

Government of the Republic of the Union of Myanmar

NATIONAL RURAL SANITATION AND HYGIENE COSTED IMPLEMENTATION PLAN

2021 - 2030

December 2020

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Abbreviations and Acronyms

BCC	Behavior Change Communication
CATS	Community Approaches to Total Sanitation
CLTS	Community led Total Sanitation
CSO	Civil Society Organizations
CSR	Corporate Social Responsibility
DALY	Disability Adjusted Life Year
JMP	Joint Monitoring Program
DHS	Demographic and Health Survey
EASAN	East Asian Sanitation Network / Conference
EMIS	Education Management Information System
FSM	Fecal Sludge Management
GDP	Gross Domestic Product
GPI	Gender Parity Index
HCF	Health Care Facility
HMIS	Health Management Information System
IA	Implementing Agency
IPC	Interpersonal Communication
JMP	Joint Monitoring Program
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MHM	Menstrual Hygiene Management
MICS	Multiple Indicator Cluster Survey
MIS	Management Information System
MoHS	Ministry of Health and Sports
MSDP	Myanmar Sustainable Development Policy, 2018-30
NA	Not Applicable
NGO	Non-Governmental Organisation
O&M	Operation and Maintenance
ODF	Open Defecation Free
RHC	Rural health center
S&H	Sanitation and Hygiene
SDG	Sustainable Development Goals
SHG	Self Help Group
SWA	Sanitation and Water for all
TWG	Technical Working Group
UNICEF	United Nations Children Fund
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

Definitions

Costed Implementation Plan	Costed Implementation Plan involves the strategic approach adopted to translate the Myanmar Rural Sanitation and Hygiene Policy into action, to reach the targets set therein within the specified timeframe. It includes the enabling environment elements that needs to be in place to achieve at-scale change, as well as the software and hardware activities. Costing of the EE elements as well as software and hardware (limited to household sanitation) is also included.
Sanitation	“Sanitation refers to the provision of facilities and services for the safe management of human excreta from the toilet to containment and storage and treatment onsite or conveyance, treatment and eventual safe end use or disposal. More broadly sanitation also included the safe management of solid waste and animal waste.” (https://www.who.int/topics/sanitation/en/)
Handwashing	Handwashing is the act of cleaning your hands with soap and water, when hands are visibly dirty or before/after certain behavior/actions such as before having meals/feeding, using the toilet, washing baby’s bottom, and other actions which can potentially contaminate the hands.
Hygiene	“Cleanliness that promotes health and well-being, especially of a personal nature” (https://medical-dictionary.thefreedictionary.com/hygiene). Hygiene refers to the maintenance of a clean environment, both at personal and at the environment level. it mandates cleans body, especially hands, covered food and water, and maintenance of a germ-free environment.
Improved sanitation	Sanitation facility where the fecal-oral chain and water contamination has been blocked; practically, it means that flies cannot access the fecal waste and come back to human beings; also, ground and surface water is not contaminated by the sanitation facility
Basic Sanitation Services	Terminology used by SDG for basic sanitation. Sanitation facility where the fecal-oral chain and water contamination has been blocked; practically, it means that flies cannot access the fecal waste and come back to human beings; also, ground and surface water is not contaminated by the sanitation facility
Safe sanitation Services	Basic/basic sanitation where the fecal matter is stored, transported, treated and disposed in a safe manner. Looks at not just the toilet, but also the service chain until final disposal of the

treated waste.

Myanmar Sustainable Development Plan, 2018 – 30	The MSDP, 2018-30 is the national development vision of Myanmar. It seeks to provide an overall framework for coordination and cooperation among all the stakeholders at national and sub-national levels. The MSDP's Goal 5: Natural Resources and the Environment for Prosperity of the Nation, Pillar 3: People and Planet states: "Enable safe and equitable access to water and sanitation in ways that ensure environmental sustainability".
Sustainable Development Goals, 2030	The '2030 Agenda for Sustainable Development were adopted by the United Nations in 2015. Goal 6.2 has the objective: "By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations"
Joint Monitoring Program (JMP)	International monitoring system of the SDG, undertaken jointly by WHO and UNICEF. Source of data is typically country based data collection systems, DHS, MICS, etc. A best fit line is drawn for a country based on multiple data systems.
School Sanitation	Sanitation facility for the children, teachers and staff in a school. Needs to be gender-segregated, subscribe to safe sanitation standards, adequately in quantity (ratio of urinals/toilets to children and staff), have handwashing facilities, and menstrual hygiene management facilities
Health Care Facility Sanitation	Sanitation facilities in hospitals and health centers. As per size of the hospital – number of in- and out-patients, and health staff.
Menstrual Hygiene Management facilities	Typically, in schools, but also in community. Facilities in schools to meet menstrual needs of adolescent girls, including privacy facilities and safe disposal facilities (e.g. incinerators)
Public Place Sanitation	These are sanitation facilities at public places, where there is a high number of temporary visitors. These could be markets, bus stops, religious places, etc., where people congregate. This could be permanent such as a bus stop, periodic like a weekly market, or temporary like a one-off festival. The sanitation facilities could be permanent or temporary (e.g. mobile toilets) depending on the need.
Emergency sanitation	In this plan, emergency sanitation refers to the preparatory activities required to be in place at various levels, to be put into action when emergency situations arise. This would include identification and capacity building of institutions, emergency plans prepared and in place, provision of emergency material for sanitation and hygiene, etc.

Development Partners	Donors, development banks and multilateral development organisations
Open Defecation	Feces left openly exposed to the air, typically done behind the 'bushes' or into water bodies (e.g. stream) directly; includes pit toilets with no covering where feces is open to flies or ground water.
Open Defecation Free (ODF)	Situation where is no open defecation (see definition of OD) in the environment
At-scale program	Program where the intervention is targeted at a larger unit, say a district or region/state
SDG targets	Sustainable Development Goals of the United Nations adopted in 2015. Aims to achieve 100% coverage / access across 15 developmental goals. Goal 6 covers WASH, with Goal 6.2 covering Sanitation and Hygiene: "By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations"

Acknowledgements

The development of the Sanitation and Hygiene costed Implementation Plan for rural Myanmar was led by the Ministry of Health and Sports (MoHS), Government of Myanmar. The process was led by the Minister of Health and Sports, H.E. Dr Myint Htwe, Deputy Minister H.E. Dr Mya Lay Sein, Permanent Secretary Dr Thet Khaing Win and Director General of Department of Public Health, Dr Soe Oo. The process was coordinated and led by the Task Force created for the purpose, acted as a secretary of the Task Force by U Htay Win, Deputy Director of the Environmental Sanitation Division under the Department of Public Health, and consisting of members from various Departments of the MoHS such as Department of Public Health and Department of Medical Service, various Ministries/ Departments of the Government of Myanmar such as Department of Basic Education, Department of Rural Development, Department of Planning, Department of Budget, Central Statistics Organization, General Administration Department, Environmental Conservation Department, Department of Disaster Management, Department of Building, Inland Water Transport, Department of Marine Administration, Myanmar Railways, Road Transport Administration Department, Directorate of Water Resources and Improvement of River Systems, University of Public Health (Yangon), University of Medicine (1) Yangon, University of Medicine (2) Yangon, University of Community Health (Magwe) and technical experts from WHO and UNICEF. Thanks to the TF members for their constant guidance and leadership during the process.

The representatives of the Task Force and sub-national governments, from the States/Regions and selected townships, participated in the consultative workshops at the preliminary stage as well as the draft stages, and contributed extensively to the development of ideas for this costed plan. All these representatives who participated in these meetings, as well as those in the background who contributed, are thanked for their contribution.

The MoHS was supported in the development of the costed implementation plan by WHO and UNICEF, including the provision of support of consultants (Dr. Min Than Nyunt and Ajith Kumar). Additionally, other development partners and national and international NGOs also contributed to various drafts of the costed plan through physical and online feedback. This plan acknowledges the contribution that all these partners to the MoHS, made in its preparation.

Executive Summary

The Rural Sanitation and Hygiene costed Implementation Plan details out the physical and financial targets for achieving the objectives of the Rural Sanitation and Hygiene Policy of the Government of the Republic of the Union of Myanmar. It seeks to achieve the vision of the Policy, of achieving ODF in rural Myanmar by the year 2030, in line with the Myanmar Sustainable Development Plan, 2018-2030, and the Sustainable Development Goals, 2030.

The approach to meeting the objectives involves the strengthening of the enabling environment, to achieve the targets at scale, as well as the software and hardware interventions required to move from OD and unimproved sanitation to safe sanitation facilities. While software is costed for all elements and sub-sectors, hardware costs for only households and Fecal Sludge Management plants are considered – the other sub-sectors will be costed by the respective institutions responsible, in line with their strategy and costing guidelines.

Targets, 2021-30

(all figures in %)	Baseline (2020)	2022	2025	2030
Open Defecation Free communities	2	20	60	100
Access to basic toilets	78	85	95	100
Access to safe sanitation		20	40	70
Access to handwashing facilities	80	90	90	100
Safe disposal of infant feces	59	70	90	100
School Sanitation and Hygiene facilities	NA	60	60	100
Health Care Facility Sanitation	NA	60	80	100
Public Places Sanitation	NA	60	80	100

Required financial costs

- Capital costs 2021-30

		Amount (USD million)
Household toilets: Capex 'No toilet to basic toilet'	184	243
Household toilets: Capex 'Unimproved to basic toilet'	60	
Household toilets: O&M costs		1,517
Fecal sludge management: Capex for FSM plants		70

- Software costs 2021-30

Indicator/Sub-sector	Amount (USD million)
Enabling Environment – Policies, Laws and Guidelines	0.18
Enabling Environment – Institutional Arrangements	51.31
Enabling Environment - Demand generation	4.21
Enabling Environment - Supply and markets	-
Enabling Environment - Financing	1.06
Enabling Environment – Management Information System and Knowledge Management	6.78
Enabling Environment - Equity	0.60
Open Defecation Free rural communities	15.53
Household Sanitation Facilities (basic toilets and FSM)	313
Basic hygiene	-
School sanitation	24.63
Health Care Facility Sanitation	-
Sanitation in public places	0.10
WASH in emergencies and disaster	-
Total	417.39

- Per unit Software costs (rural)

	Amount (USD)
Per capita	3
Per village	1650
Per township	316,324
Per district	1,391,824
Per state / region	6,959,118

1. Background

1. The costed implementation plan sets out the strategy for achieving the vision of the Myanmar National Rural Sanitation and Hygiene Policy, as well as the costs required to achieve it.
2. The Rural Sanitation and Hygiene Policy of Myanmar has the vision:

“All residents of the rural areas in the country are living and practicing, by the year 2030, in a clean and safe environment as a social norm, as a way of life, leading to a brighter image of the country within and outside.”

The Policy is aligned with the goals of the MSDP, 2018-30 and the SDGs and aims to achieve an Open Defecation Free (ODF) rural Myanmar by 2030. This includes rural communities (including peri-urban communities) with 100% coverage of basic sanitation of all households, schools, health care facilities, public areas sanitation and emergency sanitation.

3. The strategic objective of the vision includes:
 - All residents people in the rural areas including the peri-urban rural areas of the country are living in ODF communities. Residents include all those who are living permanently, short- or long-term visitors, short- or long-term migrants, those who have come for work for a day or for longer duration.
 - All people in rural areas have access to a basic toilet and handwashing station (with soap), at all times, by the year 2030. This would be at home, at schools, at work, at public places, at disaster or emergency situations and the like, that are:
 - Safe, hygienic, socially and culturally acceptable, and affordable, provides privacy and ensures dignity.
 - Are always easily accessible, day and night, and during health emergencies
 - Protects health, are environmentally appropriate and climate resilient
 - Handwashing stations are near to point of use (toilet, dining areas), along with soap, and are always easy to use.
 - At least 70% of the toilets fall into the ‘safely managed’ category by 2030, with the remaining 30% being achieved by the year 2035.
 - No one is left behind, with all the people, including marginalized of any kind, have equal access to an ODF environment and basic sanitation and hygiene facilities as anyone else.
 - All feces, including infant feces, is disposed of in the toilet or other safe practices
 - Other feces, like animal feces, are also disposed-off in a safe manner
 - ODF and basic access becomes a society norm that sustainability of these behaviors are guaranteed in the future, without dangers of slip-backs.
 - The vision of achieving an ODF rural Myanmar is a means to achieving ODF Myanmar by 2030.
4. The intervention is undertaken at two levels

- at the creation of an enabling environment necessary to achieve outcomes at scale; when moving from single/few communities to scaling entire districts and states/regions, the presence of an enabling environment, i.e. the systems required to achieve these outcomes, at scale, is critical.
 - the software and hardware interventions required to achieve the outcomes. The software intervention is aimed at all sub-sectors, while the hardware is looked at, for household toilets and FSM plants only (it is anticipated that the costing for hardware for institutions like schools, HCFs and public places would be undertaken and resourced by the concerned ministry / department / institution).
5. This costed implementation plan therefore sets out to create an enabling environment (institutions, capacity, finance, monitoring, etc.) to create this large-scale change to the status quo, across the sub-sectors as mentioned above.

1.1. Baseline status

6. The costed implementation plan is based on the status of the sanitation and hygiene sector, in 2020. This status is taken from various sources such as DHS, MICS, Census, Inter-censal survey – whichever is the latest source of information available.

