service providers to include the costs of becoming climate resilient in submissions for tariff reviews

4: Adaptation actions by national and subnational government – finance

5.4 code	Objective	Indicator
0403	Sufficient budget allocation/ expenditure for WASH climate adaptation	Financial incentives for water efficiency by service providers

0404	Sufficient budget allocation for WASH climate adaptation	Funds are allocated to support technical capacity of regulatory bodies on climate resilience of WASH
0405	Accessible finance available to support rapid recovery following a climate event	Value and-availability of emergency cash transfers for WASH response and recovery following climate events

5: Adaptation actions by hygiene promoters and supply chain actors

5.4 code	Objective	Indicator
0502	Emergency response protocols / plans / back-ups in place	Hygiene materials, equipment and resources are stockpiled and prepositioned to ensure rapid distribution when needed before, during and following a climate event
0503	Support to households provided to undertake actions for climate resilience / recovery	Proportion of population within nationally-defined climate hazard zones receiving education / messaging on hygiene behaviour, practice, and materials (in local language) relevant to climate events in the last 12 months

6: Adaptation actions by water supply service providers

5.4 code	Objective	Indicator
0604	Proactive plans and actions in place to prepare for the effects of climate events	Proportion of population / schools / health care facilities served by water supply service providers that monitor and report on climate impacts
0605	Redundancy is provided to reduce impacts of climate change	Proportion of the population / schools / health care facilities served by service providers with multiple or diverse water sources
0606	WASH planning incorporates current and future climate risk	Proportion of service providers that have climate resilience investment plans for • water supply; • sanitation and wastewater
0607	Water use efficiency improves	Water use efficiency programmes include measures to improve efficiency of water use for drinking water supply and sanitation
0608	Emergency response protocols / plans / back-ups in place	Proportion of population / schools / health care facilities served by alternative water service providers that meet minimum national standards when their primary water supply is disrupted due to a climate event.
0609	Emergency response protocols / plans / back-ups in place	Proportion of households served by water treatment facilities where service provider has a quick-restart plan in place for use following climate event
0610	Sufficient quality and quantity of workforce exists for climate-resilient WASH	Proportion of population served by water service providers that have received training that includes climate risk assessment and risk management in the last [reference period to be determined]

7: Adaptation actions by sanitation providers

5.4 code	Objective	Indicator
0704	Proactive plans and actions in place to prepare for the effects of climate events	Proportion of population / schools / health care facilities served by sanitation service providers that monitor and report climate impacts
0705	Management is appropriate to ensure and advance climate resilience	Proportion of sanitation service providers that have protocols and procedures in place for safe, appropriate and timely emptying of pits and tanks on receipt of early warning relating to a climate event
0706	Emergency response protocols / plans / back-ups in place	Proportion of the population / schools / health care facilities served by sanitation service providers who provide multiple or diverse sanitation options for use in emergencies
0707	Emergency response protocols / plans / back-ups in place	Proportion of sanitation service providers with construction materials, equipment and resources available to ensure robust re-construction and repair of sanitation infrastructure to maintain sanitation service delivery
0708	Emergency response protocols / plans / back-ups in place	Proportion of sanitation service providers with well-defined, event-specific action plans ready for execution on receiving early warnings

8, 9 and 10: Adaptation actions by users

5.4 code	Objective	Indicator
0801	Users respond to climate events by taking actions to secure water quantity and quality	Proportion of the population that have invested in improvements in their water supply system in the past [reference period to be determined] in response to climate information or hazards
0802	Users prepare themselves for climate events by securing household water storage	Proportion of population / schools / health care facilities with adequate water storage container on site that is secured against climate hazards
0901	Users provide themselves with redundancy to offset effects of service interruption / system failure	Proportion of population that have built or upgraded to climate-resilient toilets / latrines before a climate event
0902	Users build back better following a climate event	Proportion of population that have taken action to upgrade latrines following a climate event
1001	Users prepare for climate events by stockpiling essential hygiene items	Proportion of population that report that they have sufficient soap and menstrual products in the house to support future household hygiene needs for up to [reference period to be determined]

11: Adaptation actions related to water resources and land management

5.4 code	Objective	Indicator
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1103	Early warning systems in place that support actions to reduce impact of climate events	Proportion of population covered by multi-hazard warning systems that include early warning for providers of domestic water and sanitation services
1104	Climate-related risk is managed in the catchment	Environmental regulations set appropriate limits on discharge quality from wastewater treatment plants that achieve established water quality standards taking account current and future climate scenarios

12: Adaptation actions related to coordination with Solid Waste Management and Drainage

5.4 code	Objective	Indicator
1202	Coherence and cooperation between agencies to deliver climate-resilient WASH	Sanitation investment and operational plans reference solid waste investment and operational plans
1203	Users receive messages that inform adaptation actions	Sanitation behaviour change campaigns include interventions to reduce risk of solid waste entering the sanitation system and causing climate-related failures
1204	Operations and management is appropriate to ensure and advance climate resilience	Standard operating procedures for sanitation workers include interventions to reduce risk of solid waste entering the sanitation system and causing climate-related failures

13: Attributes of water resources for water supply and receiving waters

No set B indicators were identified for this framework component.