Indicator	Status	Source
Access to basic household sanitation	78%	Inter-censal survey 2019
Access to basic handwashing facilities	80%	DHS 2017
Disposal of child feces	59%	DHS 2017
No. of ODF communities	1240	UNICEF progress report
No. of schools with safe sanitation facilities	TBD	
No. of HCFs with safe sanitation facilities	TBD	

2. Planning the intervention

7. The extent of intervention required varies according to the source of data, but as per latest available data on the baseline status, the country still has some way to go. The main challenge is in household toilets, where the current access rates are at 78% (Inter-censal survey, 2019); in addition, there are large disparities between regions/states, districts and townships, which means some of these may have poorer rates of access than this national average.
8. The access to sanitation requires the construction of basic and safe sanitation facilities, as well as change in behavior to use basic and safe sanitation facilities. This is a huge task, within a limited time. An accelerated campaign mode needs to be adopted, if an at-scale outcomes needs to be achieved for sanitation and hygiene across the rural areas of the country, by 2030. For it to

be effective in reaching the outcomes, but also be sustainable, this campaign requires systematic planning. Certain ingredients are critical for this planning to bear fruit:

- **Evidence based approach:** The factors that brings about change in infrastructure and behavior may vary between persons, households, communities, and districts. The intervention will need to be suited to the situation, as also need to change according to the need. As each unit of implementation, such as districts or regions/states, may have different characteristics, it is important not to have a one-approach-fits-all, but be adapted to the local characteristics. These need to be based on evidence on what the status – physical, perceptions, capacity, resources – is, so that the intervention will be fine-tuned to the needs. If no/limited evidence is currently available, a situation analysis and/or formative research will need to be undertaken to understand the status. This may be undertaken at any level according to the characteristics – for e.g. if a region/state has homogenous population, it could be done at that level; however, if the population is heterogenous, it is best that sub-region/state level studies be undertaken to capture the diversity.
- **Presence of an enabling environment (systems approach):** Making few/pilot villages ODF may be simpler task than achieving ODF at-scale across townships/districts/regions/states, which requires the presence of an enabling environment. Multiple systems need to be in place for this environment to enable the scaling up. These include the institutional system (along with capacity building), monitoring system, financing system, and the like. The presence of these systems will ensure that the intervention is seamless and effective. Each component will therefore need to be planned in detail and put into place at the beginning of the intervention.
- **Phasing the intervention:** The task is huge and the time available is limited – the intervention therefore needs to be focused. A tendency to impatiently rush into spreading the campaign across the country is best avoided. The resources available may be limited, which may be spread thin if the intervention is spread around. Certain actions such as national level BCC interventions may be undertaken which reaches every part of the country; however, targeted interventions through IPC is better when it is done in phases. Between now and 2030, the total need at each unit (say, district, region/state) should be divided into phases and each slice should be taken up for intervention at periodic intervals. Certain criteria could be used to define each slice – e.g. low hanging fruits in the form of no/low OD (i.e. almost everyone has a toilet, some of which needs upgrading) communities, homogenous community, not difficult to reach areas (though it is not prudent to ignore all to reach difficult areas till the end). A suggested spread of communities being taken up over the next decade is given below:

Table: Phasing of communities intervened, 2021 – 2030

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
% of communities intervened	15	20	20	15	10	5	5	5	5	0

3. Timeline

9. The policy for Sanitation and Hygiene provides a vision for achievement of a clean rural Myanmar by the year 2030. The period until 2030 is dis-aggregated on a periodic basis, from the base year 2021, as well as on sub-sectors and themes.
 - Physical: This will provide the targets for achievement of physical targets, such as number of household toilets to be reached etc., for each year.
 - Financial: The corresponding financial requirements to achieve the goals of the policy will be costed (hardware costs limited to household sanitation and FSM). The basis for this calculation will be approximate per capita costs, which will give a broad idea of the financial requirements.

Table: Trajectory of Outputs and Outcomes, 2021-30

(all figures in %)	Baseline (2020)	2022	2025	2030
Open Defecation Free communities	2	20	60	100
Access to basic toilets	78.5	85	95	100
Access to safe sanitation		20	40	70
Access to handwashing facilities	71	80	90	100
Safe disposal of infant feces	59	70	90	100
School Sanitation and Hygiene facilities	NA	60	80	100
Health Care Facility Sanitation	NA	60	80	100
Public Places Sanitation	NA	60	80	100

- Based on these strategy and costing at the national level, the regions/states shall disaggregate the physical and financial timelines for their districts and townships.

4. Strategic Approach and Costs

All Costs in USD

10. The goal of the sanitation and hygiene sector in rural Myanmar is to meet the MSDP and SDG goals by 2030. This would be approached incrementally from the current baseline in 2020. The targets for the various sub-sectors, the indicators of success, the strategic approach adopted, and costs for this, will be considered.
11. The costed Implementation Plan will consider the following service delivery elements, and specific sub-sectors:

Service delivery elements (Enabling Environment)

- Standards and Guidelines
- Institutional arrangement (incl. Capacity development)
- Demand generation
- Supply and markets
- Financing
- Monitoring and regulation
- Equity

Sub-sectors:

- Open Defecation Free (ODF) communities
- Access to Basic sanitation and hygiene in households
- Access to Basic sanitation and hygiene in schools
- Access to Basic sanitation and hygiene in Health Care Facilities
- Access to Basic sanitation and hygiene in public places
- Access to Basic sanitation and hygiene in emergencies

12. Each of these service delivery elements and sub-sectors would be detailed further across these themes:

- Indicators of Outcome
- Targets
- Strategic approach
- Costs

13. Regarding costs, the direct financial costs are only taken into consideration; there may be additional invisible costs in the form of government staff time, time by other stakeholders (e.g. households), which are not measured. Though these are important, it was beyond the scope of this exercise to compute them. Additionally, due to the absence of credible data on the status and costs, assumptions have been used; these have been made as far as possible based on anecdotal evidence and/or realistic factors.

14. In terms of financial needs, the hardware costs of only the households and FSM are considered, while the software looks at all sub-sectors. Based on the policy, and standards currently being developed for sub-sectors like school sanitation, detailed costing would be arrived at by their corresponding institutions/ stakeholders.

5. Summary of physical and financial targets:

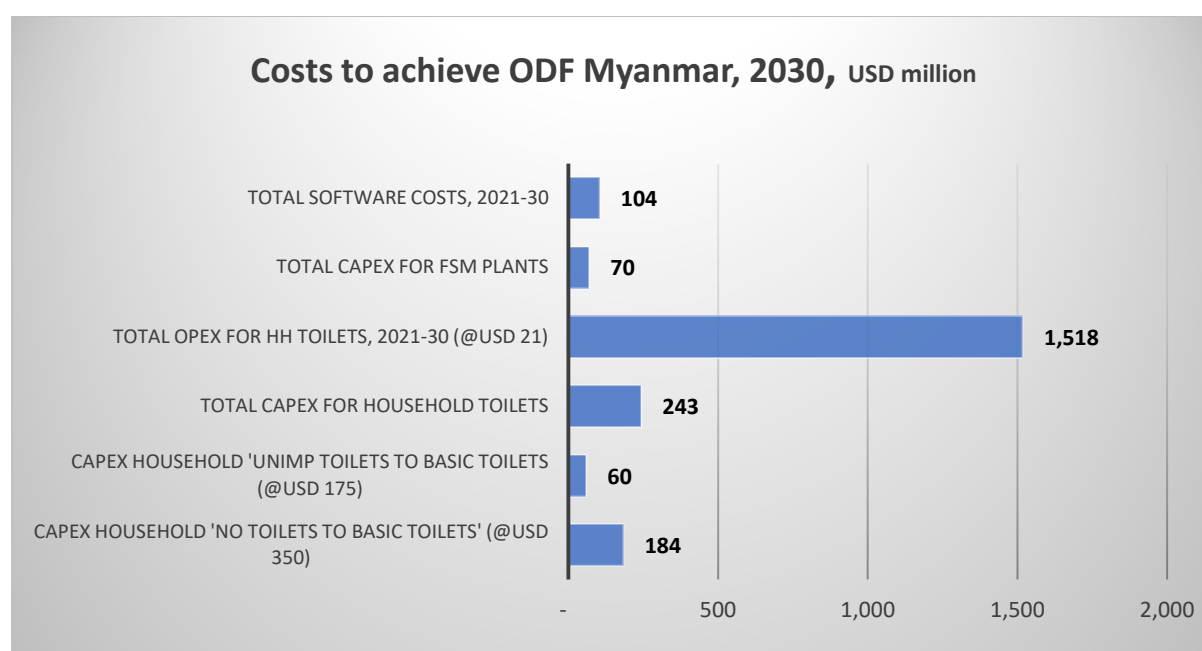
15. Demographic status (Source: Inter-censal survey, 2019-20):

Number of states/regions	15
Number of districts	75
Number of townships	330
Number of towns	458
Number of wards	3,400
Number of village tracts	13,599
Number of villages	63,282
Population of the country	51.1 million
Rural population (70%)	36.4million
Number of households	11.1 million
Rural households	8 million
Average number of household members	5
Average number of rural household members	6

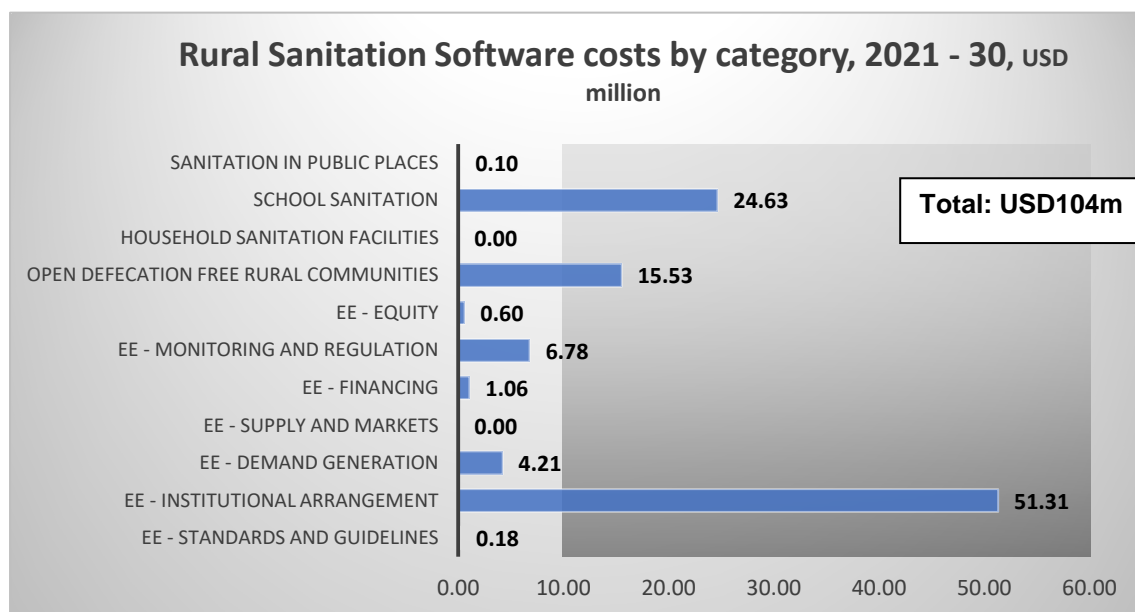
16. Sanitation status (Inter-censal survey, 2019-20)

Households with basic toilets (%)	78
Rural household with basic toilets	6.2 million
Rural households with unimproved toilets	0.3 million
Rural households with no toilets	0.5 million

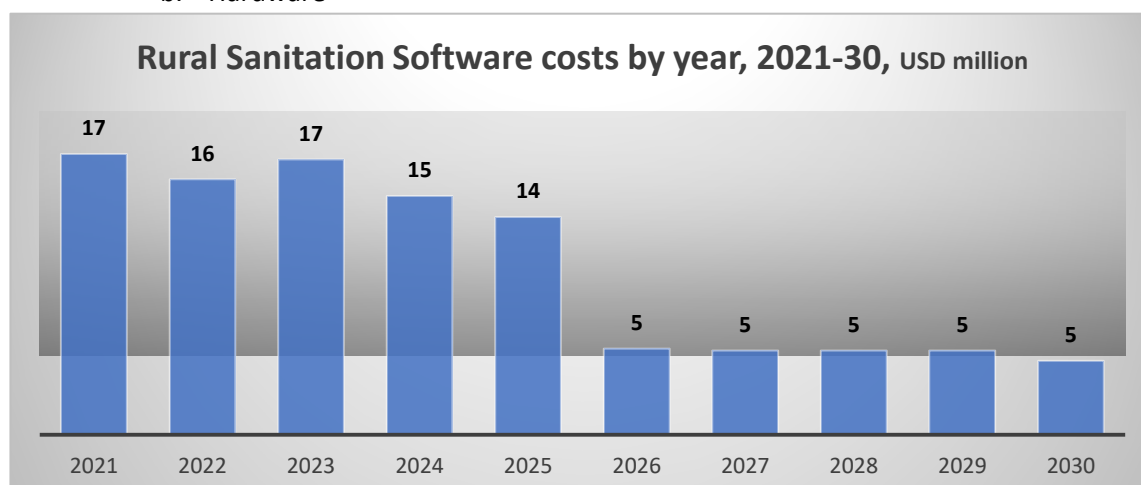
17. Summary of required financial costs



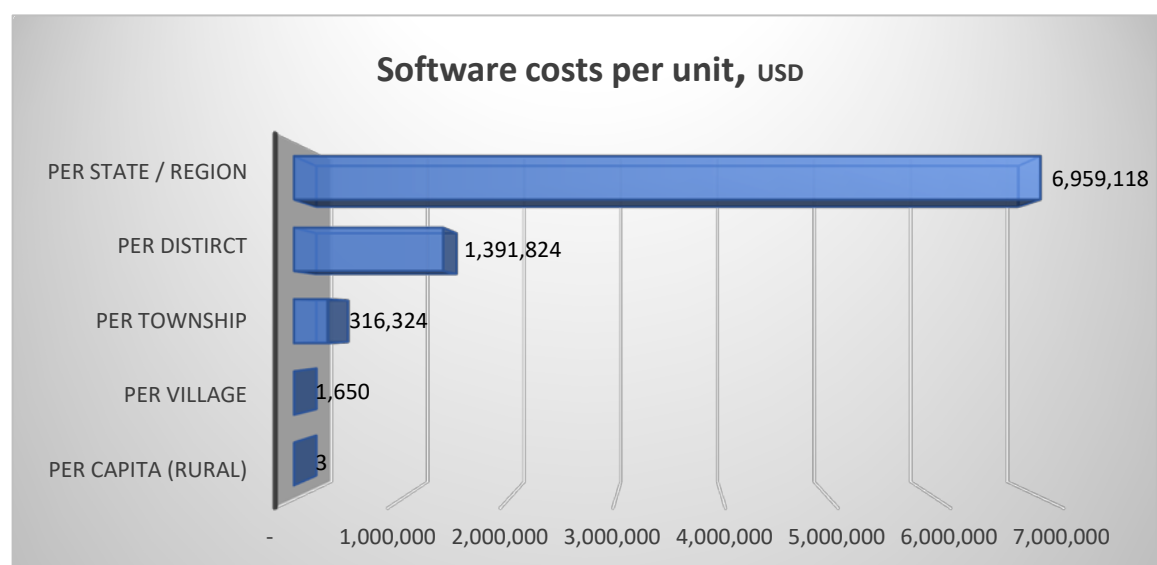
a. Software



b. Hardware



5.1. Sources for



Sanitation and Hygiene funding

18. The funding for sanitation would cover both the capital expenditure and the operational expenditure of the facilities and/or behavior
19. The sources of these funding would be varied, according to the facility: Government, national and international development agencies, private sector, households, etc. Some of the funding may be from one source, with another source maybe putting in additional or substitute resources.
20. The following would be the broad funding pattern for the various heads of expenditure in the S&H sector:

Table: Potential sources of funding across type of expenditure

Type of expenditure		Govern- ment	Develop- ment partners	Private sector	Institutions (School / HCF / others)	Househ old
Demand creation / BCC	Sanitation	✓	✓	✓		
Household toilets	Capital expenditure	10% (in specific cases)	-	-		100%
	O&M expenditure					100%
School sanitation	Capital expenditure for toilets	100%	✓	✓	Partly	NA
	O&M of toilets	✗	✗	✗	✓	NA
	Hygiene promotion	✗	✓	✓	✓	NA
Health facility	Capital expenditure for toilets	100%	✓	✓	Partly	NA
	O&M of toilets	✗	✗	✗	✓	NA
Public places	Capital expenditure for toilets	100%	✓	✓	✗	NA
	O&M of toilets	✗	✗	✗	100%	NA
Emergency S&H	Capital expenditure	✓	✓	✗	✗	NA
	O&M expenditure	✓	✓	✗	✗	NA

6. Enabling Environment – Development of Standards and Guidelines

21. A poor intervention is worse than no intervention. Sanitation and hygiene facilities, if created without adhering to minimum standards, can pollute the environment, aid in the spread of diseases and drive people away from basic sanitation. It is therefore important that every sanitation facility created is not only constructed, but also operated and maintained, as per minimum standards.
22. The Sanitation and Hygiene sector, therefore, requires certain laws, guidelines, and standards to function. Some of these are laws which are required to enforce the minimum standards – e.g. the prevention of pollution of the environment, are non-negotiable and need to be enforced across the board. Others may be guidelines that are desirable to be achieved, but which has

flexibility to be adapted according to the circumstances. Some of the laws and guidelines may already be existing – these would be reviewed for comprehensiveness and whether they meet the needs of the S&H sector. Recommendations on strengthening these would be made.

- The standards set shall be equivalent to the MSDP or the SDG (Joint Monitoring Program) standards. These shall be the minimum standards set for sanitation and hygiene, under which public financing shall be spent on, for promotion, and/or in rare cases, infrastructure. If the household/institution desires higher standards than the basic minimum, these shall be financed from private sources.
- Other laws and guidelines may be non-existent at the moment and may need to be prepared new. A process of consultative drafting and finalization would be adopted to come out with these.
- Environmental assessments shall be part of any decision-making process. Any intervention shall adopt a holistic approach, including conducting an Environmental Impact Assessment – the complexity of the assessment shall be determined by the complexity of the intervention. All interventions shall be assessed against alternatives through a systematic evaluation. The final selection of the intervention shall consider the environmental impact as one of the decision-making factors, through a cost-benefit analysis (including quantitative and qualitative elements). Environmental impacts of any intervention, if any, shall be managed and minimized to the extent possible. Reduce and recycle approach shall be promoted. Instead of creating pollution and then treating it, the approach shall seek to prevent these through encouragement of reducing use and then recycling. Legislation shall complement advocacy and awareness to environmental concerns.

6.1. Indicators of Outcome

23. The following will be completed (review and strengthening of existing, or prepared afresh):

- Environmental laws and standards
- Toilet standards
- Guidelines on Toilet options
- Construction standards
- Pit emptying, transportation, and treatment guidelines

6.2. Targets

24. These laws, guidelines and standards are expected to be completed at the earliest, to facilitate the achievement of the objectives of the policy by the year 2030.

Environmental laws and standards	mid 2021
Toilet standards	mid 2021
Guidelines on Toilet options	mid 2021
Construction standards	mid 2021
Pit emptying, transportation and treatment guidelines	end 2021

6.3. Strategic approach

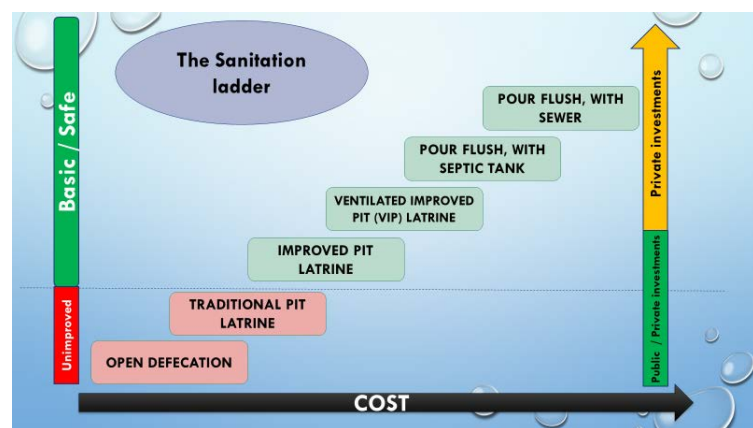
25. The laws, guidelines and standards will be prepared/strengthened for the effective roll out of the policy and implementation of the Sanitation and Hygiene Policy.

- Environmental laws and standards: The existing environmental standards and laws will need to be critically examined to identify any existing gaps which may need to be strengthened, or if not available, new laws along with standards passed. These will include the laws pertaining

to pollution of the environment, including public land and water bodies – discharge of effluent and sludge into these; physical handling of waste; and transportation of waste. All these would have the minimum standards, the procedures for disposal, and the penalty for violation of these laws.

- Toilet standards: The standards of a toilet and handwashing station, by which it is termed as a basic facility. This would be in line with the standards propounded by the MSDP or the SDG. The basis for this would be the health impact that poor sanitation and hygiene has, and not on

other criteria of shame, dignity or status. These latter standards may be optional, depending on the user preference and strictly based on private investments (software and hardware).



Guidelines on Toilet options:

Various types of toilets, all meeting Myanmar basic standards of basic toilet, from simple to complex, at various price point (cheap to expensive); includes construction standards / principles, suggested dimensions, number/quantity of material required, approximate (range of) prices; includes substructure and platform; may include suggestions for superstructure.

- Guidelines on Toilet options: A manual of options suited for different socio-cultural and geographical conditions, across various price points. The options for substructure (leach pit, septic tanks, sewer lines), platform (earth, plastic, cement, tiled), and superstructure (local material, bricks, etc.) could be provided, along with price points. The toilets would be user-friendly, including ensuring access to the disabled, children and other categories of people.

- Construction standards: The basic principles of a toilet (for e.g. distance from

drinking water source, from ground water table) would be enunciated. The other standards or construction which ensures that the toilet undertakes its purpose as designed would be included – some of these would include the gaps in the leachpit, the outlet for a septic tank, etc.

- Pit emptying, transportation and treatment guidelines – this is part of the post construction management part. When a pit is full, it needs to be emptied, the contents transported safely to a treatment plant, and treatment of the waste undertaken, before safe disposal. This process needs to be tightly controlled so that no contamination takes place, the workers who does this have safety equipment, the transportation is done without spills, etc.

26. It is recommended that the approach to develop/strengthen the laws, guidelines and standards would be undertaken with the support of development partners.

6.4. Costs

27. The costs involved in development of these laws, guidelines and standards involves the engagement of consultancies, and stakeholder workshops to discuss and finalize. An estimated cost involved is given below:

		(All costs in USD)
Output / Activity	Details	Amount
Environmental laws and standards	Lumpsum costs	50,000
Toilet standards	Lumpsum costs	25,000
Guidelines on toilet options	Lumpsum costs	25,000
Construction standards	Lumpsum costs	25,000
Guidelines for septage management (pit emptying, transportation and treatment)	Lumpsum costs	50,000
Total		175,000*

*all expenditure in 2021

7. Enabling Environment – Institutional Arrangement

28. Identification of institutions, with assigned responsibility, to manage the sanitation and hygiene campaign process at all levels is critical to its progress. The role of the institutions at different levels would be different, ranging from policy to supervision to implementation to monitoring; the right type of people with the right capacity can determine the progress towards outcomes.

7.1. Indicators of Outcome

- Clarity on the institutions responsible for various aspects of the sanitation and hygiene service chain, from policy to implementation to monitoring to sustainability.
- Availability of institutions at all levels, with staff which are full time or part time (at least 50% of their time) and whose capacities have built up to enable them to carry their responsibilities.
- Effective coordination of stakeholders involved in the sanitation and hygiene sector

7.2. Targets

29. The number of personnel at the national, regional/state, district and township levels are proposed. These could be full time personnel or part time (giving to the sanitation campaign at least 50% of their time as input). They may be of different skills-sets like social and community mobilization, technology, supply chain and markets, finance, monitoring, etc. At the sub-township level, each RHC would have a facilitator given the responsibility of facilitating the community driven processes.

National level	5-member team
Regional level	5-member team
District level	3-member team
Township level	2-member team
RHC	1-person team

7.3. Strategic approach

30. A review of the status of institutions from national to townships levels, along with their perceived responsibilities and accountabilities, would be undertaken at the beginning. Based on this, recommendations on bringing about clarity including change in laws and procedures and follow-up actions required, would be given.
31. The sanitation campaign will need to be planned and coordinated at the appropriate levels. At the national level, this would include preparing and furthering policy, coordination, conceiving laws and guidelines, overall supervision and oversight, financing, monitoring, etc. Regional level institutions will provide handholding support to the sub-regional levels, undertake monitoring and reporting. Demand creation and Implementation will be the main responsibility at district level, with financing and monitoring included. Township level shall facilitate the processes within their area of operations.
- The rural sanitation and hygiene sector shall be led and coordinated by the Ministry of Health and Sports at the national level. It shall set the standards for the sector and issue guidelines, enable the legal and regulatory frameworks, guide the regions and states in the promotion of sanitation and hygiene, coordinate the disparate stakeholders active at all levels and functions in the sector, provide finance for the construction of public facilities and monitor the progress and trends in the sector. MoHS will also lead efforts to ensure the availability of sanitation and hygiene facilities at all hospitals and health centers from the township level and below.
 - The other ministries at the national level, like Education, Social Welfare, etc., will lead the efforts in identifying the need, planning and implementation of sanitation and hygiene facilities (including water supply) in their respective domains – e.g. Education Ministry will be responsible for ensuring their availability and use in all educational institutions.
 - The promotion and implementation of the sanitation and hygiene campaign shall be undertaken by the State/Region level Ministry/Department. It shall oversee and guide the process to ensure that the messages reach the stakeholders down to the community and household levels, the supply chain and markets are facilitated, and outputs and outcomes monitored. Sub- State/Region level institutions at the

township and Rural Health Centers (RHCs) shall undertake the actual implementation and monitoring.

- d. The development partners / donors shall contribute to the sector by way of providing financial and technical assistance for promotion, establishing systems including supply chains and monitoring systems, financing approaches, etc. It shall support to document and disseminate best practices in the sector from within and outside the country, to support its adaptation within the country.
 - e. Financial institutions such as banks, credit cooperatives, micro-credit institutions shall be facilitated by the appropriate lead organization at national and sub-national levels to provide soft loans / credit to households and vendors on softer terms to avail or offer sanitation products and services.
 - f. NGOs and CSOs shall be facilitated to partner with the implementing agencies to support the implementation process, build the capacity of the institutions involved in the sector, facilitate the monitoring and accountability of outputs and outcomes, and provide support to document and disseminate best practices.
 - g. The private sector shall be facilitated to offer resources to set up self-sustaining supply chain and markets to offer sanitation and hygiene products and services, both to construct the infrastructure as well as their maintenance over the long term. Private sector may be facilitated to set up pit emptying businesses, as well as transportation, and operating Fecal Sludge Management (FSM) plants.
 - h. The households shall be responsible for the construction and maintenance of their own household toilets and handwashing stations, as per the minimum standards set up by the government, and adopt the basic sanitation and hygiene behaviors.
 - i. Technical Working Groups on various themes would be set up at the national and sub-national levels, which would meet periodically to discuss on the issues, share experiences, and find solutions.
32. The lead institutions mandated to implement the sanitation and hygiene program shall have adequate personnel to coordinate and manage the efforts; they would be based at the Project Management Units (PMUs) within these institutions and shall be existing personnel from within the ministry/departments or sourced on deputation from other ministries/departments or hired from the market for the duration of the program. If the former two is the source of the personnel, they need to contribute at least 50% of the time to the sanitation campaign, as anecdotal experience from elsewhere suggests that running an effective campaign at scale requires significant levels of human resource inputs.
- a. The catalyzing agents at the RHC and village levels can be engaged based on output and outcome-based incentives. Milestones of activities (e.g. triggering in the village, household visits), processes (monitoring), outputs (toilets upgraded / built), outcomes (ODF villages) and sustainability can be basis for incentives.
 - b. The capacities of all the stakeholders at all the levels will need to be developed to enable them to manage the program at scale. An initial capacity needs assessment will be undertaken to identify the scope of this capacity development plan – identify the stakeholders and the capacity needs of each of them. Series of training and capacity building programs would be undertaken to build up capacities of the stakeholders and institutions.