14: Attributes of water supply infrastructure

5.4 code	Objective	Indicator
1402	Construction and design standards for climate-resilient WASH are implemented	Proportion of population / schools / health care facilities served by water source / collection point where infrastructure conforms to national regulations and standards for design and construction that take into account current and future climate
1403	Construction and design standards for climate-resilient WASH are implemented	Proportion of population / schools / health care facilities served by treatment facilities where infrastructure conforms to national regulations and standards for design and construction that take into account current and future climate
1404	Construction and design standards for climate-resilient WASH are implemented	Proportion of population / schools / health care facilities served by distribution network where critical infrastructure conforms to national regulations and standards for design and construction that take into account current and future climate
1405	Assets and systems have reduced sensitivity to climate shocks and stresses	Proportion of population / schools / health care facilities served by water supply system with backup power supply

15: Attributes of sanitation infrastructure

5.4 code	Objective	Indicator
1502	Construction and design standards for climate-resilient WASH are implemented	Proportion of population / schools / health care facilities served by latrines and containments that conform to national regulations and standards for design and construction that take into account current and future climate
1503	Construction and design standards for climate-resilient WASH are implemented	Proportion, by length of sewers, that conform to national regulations and standards for design and construction that take into account current and future climate
1504	Construction and design standards for climate-resilient WASH are implemented	Proportion of wastewater/faecal sludge treatment facilities that conform to national regulations and standards for design and construction that take into account current and future climate

16: Attributes of hygiene infrastructure

No set B indicators were identified for this framework component.

17: Water supply service functioning

5.4 code	Objective	Indicator
1704	Access to a minimum service level is maintained	Number of disruptions to a basic drinking water service before, during, and following a climate event (Modified UNDESA SENDAI indicator)
1705	Water quality is maintained	Proportion of the population / schools / health care facilities served by water supplies that meet national drinking water standards before during and following climate events
1706	Sufficient water quantity is supplied	Proportion of population / schools / health care facilities using groundwater-based water supplies where production falls below design minimum yield for [reference number of days to be determined] per year
1707	Water quality is maintained	Number of water treatment facilities out of service before, during, and following a climate event
1708	Time for services to be restored is minimised	Water supply services are restored to [defined level of service to be determined] within [reference time step period to be determined] to [reference % of the population to be determined] after a climate-change induced hazard event disaggregated by settings and by service levels

18: Sanitation service functioning

5.4 code	Objective	Indicator
1804	Access to a minimum service level is maintained	Number of disruptions to a basic sanitation service before, during, and following a climate event (UNDESA

		SENDAI indicator) disaggregated by settings and by service levels
1805	Access to a minimum service level is maintained	Proportion of population / schools / health care facilities where sanitation facilities have flooded or sewer connections have experienced backflow in the last year
1806	Sewer system continues to provide a minimum service	Number of households / schools / health care facilities reporting sewer backflows in the past year per number of sewer connections
1807	Road based FSM continues to provide a minimum service	Number of faecal sludge service providers reporting interruption to operations for a period of at least 7 days during the past year
1808	FS and WW treatment continues to provide a minimum service	Proportion of faecal sludge / wastewater treatment facilities not operating for a period of at least 7 days in the past year

19: Hygiene service functioning

5.4 code	Objective	Indicator
1905	Safe, secure, and preferred MHM facilities available during and following a climate event	Proportion of women, girls, and menstruators reporting a break in access to safe, secure, and private facilities to wash and dry menstrual products/cloths for at least one menstrual cycle due to a climate event disaggregated by settings

20: User experience of water supply

5.4 code	Objective	Indicator
2003	Users are protected from distress related to water service disruptions	Proportion of population who felt safe accessing water supplies during and following a climate event
2004	Access to water supply is maintained	Proportion of population whose water supply services were unavailable during and following a climate event who were able to access alternative water supply facility
2005	Financial impacts on users are minimised	Additional time spent collecting, treating and managing water supply before, during, and following a climate event disaggregated by gender
2006	User complaints / requests for assistance are dealt with in a timely manner	Time lapsed in redressal of customer complaints before, during, and following a climate event

21: User experience of sanitation

5.4 code	Objective	Indicator
2103	Access to sanitation is maintained	Proportion of population whose sanitation services were unavailable during or following a climate event who were able to access alternative sanitation facility

2104	Financial impacts on users are minimised	Value of financial losses due to damaged WASH infrastructure (centralised/system and household level)
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22: User experience of practicing hygiene behaviours

5.4 code	Objective	Indicator
2203	Users are protected from distress related to practicing hygiene	Proportion of population reporting that they worried about meeting hygiene needs before, during, and following climate events
2204	Users are protected from distress related to practicing hygiene	Proportion of women, girls, and menstruators who reported that they felt safe while practicing menstrual hygiene management before, during, and following a climate event in the last [reference period to be determined]
2205	Users are protected from uncertainty related to managing menstrual hygiene	Proportion of women, girls, and menstruators who reported easy access to affordable menstrual materials due to market disruptions before, during, and following a climate event