33. The personnel at district and township levels would be entitled to an incentive for reaching ODF outcomes as well as sustaining the ODF outcomes. An incentive program would be designed by the national government, which would identify the quantum of incentives based on whether they are government personnel or from the market. The program would give out incentives at the first instance on achievement of ODF outcomes, and after few years (to be defined) a second instance on sustainability of these outcomes. Detailed guidelines on this incentive program would be prepared by the national government; issues of attribution and contribution to both outcomes and sustainability, i.e. who were responsible for reaching these, would be clarified in these guidelines. As there is a time lag between the two instances, having objective and transparent processes is very essential to build confidence among all in the process.
34. Effective coordination mechanism would be established at national and sub-national levels. This would include:
- Technical Working Groups at national, regional/state and district levels; comprise of all stakeholders from government and partner agencies involved in the S&H sector; meets once every quarter to discuss on progress and thematic issues.
 - Annual Joint Sector Reviews at regional/state and national levels to discuss broader policy and strategy issues as well as issues around implementation and sustainability.

7.4. Costs

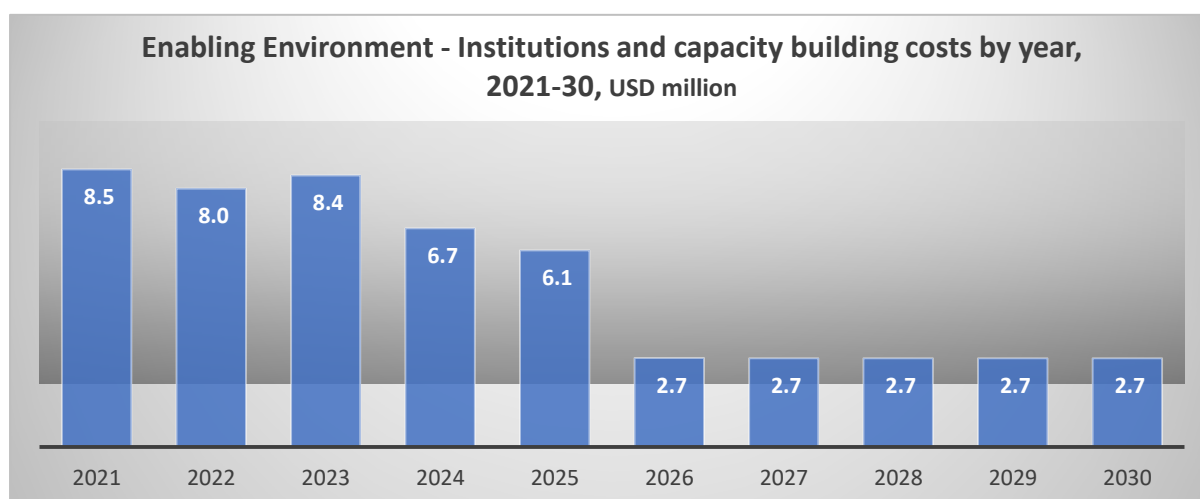
35. The costs envisaged for setting up the institutional framework includes the cost of hiring personnel, capacitating them, costs for incentives as well as coordination activities.

(all costs in USD)

Output / Activity		Details	Cost per unit	No. of units	Total Amount 2021 - 30
Review studies	Review of institutions and responsibilities	Lumpsum cost	50,000	1	50,000
Personnel costs (cost of personnel to be engaged by institutions at various levels, for sanitation promotion / facilitation)	Annual emoluments for the PMU at national level	5 members X MMK 300,000 per person per month X 12	12,000	1	120,000
	Annual emoluments for the PMU at State/ Region level	5 members X MMK 250,000 per person per month X 12 X 15 regions/states	10,000	15	1,500,000
	Annual emoluments for the PMU at district level	3 members X MMK 200,000 per person per month X 12 X 75 districts	4,800	75	3,600,000
	Annual emoluments for the PMU at township level	2 members X MMK 200,000 per person per month X 12 X 330 townships	3,200	330	10,560,000
Guidelines on incentives		Lumpsum cost			

Output / Activity		Details	Cost per unit	No. of units	Total Amount 2021 - 30
			25,000	1	25,000
Guidelines on natural leaders' incentives		Lumpsum cost	25,000	1	25,000
Outcome / sustainability incentives - district	Outcome Incentives for the PMU	MMK 50,000 per village	33	63,282	2,109,400
	Sustainability Incentives for the PMU	MMK 50,000 per village (60% of total villages)	33	37,969	1,265,640
Outcome / sustainability incentives - township	Outcome Incentives for the PMU	MMK 100,000 per village	67	63,282	4,239,894
	Sustainability Incentives for the PMU	MMK 100,000 per village (60% of total villages)	67	37,969	2,531,280
Natural leaders' incentives	Incentives for natural leaders	MMK 10,000 per ODF village	7	63,282	421,880
Capacity Building	Capacity Building needs appraisal	USD 5,000 * 15 region/state			75,000
	Facilitators training - initial training;	1494 RHCs; USD 100 per RHC	100	1,494	149,400
	Facilitators training - refresher training;	1494 RHCs; USD 50 per RHC X 4 years	50	1,494	298,800
	Local govt. training - initial training;	(2X330 townships) + (3X75 districts) + (5X15 State/Region) X USD 100			96,000
	Local govt. training - refresher training;	(2X330 townships) + (3X75 districts) + (5X15 State/Region) X USD 50			48,000
	Community natural leaders training	5 leaders per community X 63,282 villages * USD 20 per person			6,328,200
	Mason training	3 masons X 13,618 village tracts X USD			2,042,700

Output / Activity	Details	Cost per unit	No. of units	Total Amount 2021 - 30
	50 per mason			
Entrepreneur training	13618 village tracts * 2 entrepreneurs * USD 100			2,723,600
Equity orientation	330 townships * 3 per township * USD 500			495,000
Supply chain workshops	330 townships * 3 workshops * USD 10000			9,900,000
Finance officers training	13619 village tracts * 1 finance officer * USD 200			2,723,600
TOTAL				51,307,300



8. Enabling Environment - Demand generation

36. Recognizing that toilet is a behavior in addition to having access to an infrastructure, demand and felt need for basic sanitation is critical for achieving ODF outcomes. Though there is a significant coverage of toilets in Myanmar, much of it is unimproved, which is near equivalent to the traditional Open Defecation (in the bushes/water bodies). Change in behavior does not include a fixed-point defecation, but also having the toilet used being a basic one; this needs to be followed with handwashing at critical times.
37. Multiple methods of influencing people to change their behavior would be undertaken, including using interpersonal and mass media communication approaches.

8.1. Indicators of Outcome

- i. A demand for basic and safe sanitation facility would see the households, schools, HCFs and all other areas constructing such facilities or upgrading their existing unimproved facility to an basic one.
- ii. The percentage of toilets meeting basic and safely managed standards would reach 100% by 2030 respectively.

8.2. Targets:

- 38. The target for this indicator would be measured by an outcome indicator of communities becoming Open Defecation Free. The achievement of this status means that all households and institutions are accessing and using basic sanitation facilities.

8.3. Approach

- 39. The approach to creating demand for basic and safely managed sanitation will depend on a broad set of activities, which can be classified under Behavior Change Communication. The intended change requires changes in both i) behavior – from OD to fixed point defecation – and ii) changes in infrastructure – from unimproved to basic/safely managed.
 - i. A participatory approach shall be used to promote sanitation and hygiene. The promotion of sanitation and hygiene among households shall be undertaken using the principles of participatory approaches such as the CLTS/CATS approach, with the community playing a lead role in the planning, implementation, monitoring and maintenance of the sanitation and hygiene infrastructure as well as the behavior.
 - ii. A push for motivation of the people requires an understanding of the current levels of Knowledge, Skills and Attitudes of the people. Their current beliefs, perceptions, understanding is essential to design appropriate BCC messages and approaches which will bring about the change. This would be undertaken through formative research at the beginning. The research shall be undertaken at the level of a specific unit, say a region/state or district, but would be a representative study to understand the various socio-economic and cultural groups, as well as equity issues. The formative research would delve into the perceptions of the people, the facilitators and inhibitors of change from the personal, household and community points of view; identify the opportunities of change (type of messaging, channels available, etc.); all of which will enable the design of a BCC campaign.
 - iii. Based on the formative research, Inter-Personal Communication (at household and community levels) and mass media (including social media) will be designed and delivered. Health should be one of the major components of messaging, to enable a full understanding among the people of the link between poor Sanitation & Hygiene (S&H) and health. Other factors such as shame, dignity, privacy, status, convenience shall be supplemented, as per the situation. Peer pressure to adopt basic sanitation and hygiene practices would be adopted to motivate the sustained change in behavior.
 - iv. Inter-personal communication will base itself on the proven approaches which places community at the lead role, and uses multiple ‘group-visual synergy’ methods to facilitate the communities to analyze the current status and design change interventions to transform the status quo, implement them and sustain them through community-based monitoring

and regulation. Facilitating approaches to ‘trigger’ communities into wanting to change their behavior, traditional folk media from the local area would be some of the approaches adopted to drive change.

- v. Mass media campaigns including the traditional media such as radio and television, as well as social media such as Facebook, WhatsApp will be leveraged to drive home the messages of change.
- vi. The implementation approach used (e.g. IPC, mass media), the messaging used, etc. will all be determined based on what emerges out of the formative research and the enabling environment. There will be flexibility in the approach to be adopted by each district, based on the need and the resources available.
- vii. The intervention process would have the goal of sustained usage of basic sanitation and hygiene being a societal norm. The process should lead to a situation where using basic sanitation and hygiene facilities is a way of life, a behavior ingrained into the societal life.
- viii. Various events and fora shall be used to promote the messages of basic sanitation and hygiene. Various opportunities like World Water Day, World Toilet Day, National Sanitation Week, etc. shall be used for this. Periodic meetings, conferences, and other events where stakeholders can convene to experience and share, shall be held, as this would help reinforcing the messages.
- ix. Technical solutions offered should be location specific, able to meet the challenges of that areas – e.g. flood prone, water shortage areas. Affordability to various socio-economic status of people should be a factor while offering options.
- x. Environmental education shall be promoted to lead to an environmental ethic among the population. Awareness campaigns at schools, within the community, through local art, mass and social media shall be conducted to raise the level of sensitivity to environmental issues among the populace.
- xi. Climate change adaptation and mitigation: The interventions shall have climate change adaptation and mitigation as part of its focus.

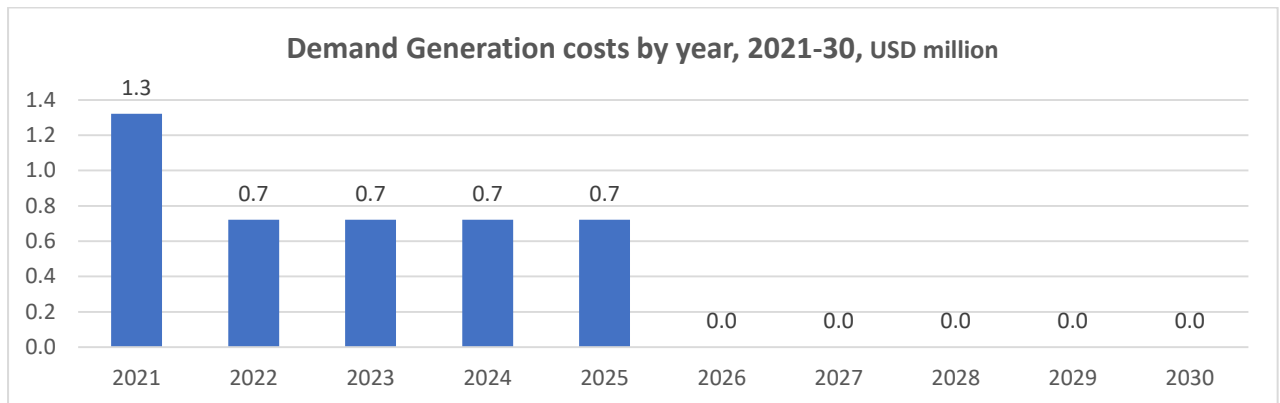
40. The campaign to raise demand in the villages will be done in phases; increasing number of villages selected every year with all the villages intervened by the year 2025; this will be the approach in all districts in all the regions/states, however, each district will decided the phasing approach as per the local dynamics.

8.4. Costs

Output / Activity	Details	Amount
Formative research	Formative research in all 15 regions/states @ USD 25,000 / region, state	375,000
Advocacy campaign	Advocacy campaign at national, region/state and all 75 districts @ USD 3000 average	225,000
Mass media campaign	Mass media and social media campaign roll out in all regions/states @ USD 100,000/region, state	1,500,000
IPC campaigns	IPC events in villages @ 5 events / village X 63282 villages X MMK 10000 per event	2,109,400

Total

4,209,400



9. Enabling Environment – Supply and markets

9.1. Indicators of Outcome

- i. All households and institutions have access to information on the basic principles of basic toilets, affordable options of toilets, and availability of different types of products and services – location and price.
- ii. All villages have access to masons who are trained in various types of toilets across a range of affordability.
- iii. A well-functioning market is available in the near vicinity of the villages in the area, which stocks products (pans, pipes) and services (mason, pit-emptying). If markets are distant, a well-organized collective effort, to have economies of scale, exists for procurement.
- iv. Entrepreneurs set up sanitation markets which facilitate access to products and services, along with sales agents for outreach activities; additional entrepreneurs have set up pit emptying, transportation and treatment services.

9.2. Targets:

Household level awareness campaign	2020 – ongoing
Entrepreneurs identified and facilitated	2020 – 2025
Mason training in all villages	2020 – 2025

9.3. Approach

41. The approach to having an effective supply chain and markets includes the facilitation of development of private markets for goods and services and making available to all stakeholders technical and market information to facilitate an informed decision on adopting a sanitation facility.
 - A market-based approach shall underly the supply chain system, with the promotion of the private sector for products and services. The promotion of the private sector will ensure the market will be available beyond the campaign period for products and services that the households and institutions will require at any time in the future (i.e. 2030). This shall be decentralized to the extent possible with local masons, local retail shops, local service providers (for Operation and Maintenance -O&M) available to supply products and services for infrastructure installation and long-term O&M.
 - The public agencies shall restrict itself to its strong role of facilitating the private sector to understand the market, preferences of consumers, access to market-based credit and the like. These wholesalers and retailers will be facilitated through workshops and other events to understand the potential size of the sanitation and hygiene market, the type, quality and costs of products that may potentially increase in demand due to the program, etc. Public sector institutions shall not be involved in supply of products and services, except in the rarest of circumstances with strong justification.

- Level playing field is important to enable efficiency. A policy and regulatory environment which provides an enabling environment for private and public sectors, without hidden subsidies, is essential for private markets to emerge, which is critical for long term sustainability of the sector.
- Information on basic principles of toilets (e.g. distance with drinking water source, soak-pit for septic tanks, etc.) would be made available to all households, so that they can ensure that their toilets are constructed according to the relevant standards. Detailed information on the toilet (technical specifications) need be available only to the masons and other technical personnel in the village and the supporting agencies. Specific information on the options in hard-to-reach areas, areas prone to flooding, coastal areas, dry areas with water shortage, etc. would also need to be included.
This information can be included in the BCC campaign, as part of the demand generation program.
- Information on place of availability of these products and services along with their costs would be available to all households so that they can make informed choices. The options would range across various price points, so that households at various economic levels would find access to an affordable option.
- Strengthening the supply chain to make available products and services at affordable rates at nearby markets:
 - The products shall include all those which are required to construct or upgrade a sanitation facility. This will include pans, pipes, cement, bricks, doors, roofing material, and others. Out of the absolutely essential material, only the pans and pipes tends to be from the formal markets; the other material like bricks can be available locally (depending on situation), cement, doors, etc. can be substituted with local material like soil, cloth doors, etc.
 - The mason plays an important role in the construction/upgradation of toilets; being a local person, households tend to trust the mason for technical advice and what toilet to construct. Masons should therefore have the correct technical knowledge and have a variety of options, which are suited to normal and difficult situations (flood prone, dry areas) and which is affordable to different income levels of households.
Trained masons would be available at the village, or close by, to construct toilets. The masons would be well-versed with toilets of various characteristics and budgets, to be able to be affordable to all.
 - The products and services would be available to the households at a place which is nearby – preferably at the markets where they do their routine household purchases. If they are beyond these markets, some mechanism for collective procurement at the village level would be facilitated, so that households can come together to procure and enjoy economies of scale in the price of these products, but also in transportation (which can be significant in some situations)
 - Entrepreneurship based on sanitation and hygiene shall be developed at the local level. this will involve those with potential entrepreneurship skills to be identified and skilled to set up one-stop shops for sanitation and hygiene products and services. This will be supplemented by sales-agents who shall canvas households to

construct or upgrade their toilets, avail O&M services for routine servicing and products, as well as for pit emptying services.

- Services would also include pit emptying and treatment services. Local entrepreneurs will also be facilitated to set up pit emptying, transportation, treatment and disposal services. Training (partly subsidized by the program) in entrepreneurship skills, including finance, marketing skills, etc. would be provided to enable this.

9.4. Costs

42. The costs involved in strengthening the supply chain includes information dissemination, as well as trainings and workshops for wholesalers/retailers, entrepreneurs (up- and down-stream) and masons. The former will be covered under the BCC campaign, while the latter set of activities under trainings.
43. No additional costs are envisaged under this head.

10. Enabling Environment – Financing

44. Financing for hardware and software is critical to conduct the campaign and achieve the outputs but is often unavailable or under-funded. This is mostly due to the low status that sanitation enjoys in the development world hierarchy.

10.1. Indicators of Outcome

- Financing by the Government of Myanmar, for software activities and limited hardware support for marginal households and government institutions to facilitate the change process in the rural areas.
- Availability of microfinance, bank funds or other kinds of sources of funds at softer terms (than commercial borrowing), to support households and entrepreneurs to construct toilets and handwashing facilities or set up up-stream or down-stream businesses.

10.2. Targets:

Budgetary support for Sanitation and Hygiene by Govt. of Myanmar	2022 – 2030
Revolving fund for sanitation and hygiene established and operational	2022 – 2030

10.3. Approach

45. This strategy would ensure that adequate funding is available for supporting both software and hardware needs of the S&H sector. The source of financing would include households themselves (predominantly for constructing/strengthening and maintaining their own toilets), government budgets, development partners, private sector, and others. New avenues of financing for e.g. bank/microfinance credit for sanitation and hygiene would also be facilitated.
46. Efficient utilization of resources shall be key. The financial and other resources shall be utilized with the utmost care and efficiency to ensure that public resources give the maximum benefits. Public resources (monies from Government, Donors, NGOs, etc.) should be utilized only for promotion and investment of whatever is the minimum that is required to meet the health, environmental, social and economic goals. Subsidies shall be directed towards public expenditure (e.g. promotion, public school toilets) and not private assets (like household toilets).
- a. Public funding of private needs shall be based on transparent, objective criteria. In rare cases, public funds may need to fund private needs, such as a household toilet. This may be a full or partial subsidy of the capital or operational costs, and should be justified based on transparent and objective criteria which applies to all who meet these criteria; a major criteria would be the financial marginalization of the household, besides women-headed households, single-parent household, physical/mentally challenged. It is best offered as an incentive against achievement of specific outputs or outcomes, i.e. on completion of construction of toilets, its consistent usage, sustainability, etc.

- b. Output and outcomes-based funding approaches. The input funding should be commensurate to the outputs and outcomes generated. Planning to meet the most of outputs and outcomes against each unit of funds, tracking to ensure that the plans work as proposed, shall be part of the process.
- 47. Life cycle costs approach shall be adopted. The total costs, which includes the capital expenditure, operational expenditure and other costs together shall be considered, while evaluating the cost-benefit analysis of any intervention. Even if individual (capital, operational) costs are high or low, they should not be basis for comparison, but the overall life-cycle costs should be. However, when there is a mix of public and private resources meeting the costs of an intervention, the public part of the financing may be given predominance while deciding among alternatives.
- 48. Long term costing of the intervention shall be prepared. The total quantum of costs required for the sanitation and hygiene sector to meet its goals by 2030 shall be computed, with break-down of component costs. The costs shall include the capital costs for households and institutions, the O&M costs over a period, promotion costs, monitoring costs, etc.
 - a. The approach to ensuring financial sustainability of the sanitation program includes the availability of funding from Government's budgetary support, from other donors and from the private sector.
 - b. Advocacy for granting of government budgets is critical for sanitation to be included as a major item in the national and sub-national budgets. This advocacy would be significantly aided if there is evidence available about the economic rationale of investing in sanitation (in addition to the health, human rights rationale). Creating such evidence would be one of the major interventions. Studies and assessments would be conducted to compute the economic impact of investing or not investing in sanitation on the country's GDP and progress. The results from such studies would be disseminated while conducting the advocacy for increased funding for sanitation and hygiene, with the finance ministers and other policy officials at the national and sub-national levels.
 - c. Financing shall be provided to units for promotion based on formulae. The amount of financial resources available to specific units, say region or state or community, shall be based on a formula, calculated based on normative and performance-based criteria. The former may include population, poverty rates, sanitation gaps, while the latter may include overall performance, efficiency in meeting outcomes, etc.
 - d. The finance which will be required for the sanitation sector will be majorly used for software activities towards a variety of stakeholders, as well as hardware costs for households, schools, Health Care Facilities, public toilets and, sanitation and hygiene during emergencies. Post construction O&M would be the responsibility of the respective users/institutions.
- 49. Facilitating loans and grants from national and international development organizations such as The World Bank, UNICEF and others, will be undertaken. This will primarily be for institutional strengthening, including capacity development, software activities such as Behavior Change Communications, IPC activities, etc., and for meeting the hardware costs of institutional toilets such as schools.
- 50. The implementing agencies will work with commercial and cooperative banks, agricultural finance banks, other rural development credit societies, to provide loans at softer terms suitable

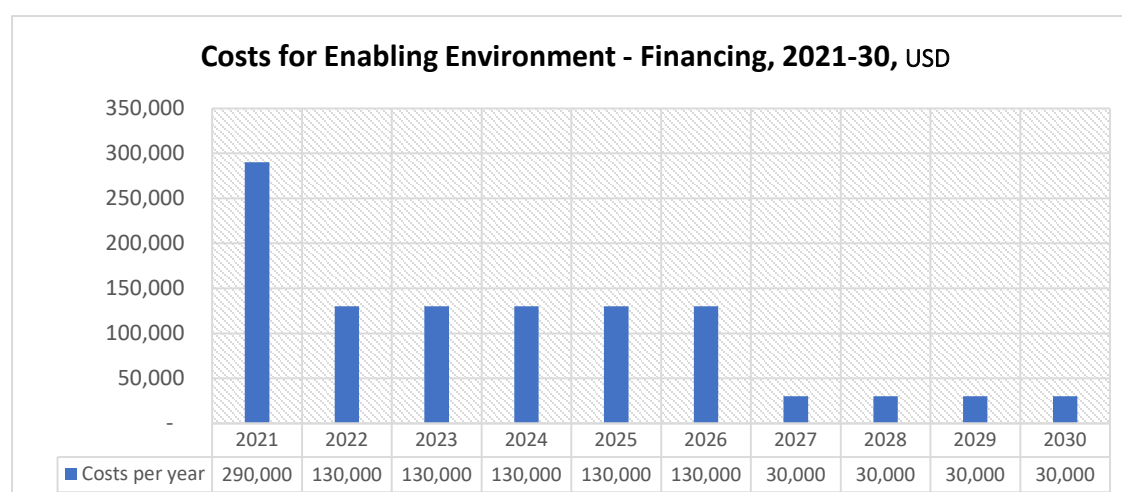
for rural families, including the marginalized, for construction of sanitation and hygiene facilities. In addition, micro-finance, wherever available, will be facilitated to offer loans for sanitation products at less than commercial lending rates, to help households in need.

51. The implementing agencies, on its own or through private bodies, establish revolving funds for communities which will enable them to borrow, lend to individual households to be returned for further lending; once communities are saturated, the principle amount can be returned to the implementing agency for it to lend to more communities. Objective and transparent guidelines need to be prepared to provide incentives for funds to 'revolve' and be repaid.
52. Like the above, the IA shall on its own, or through other private bodies, facilitate credit to private entrepreneurs to set up sanitation businesses, either upstream for supply of products and masonry services or downstream like pit emptying and disposal. The IA shall also offer interest credit, i.e. subsidy on interest for credit taken from commercial entities. All these would be based on strict performance criteria with clear transparent benchmarks.

10.4. Costs

53. These costs are envisaged under this head (some of which are already included in other heads and will not be duplicated).

Activity / Output	Details	Amount (USD)
Thematic studies	lumpsum costs @ USD 25,000/year	250,000
Dissemination workshops	lumpsum costs @ USD 5,000/year	50,000
Guidelines for household subsidies	lumpsum costs	50,000
Guidelines for revolving fund	lumpsum costs	30,000
Guidelines for supporting private entities	lumpsum costs	30,000
Revolving fund, interest subsidies	lumpsum costs	600,000
Guidelines for septage management (Pit emptying, transportation, and treatment)	lumpsum costs	50,000
TOTAL		1,060,000



11. Enabling Environment – Management Information System and Knowledge Management

11.1. Expected outcome and indicator:

- i. A national sanitation and hygiene M&E system near real-time credible data available at all levels to help efficient planning and implementation
- ii. Annual Sector Performance Reviews (feeding into the annual Joint Sector Review) giving an overview of the status of the sector and the trends.
- iii. Thematic studies on various aspects of the implementation processes, outputs, and outcomes.

11.2. Targets:

National rural S&H monitoring system designed/strengthened and fully operational	2021
Annual Sector Performance Reviews	Every year
Joint WASH Sector Review (JWSR)	Every year
Thematic studies - 2	Every year

11.3. Approach

54. Undertake a review of the existing MIS and assess it for its comprehensiveness of the indicators, the strengths and weaknesses of the overall framework, the institutional structure for data collection, the incentive structure for quality data collection, the methodology adopted, the quality controls, the analysis and use of the information generated, the feedback loops, etc.
55. The monitoring system shall track indicators based on 'need to know'. The indicators for monitoring shall be based on a 'need to know' and not a 'nice to know' basis. The need to know may be different as per the different levels, from the community to the national and international levels. Some may be for day-to-day project management purposes, while others may be to track the trends in the sector over a longer period.
56. All monitoring systems shall collect data based on statistically valid methods and be subject to in-built verification. The monitoring systems shall collect data on a census or on a sample basis; all the latter forms of data collection shall be undertaken based on statistically valid samples (validity for the unit for which the data is gathered) with high level of confidence. In-built verification modules shall be part of the system to ensure that data collected is of the highest reliability.
57. Project management monitoring shall be supplemented by third-party objective monitoring. Project monitoring shall collect data critical to understand the day to day issues, as well as the status of the sector, on a periodic basis. These shall form the basis for the changes in direction, if need be, in project implementation. In addition, third party objective processes for collection of data would supplement, to ensure triangulation of the data. Third parties shall include consulting firms, academic institutions, federations (of civil society, for e.g.) – anyone who are not part of or influenced by the implementation process.
58. Monitoring system shall evolve a set of indicators along with consistent definitions for the indicators. Monitoring systems shall develop relevant indicators from the rural areas to the

national and international levels, as relevant, for both project management and long-term analysis. Multiple organizations shall conduct both project monitoring as well as third party (as above) monitoring programs, for which consistent and comparable set of indicators and methodologies shall be developed.

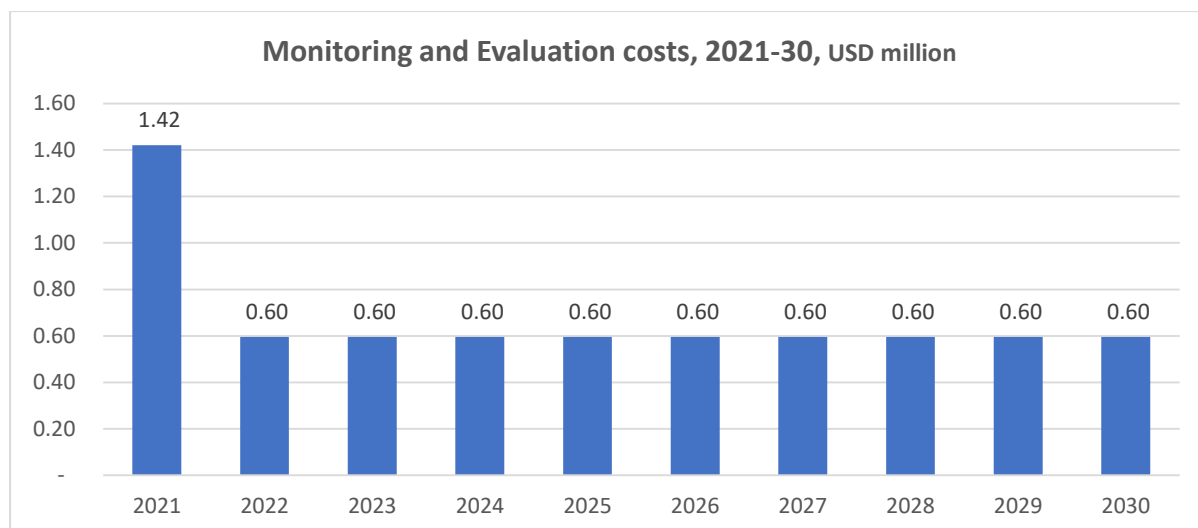
59. Monitoring shall prioritize on output and outcome monitoring, in addition to focusing on inputs and process. The indicators for monitoring shall include output indicators like number of toilets built, efficiency of the process, outcome indicators like water quality status, Open Defecation Free community, etc. Other project management indicators related to inputs and processes such as the financial inputs, promotional approaches, etc. shall also be included.
60. Routine monitoring done by the service providers shall be triangulated using third-party objective monitoring done through third parties. The sector monitoring system shall collect routine monitoring data on critical indicators at periodic intervals (daily/weekly/monthly/annual), which shall be used for project management and reporting. Objective monitoring led by third-party agencies shall also collect information at more infrequent intervals (annual to five years) to triangulate the routine monitoring.
61. Monitoring system shall provide disaggregated data. The monitoring system shall provide data which is disaggregated on geographical (region, state, etc.), spatial (urban /rural), gender, economic class (quintiles), disability and other indicators.
62. Modular approach shall be adopted with modules for different sets of monitoring data, with integration of data at higher levels. School sanitation shall be through the EMIS monitoring system, while HCF monitoring shall be undertaken by the HMIS monitoring systems. Household monitoring, water quality monitoring, etc. shall all have individual modular systems for monitoring. An integration of these modules shall be undertaken at the sectoral level for consolidation and analysis; in addition, S&H monitoring system shall 'dialogue' with water monitoring and another sector monitoring to compare and analyze.
63. The monitoring system will adopt a participatory approach, with the involvement of all the concerned stakeholders. At the community level, it would be involved in monitoring its own performance and sustainability. A peer monitoring system will be adopted where each unit will be monitored by its peers – e.g. a community by another / combination of communities, township by another township(s), state by another state(s), and so on.
64. A new / strengthen existing national MIS for sanitation and hygiene shall be designed. This could be done along with existing monitoring systems in the water sector, health sector such as DHIS or similar.
 - a. The monitoring system design would identify the critical indicators to be tracked (access, outcomes, sustainability, among others), the institutions responsible for data collection, the incentives for the data collection process (including transportation, sustenance, etc.), the data collection process, system of analysis and reporting, including public dashboards and feedback loops to the sub-national levels.
 - b. The monitoring system would use the 'natural leaders' from the village, health, education or other department staff based at the community level for periodic collection of data (on a census or sample basis, depending on resources available). They would be incentivized to collect data, i.e. paid incentives based on data collected (an output-based approach) and submitted to the MIS.

- c. The MIS would, in place of/addition to the conventional approach of data collection using data collectors physically visiting households to gather data, also explore innovative approaches to collect data – for e.g. approaches using mobile phones (smart/feature phones) to collect data using IVRS or USSD methods would be tried out, initially at a ‘pilot-at-scale¹’ basis. Respondents could be given incentives in the form of mobile recharge or mobile money.
 - d. The MIS would include a verification and quality control, using both physical verification (smaller sample) and phone based (larger sample) verification.
 - e. The routine monitoring system would be supplemented by periodic audits and studies conducted by external third-party objective actors. Civil society organizations would be encouraged to undertake some of these.
65. Periodic and Mid-term evaluation activities will be undertaken to assess the status of the program implementation against the plan and undertake course correction, if any.
66. Thematic studies (two) will be undertaken every year on relevant themes – for e.g. equity, gender, technology, MHM, etc.
67. Technical Working Groups on specific topics will be convened every quarter; an annual Sector Performance Review with a Joint WASH Sector Review (JWSR) workshop, would also be undertaken to exchange information, validate sector status and plan ahead.

11.4. Costs

Activity/Output	Details	Amount (USD)
MIS review	Lumpsum	25,000
Baseline survey	8 million rural households * USD 0.10/household	800,000
Sample surveys	5% of 8m households * 4 quarter * USD 0.25/household	4,000,000
Third party audit	One every year @ USD 50,000 * 10 years	500,000
TWG meetings	3 TWG groups * 4 meetings per year @ USD 5,000 lumpsum / year	50,000
Sector Performance Report	Annual report @ USD 20,000	200,000
Sector performance Review Workshop	Annual workshop @ USD 100,000	1,000,000
Thematic studies	2 studies every year @ USD 10000/study	200,000
TOTAL		6,775,000

¹ Pilot, not covering the entire country, but still at scale – e.g. a district or region/state; uses same institutions, conditions, incentives as being done at scale



12. Enabling Environment – Equity

12.1. Expected outcome and indicator:

68. Decreasing difference between different social, economic, geographical groups in access to sanitation and hygiene, to zero by 2030.

12.2. Targets:

	2022	2025	2030
% Difference in access to basic sanitation and hygiene between regions/states (highest and lowest)	50%	25%	0%
% Difference in access to basic sanitation and hygiene between gender			0%
% Difference in access to basic sanitation and hygiene between disabled and general population			0%

12.3. Approach

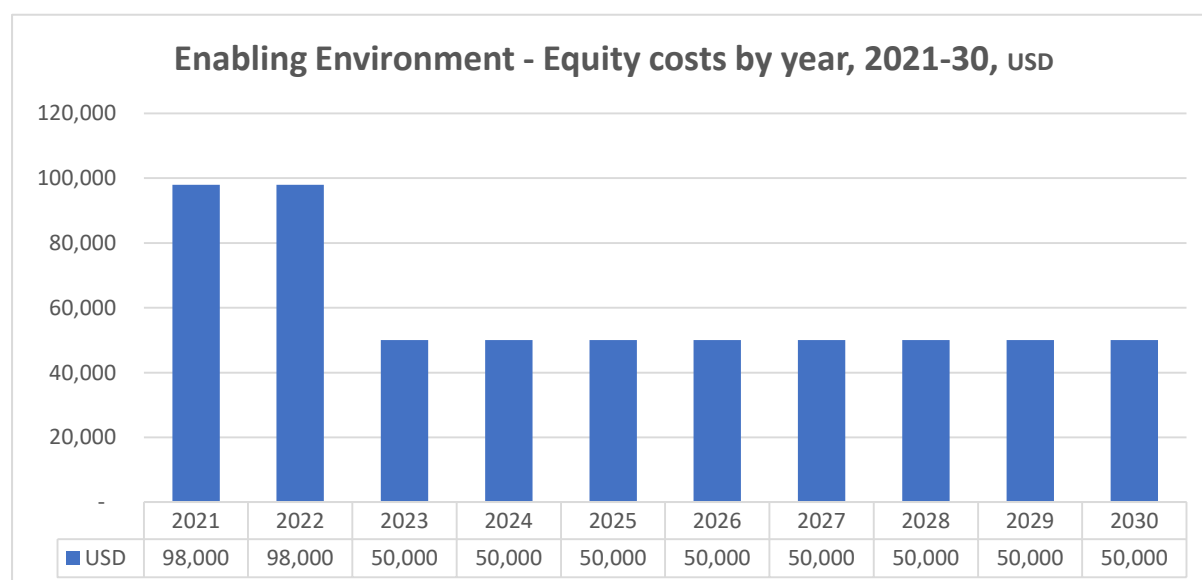
69. Equity issues shall be focused on at implementation and monitoring stages. There would be a special focus on the barriers in front of marginalized populations, which prevent their access to basic sanitation and hygiene. This would include addressing disparities and lack of differential opportunities between geographical regions (between States/Regions), between urban and rural, between gender, between the rich and poor, and the abled / disabled. Focused monitoring of access at constant intervals between these groups will be undertaken for course correction to take place, throughout implementation and thereafter.
- The attention to equity will be effective when the stakeholders are sensitive to the needs of equity. They will therefore be oriented on the need to be conscious of equity issues at planning, implementation and monitoring stages. A series of equity sensitization events will be undertaken among the various stakeholders, to enable them to understand the equity issues, the need for it and the approaches to be adopted to be responsive to it in their sanitation and hygiene interventions and activities.
 - Understanding the quantum of inequality is essential before it is addressed; the monitoring system will therefore explicitly track, identify and report the inequalities with respect to regions/states, among the gender, among the disabled and other marginal groups. Specific indicators will be identified and monitored, the data will be analyzed and shared with stakeholders so that the lack of equity can be addressed in a timely manner, so that it becomes nil by 2030.
 - Specific thematic studies on equity will be undertaken to understand the equity issues, the causes behind these, the strategies needed to amend this, and the

challenges being faced during implementation. Lessons learnt and recommendations will be part of these studies.

12.4. Costs

70. The costs for this include the cost of sensitization workshops and thematic studies. Monitoring of the equity data is costed through the M&E system.

Activity	Details	Amount (USD)
Sensitization workshops	((2X330 townships) + (3X75 districts) + (5X15 regions/state)) X USD 100	96,000
Thematic studies	2 studies / year @ USD 25000 each * 10 years	500,000
TOTAL		596,000



13. Open Defecation Free rural communities

13.1. Expected outcome and indicator:

71. The outcome expected is communities completely free of Open Defecation. The indicator of this would follow the ODF certification criteria set by the Government and would include:
- All households in the community have access to a basic toilet and handwashing with soap facilities, with ALL members using them AT ALL TIMES.
 - All schools in the community have access to a basic toilet and handwashing with soap facilities, with ALL the children and staff using it AT ALL TIMES.
 - All Health Care Facilities (HCF) in the community have access to a basic toilet and handwashing with soap facilities, with ALL patients, medical staff and visitors using it AT ALL TIMES.
 - All other institutions in the community have access to a basic toilet and handwashing with soap facilities, with ALL staff and visitors using it AT ALL TIMES.
 - All public places in the community (markets, bus stops) have access to community toilets along with handwashing with soap facilities, for visitors to use.
 - There is no evidence of open defecation visible anywhere within the geographical limits of the community.
 - All food and water within all households and other institutions safely stored.
 - All solid waste and liquid waste (including septage) in the community treated at household or community level, and reused or discharged into the environment, as per standards.

13.2. Targets:

	2022	2025	2030
Number of ODF rural communities	12,500	38,000	63,282
% of ODF rural communities	20%	60%	100%

13.3. Approach

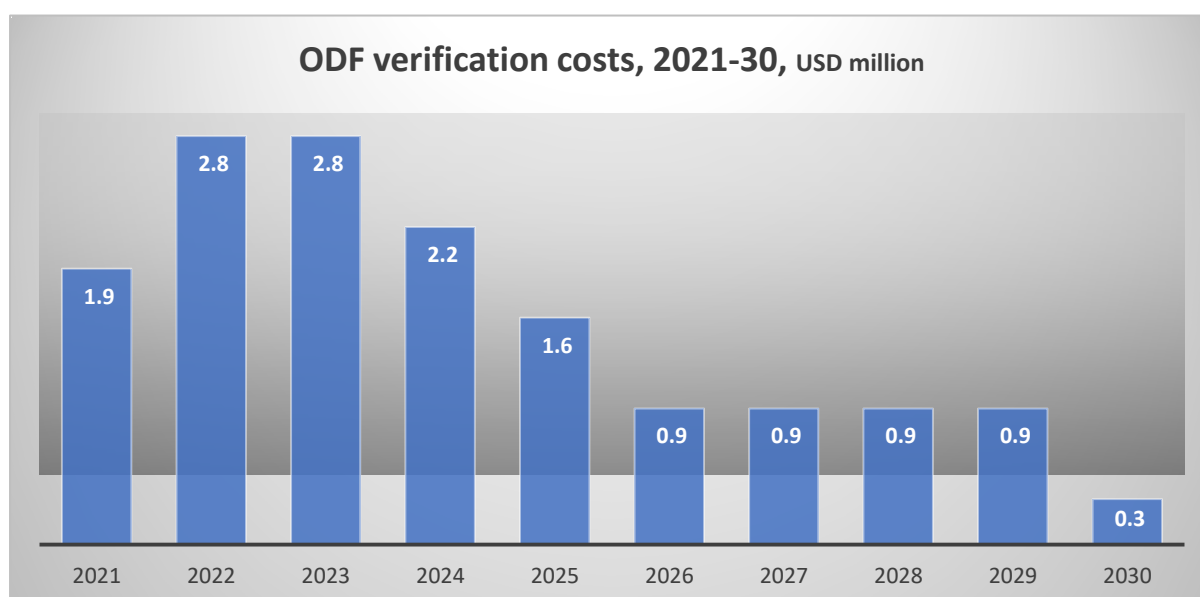
72. A community-led approach which results in empowering it to understand the need for basic community-wide sanitation, leading to planning, implementing, monitoring and regulation. This would be facilitated, in most situations, by an external facilitator. The community, on understanding the linkage and need between safe sanitation and hygiene, and health and other outcomes, would be self-motivated to undertake the change process. The objective is to have every household, school, HCF and other public places have access to sanitation and hygiene facilities, with all in these places practicing on a continuous basis safe sanitation and hygiene.
- Interpersonal communication, supplemented by mass media and social media campaigns, would be used to change the behavior of the community to safe sanitation and hygiene practices.
73. Once the community is fully 'sanitized', with all the households, school, HCF and other institutions, and public places have access to safe sanitation and hygiene facilities, and there is no Open Defecation or Fixed point Open Defecation (unsafe sanitation), the community can self-declare itself an ODF community.

- a. The community shall declare its status to the township and district governments, which shall then depute teams to verify the ODF status, based on the ODF verification protocol adopted by the Government. Further verification may be done by the regional government, based on a sample basis. The verification at all levels would be done by multi-stakeholder teams, consisting of members from government, NGOs, media, etc., to ensure a transparent and objective process. The region may also conduct third party verifications to further the objectivity of the process.
- b. Pursuant to successful verification, the community shall be declared ODF.
- c. In later years, say every year or two, an universal or sample verification of the sustainability of the ODF status shall be undertaken by the district/region or national governments. This is to ensure that slippages are not present, and if any, addressed at the right time.

13.4. Costs

74. The costs under this head shall include the design/strengthening of the ODF verification protocol and the conduct of verifications.

Activity	Details	Amount (USD)
ODF protocol development / strengthening	lumpsum	25,000
ODF verification	63282 villages * USD 200 per village	12,656,400
ODF sustainability verification	25% of 63282 villages * USD 200 per village	2,847,690
TOTAL		15,529,090



14. Access to and usage of basic Sanitation: Household

75. All households should have access to, and should use, a basic toilet – all the members of the household, always during the day and night. While it is advisable for households to have their own toilet, access and usage is not dependent on having one's own toilet. The toilet would be constructed (if household currently doing OD) or upgraded (if household has an unimproved toilet) by the household from their own resources; in the event of the household demonstrating lack of resources fully or partly, ratified by the community, full or part resources enough to construct the lowest cost basic toilet, may be made available from public resources (typically, Government). The Government will come out with detailed guidelines on the criteria and the process to avail such resources.

14.1. Expected outcome and indicator

- i. The access to basic sanitation at household level aims at
 - a. Sustained behavior of using, always by all members of a household, a basic toilet facility, and
 - b. an access of a basic (basic) toilet, as defined by the SDG, for every household in the rural area.
- ii. The definition of a basic toilet includes:
 - a. A sub-structure, which contains the fecal matter – this could be:
 - Leach pit, with enough outlets (holes) on the side to allow water to leach out; base of the pit is uncovered; enough distance between the base of the pit and the ground water table, even in rainy seasons. Twin leach pits has advantage – alternate pits can be used, while other is decomposing the waste (which can be used as manure).
 - Septic tank; covered fully on all sides, including the base and sides, to allow no leaching of water; an outlet at the opposite side to the entry to the tank, to let

- excess water to drain out; outlet to be connected to a soak pit (with layers of material to filter the septage water); a vent-pipe to let the gases out
- Biogas plant: toilet connected to a biogas plant
- Sewer network: toilet is connected directly or indirectly through a septic tank, to a sewer
- Any other, which safely contains the waste
- b. A platform, which separates the substructure from the top:
 - A sufficiently large platform which is strong enough to hold a person; which has no open holes that enables vectors like flies to access the feces and carry it back; made of earth, plastic, cement, any other material
 - An open hole with a cover (stone, wood, etc.) or a plastic or ceramic pan with water seal (if without, then a cover as above).
 - Platform has a smooth surface to enable cleaning.
 - If septic tank, sewer network or VIP, a vent pipe; no vent pipe required for leach pits
- c. A superstructure to enable privacy
 - A superstructure made of any material, which prevents the sight of the toilet user to outsiders – local material like leaves, more durable material like cement and bricks, etc., can also be used. Beyond privacy, there is no other function, which is why not much resources need be spent on this.

14.2. Targets:

76. The vision of the sanitation and hygiene policy to achieve 100% by 2030 dictates the following targets for the sector:

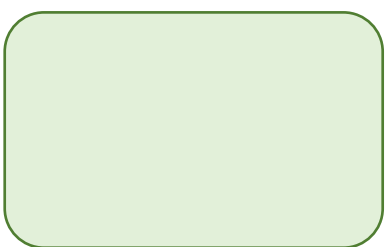
State/ Region	Total	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Phasing	100	15	20	20	15	10	5	5	5	5	0
Mon	22,147	3,322	4,429	4,429	3,322	2,215	1,107	1,107	1,107	1,107	-
Ayeyarwady	110,571	16,586	22,114	22,114	16,586	11,057	5,529	5,529	5,529	5,529	-
Bago	49,677	7,452	9,935	9,935	7,452	4,968	2,484	2,484	2,484	2,484	-
Chin	7,654	1,148	1,531	1,531	1,148	765	383	383	383	383	-
Kachin	8,864	1,330	1,773	1,773	1,330	886	443	443	443	443	-
Kayah	3,057	459	611	611	459	306	153	153	153	153	-
Kayin	37,743	5,661	7,549	7,549	5,661	3,774	1,887	1,887	1,887	1,887	-
Magway	58,235	8,735	11,647	11,647	8,735	5,823	2,912	2,912	2,912	2,912	-
Mandalay	84,204	12,631	16,841	16,841	12,631	8,420	4,210	4,210	4,210	4,210	-
Nay Pyi Taw	8,415	1,262	1,683	1,683	1,262	842	421	421	421	421	-
Rakhine	255,746	38,362	51,149	51,149	38,362	25,575	12,787	12,787	12,787	12,787	-
Sagaing	68,581	10,287	13,716	13,716	10,287	6,858	3,429	3,429	3,429	3,429	-
Shan	99,813	14,972	19,963	19,963	14,972	9,981	4,991	4,991	4,991	4,991	-
Tanintharyi	32,811	4,922	6,562	6,562	4,922	3,281	1,641	1,641	1,641	1,641	-
Yangon	21,126	3,169	4,225	4,225	3,169	2,113	1,056	1,056	1,056	1,056	-

Grand Total	868,644	130,297	173,729	173,729	130,297	86,864	43,432	43,432	43,432	43,432	-
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14.3. Approach

77. The outcomes for household sanitation include a sustained behavior of usage of an basic facility and an access to such an basic facility (this may be an own toilet, a neighbor's toilet (shared) or a community toilet (within the standards for sharing)). The approaches for reaching this includes a software component and a hardware component.

Awareness raising and building demand



- The building the demand for an basic sanitation facility (either from an Open Defecation status – ‘going into the bushes’, or unimproved sanitation facility – ‘Fixed point Open Defecation’) would be undertaken at a community level using participatory approaches, using the CLTS/CATS principles, although follow up activities may be targeted at individual household level. These would involve inter-personal approaches (at community and household levels) to ‘trigger’ the community to adopt community wide ODF outcome; these would be supplemented with mass media and social media messaging. The end outcome would be for all the members in the household to adopt basic sanitation behavior as a norm – whether they are at the house, at schools, at their place of work, while travelling, etc.
- A community-led approach is suggested due to the impact it has on the sustainability of the interventions as well as cost-effectiveness of the approach, which can lead to results in a relatively shorter duration. Sustainability of the behavior (and infrastructure) depends on the community having imbibed the messages, assumes ownership of the process and outcomes (so that it becomes a norm); they feel the need to better sustain the behavior than when the change is prescribed by external stakeholders.
- Peer pressure from community members to achieve an ODF status can motivate individual households to move from ODF/unimproved sanitation to an basic sanitation. Initially, shame and disgust can be used to separate the households who have basic toilets from the laggards; as time goes by, status and pride can be used as motivating factors by socially recognizing those households. ²

- ✓ **Enhanced sustainability**
- ✓ **Peer pressure**
- ✓ **‘Shame and disgust’ to ‘Status and pride’**

- ✓ **Trained facilitators**
- ✓ **Natural Leaders**
- ✓ **Two-way communication**
- ✓ **Output-based payments**

- The process of triggering the community will be preceded by a rapport building stage, which may include sub-community group meetings, transect walks and key leader discussions. The processes would be supported by

² A method followed in some other countries: using household stickers for recognition – red for OD and no handwashing facility, yellow for unbasic sanitation or hygiene and green for basic sanitation and hygiene facility; these stickers are stuck on the outside of the house for others to see and recognize the status of the house.

facilitators, who are typically from outside the community, who have been trained in the facilitating process. The process should be two-way communication, with no top-down messaging/instructions; an ideal and sustainable change is when the community collectively analyses the status and decide to undergo the change based on this analysis. 'Natural leaders' may be identified at this process, to continue with the facilitation and monitoring of the change process; guidelines on process (e.g. monitoring data) and output (e.g. reaching ODF) based payment to these natural leaders would be developed by the national government. The natural leaders in the initial phases, after experience in their own community, may turn into facilitators for other communities; they may require strengthening of their capacity and handholding during the initial phases. Such an approach would enable peer-learning, which leads to quicker uptake and sustainability.

- Based on the willingness of the community to move to a change process, additional information on broad technical principles, affordable toilet options (suitable to the local conditions, which includes specific challenges like high water table or dry areas), and location where products and services (e.g. masons) can be accessed, would also be discussed during these triggering events.

✓ **Household visits**
✓ **Reinforcement of messages – Behaviour change, technical**

- This may be followed by individual household visits, which would be led by the natural leaders, to reinforce the messages on moving to basic sanitation, along with support on technical issues. Provision of information on types of affordable toilets – including products, location of vendors, costs of these products –

will be reinforced during these household visits.

- The community would be motivated to come out with solutions for marginal households who are not able to fully or partly meet the costs of constructing/strengthening their toilets. Options tried in other countries includes community leaders contacting extended family members of these households (say, in other villages or in cities) to ask their support to finance the toilet, community members pooling and contributing their resources (say, in kind, like pans, pipes, bricks). In addition, any micro-finance program (if available, through SHGs), agricultural / rural credit societies, commercial banks may be tapped to encourage them to provide credit for construction of toilets and handwashing facilities on softer terms (i.e. reduced interest compared to usual commercial loans).

✓ **Supporting marginal households**
○ **Extended family help**
○ **Community help**
○ **Credit facilities**

Infrastructure

- The dominant form of access would be through individual household-based basic sanitation and hygiene facility. Once a felt need is raised among the household, it is anticipated that they would be prepared to invest their own resources in constructing a / improving the toilet. It is expected that the household would fully pay for the cost of the facility, the extent of which would depend on the type of facility that the household opts for. Routine maintenance of the toilets and handwashing facilities would also be done by the households from own resources.

- The technology for household (and other institutional) toilets will be promoted and adopted with care.

- They shall, firstly, meet the standards for safe and basic sanitation, as defined by the national or sub-national authorities; they shall not be polluting the environment and/or cause ill health to the community around.

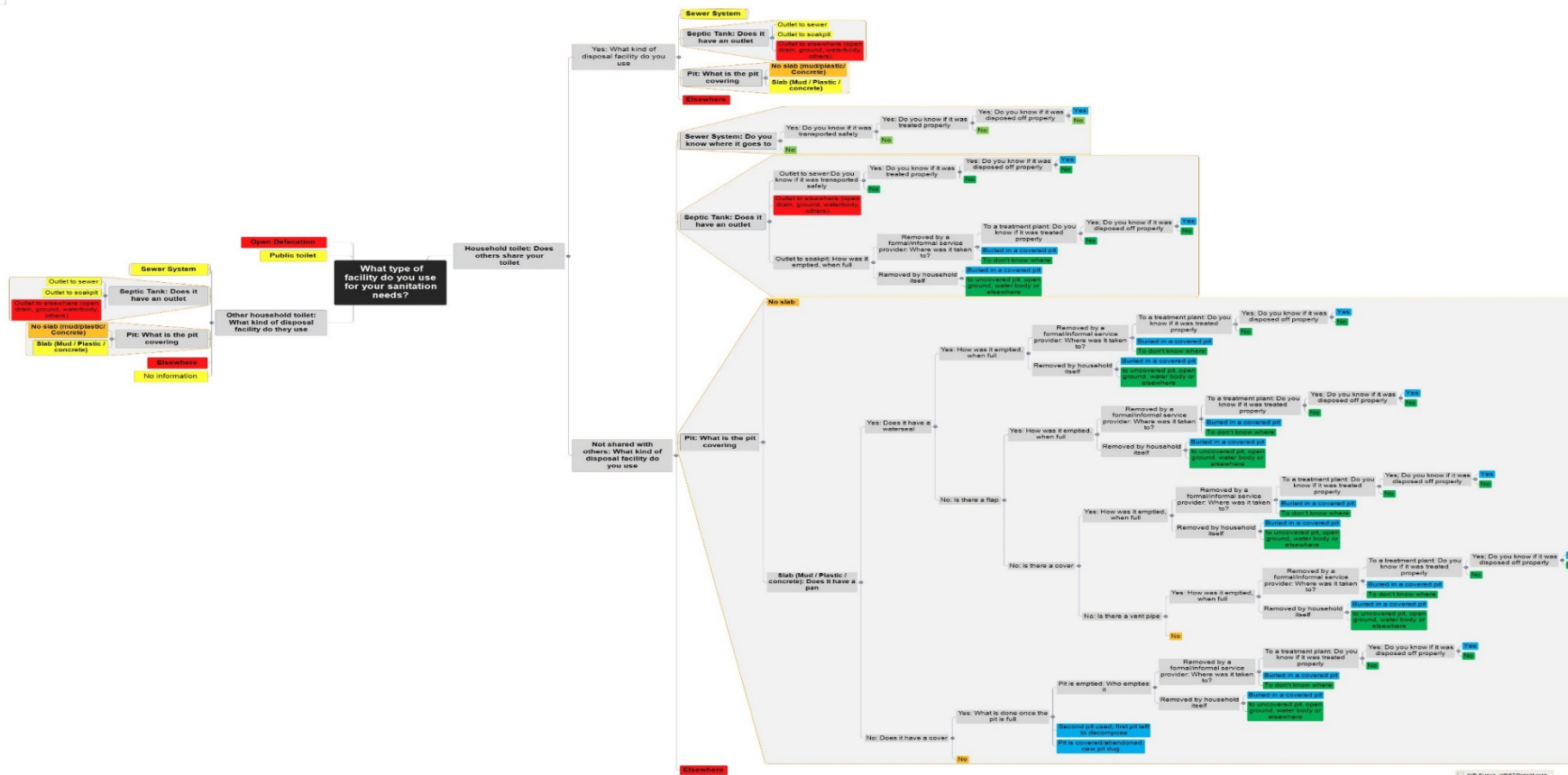
- The main components to ensure this are the sub-structure and the platform; the superstructure provides just privacy and is less important. The sub-structure should contain the waste safely and not pollute the ground water – it must therefore be adapted to local conditions such as ground water level, rainfall patterns, soil conditions, etc. The pits could either be leach pit type or septic tank type.
- The leach pit toilets, especially the twin pit toilets, are in-situ containment cum treatment facility; once one pit is full, it is left to decompose for upto a year for it to become manure for safe handling and use in agriculture; in the meantime the other pit is used. Evidence suggests that on an average, a household of 5 members takes about 5 years to fill up a 3 feet X 3 feet or 3 feet X 8 feet pit (this is due to the leaching of the water in the feces, the dry matter then becomes very less in quantity). Sizing of the leach pit depends on a variety of local conditions – the guidance table given alongside (source: Latrine Technology

Number of Persons in Household	Operational Period (years)									
	1	2	3	4	5	6	7	8	9	10
4	0.4	0.5	0.6	0.7	0.8	1.0	1.1	1.2	1.3	1.4
5	0.4	0.6	0.7	0.8	1.0	1.1	1.2	1.4	1.5	1.7
6	0.5	0.6	0.8	1.0	1.1	1.3	1.4	1.6	1.8	2.0
7	0.5	0.7	0.9	1.1	1.2	1.4	1.6	1.8	2.0	2.2
8	0.5	0.7	1.0	1.2	1.4	1.6	1.8	2.0	2.3	2.5
9	0.5	0.8	1.0	1.3	1.5	1.8	2.0	2.3	2.5	2.8
10	0.6	0.8	1.1	1.4	1.7	1.9	2.2	2.5	2.7	3.1
11	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.4
12	0.6	1.0	1.3	1.6	1.9	2.3	2.6	2.9	3.2	3.6
13-20	0.73 - 0.96	1.1 - 1.5	1.4 - 2.1	1.8 - 2.6	2.2 - 3.1	2.1 - 3.7	2.9 - 4.2	3.2 - 4.8	3.6 - 5.3	3.9 - 5.9
21-30	1.0 - 1.3	1.6 - 2.1	2.1 - 2.9	2.7 - 3.7	3.3 - 4.6	3.8 - 5.4	4.4 - 6.2	5.0 - 7.0	5.6 - 7.8	6.1 - 8.6

Manual, UNICEF and others, Ghana) gives a basic understanding of the size of pits required. A similar table shall be included in the guidance note on toilet options which shall be prepared by the national/sub-national Government(s) in Myanmar.

- The walls of the sub-structure has to be unlined or lined as per the soil conditions and the type of pit – in case of leach pits, it can be left unlined if the soil is hard and will not collapse, but has to be lined with local material / bricks / cement concrete rings if the soil can collapse; however, all lining has to have holes for the water to leach through. In case of septic tanks or similar technologies, full lining of the pit including the bottom is important such that no water leaches through; in addition, the outlet at the other side of the inlet should be channeled into a soak pit (constructed with various levels of filters such as gravel, sand, etc.).
- The platform should support the person using it, have either a hole (open pit) or a pan, have a cover (in case of a hole), water seal, etc., so that vectors such as flies do not access the waste and carry them back to human beings.
- The decision tree given below (<https://sites.google.com/view/mmr-rusan-policy-and-plan/rural-sh-policy/final-draft>) can help understand the features essential for a basic (basic) or safe sanitation facility:

Legend
Yes
No
Don't know
Not shared with others
Not shared with others



- Secondly, they should be affordable to the users – this means that there should be various options of cost-points available for the households to choose from; the costs should look at life-cycle costs including the initial capital costs as well as O&M costs.
- Untested and innovative technologies should not be pushed on the households, making them testing grounds in the process.
- Availability of technologies suited to women, children, disabled and any other marginal groups should be available.
- The compendium of technologies, recommended to be produced by the Government(s), should be followed as guidance; the final product needs to be adapted to the local situations; however, care should be taken that these proposed options are not viewed as mandatory, but only as guidance – so long as a toilet meets minimum environmental and health standards, they shall be acceptable.

78. The promotion of household toilets may include all or some of the above-mentioned approaches. It will depend on various factors such as homogeneity, social cohesion of the communities, human resources, financial capacity, etc. The formative research will help in identifying the need and adopting the appropriate strategies from the menu of options available.

Treatment of waste

79. As per the definition of SDG, the waste must be safely handled from its inception till its disposal into the environment. This not only demands the access and sustained usage of an basic toilet which contains the waste, but also ensure treatment and disposal of the contained waste.

80. The household toilets in the rural areas would predominantly be of the leach pit type, with about 30% expected to be connected to septic tanks. The septic tanks at household and institutional levels need to be emptied once they are full. This requires the availability of suitable emptying systems consisting of emptier systems (simple manual pumps or electric vacuum suction pumps), which can empty the pits without human contact and contamination. The emptied septage needs to be transported to a Fecal Sludge Management (FSM) facility which can treat the waste to appropriate standards before disposal into the environment or reuse in agriculture/gardening. The emptying, transportation, treatment and disposal guidelines prepared by the national and sub-national Government(s) need to be followed for these set of activities.

81. The need for treatment of the FS would require the setting up of decentralized FSM plants at a rural-cluster level or at the township level, depending on the population. Each of these would service about 50,000 households and would be set up using capital costs by the Government(s) / private sector; each plant is expected to cost an average of USD 150,000 to be set up. Subsequently, they would be operated on a self-sustaining basis with the costs involved (operational costs + profits + capex (if set up by private sector)) charged to the transport operator who brings the waste to the facility; who in turn charges the household for the service.

82. The number of decentralized FSM plants at township or sub-township levels are given below.

Number of decentralized Fecal Sludge Management plants to be established	
State / Region	Number of plants
Mon	18
Ayeyarwady	75
Bago	46
Chin	4
Kachin	12
Kayah	3
Kayin	16
Magway	46
Mandalay	57
Nay Pyi Taw	12
Rakhine	36
Sagaing	54
Shan	48
Tanintharyi	13
Yangon	33
Total	474
No. of plants = 30% of rural population / 5000 households to a plant	

14.4. Costs

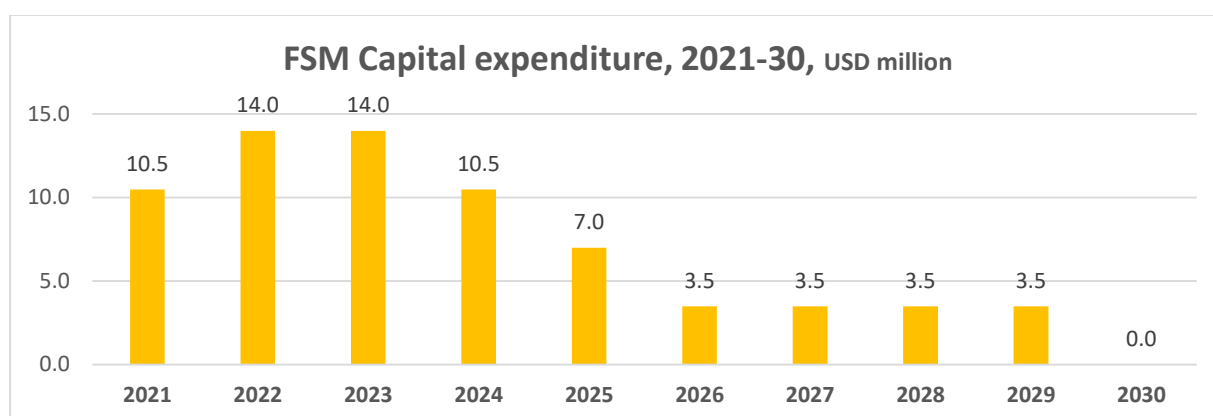
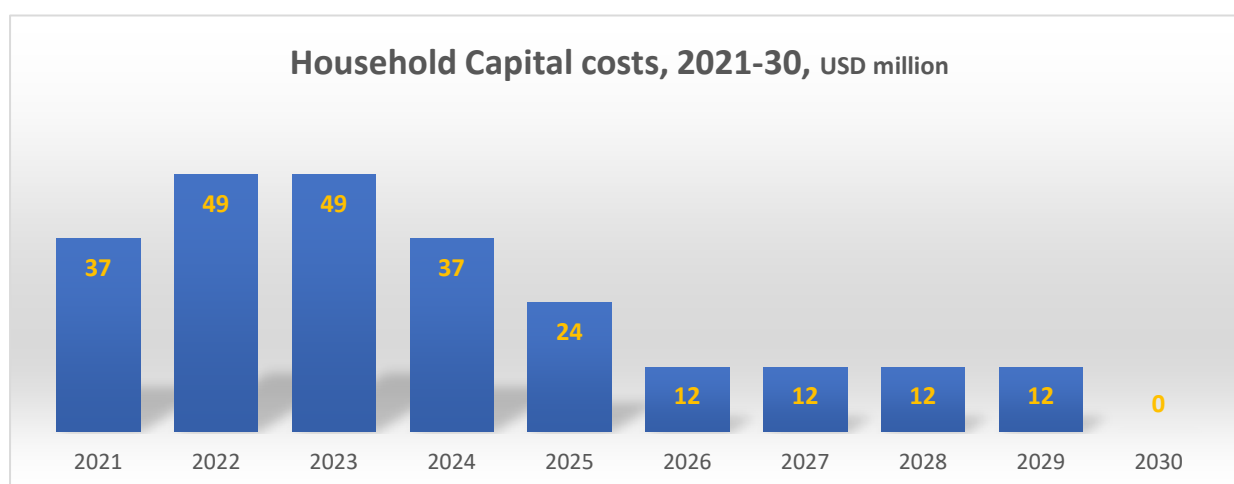
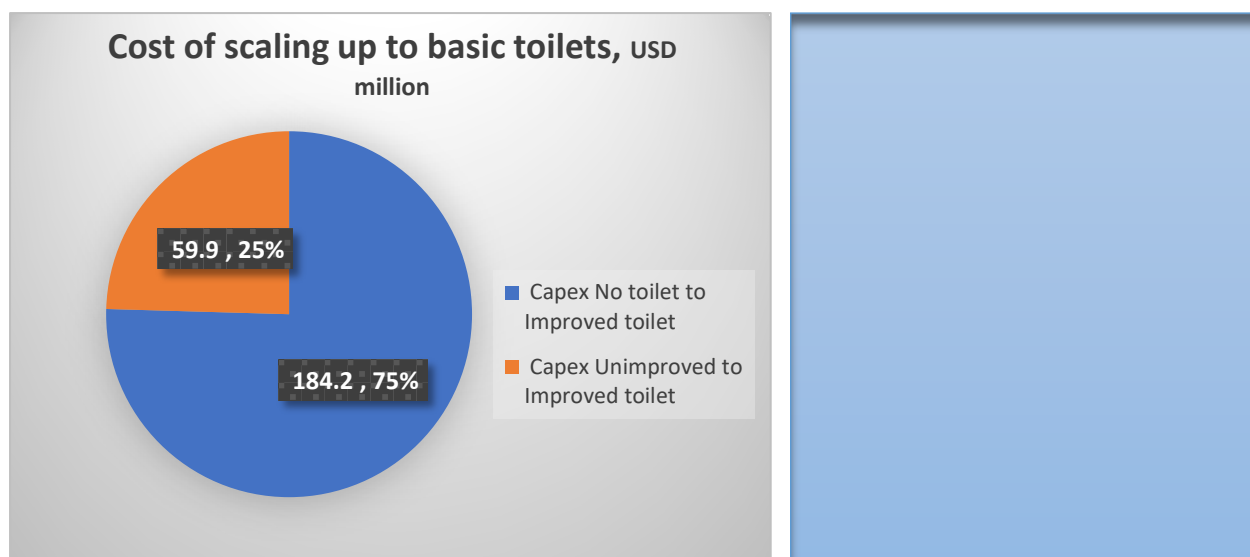
83. The costs of the enabling access to household sanitation includes the software and the hardware:

Software costs:

84. As the demand generation is done at a wider level, at the cluster/community or even at a wider level, it may not be possible to attribute the costs to a single household. As this cost has already been inputted at the enabling environment stage, it is excluded from here to avoid duplication.

Hardware costs:

85. The cost of constructing a basic toilet, which meets the standards of a basic toilet varies between various state/regions. Based on approximate costs (new toilet @USD 350 and improving an unimproved toilet @USD 175), the table below comes out the total costs of meeting the hardware needs of household sanitation. In addition, the cost of annual maintenance of all toilets (@USD21) is also taken into consideration for ten years, till 2030. In addition, the costs for setting up FSM plants is also included.



15. Access to and, usage of basic Hygiene

15.1. Expected outcome and indicator:

- i. Access to handwashing facility with soap is available at all critical junctures – after defecation, after cleaning children, before cooking of food, before consumption of food, etc.
- ii. Infant feces disposed in safe way
- iii. Water handling in all situations is undertaken in a safe manner

15.2. Targets:

	2020 (baseline)	2022	2025	2030
Access to handwashing facilities with soap	80	90	90	100
Safe infant feces disposal	59	60	70	100
Safe water handling in the home	NA	60	80	100

15.3. Approach

86. Along with the construction of sanitation facilities at home, schools, HCFs and any other areas, a handwashing facility along with soap would be made available. The type of handwashing facility is not prescribed – it could be simple as a bucket filled with water or a wash basin, but soap shall be made available. The facility would be near to / at a reasonable distance from the sanitation facility (i.e. not far that the user does not feel motivated to use it). It would be user friendly for the users of that facility (height, convenience, lighting, etc.).
87. Handwashing with soap facility would also be made available in other situations where handwashing is critical – this includes area where preparation and/or consumption of food is undertaken, so that hands can be washed before food is prepared or food is consumed.
88. Infant defecation, which may be done in the open or in diapers or any other method, would be disposed-off properly. This would include rinsing this into a basic toilet, burying it with soil (not with the diaper), or any other safe method. Washing of hands after disposal would be mandatory.
89. Potable water in the house would be handled safely, so that it does not get contaminated. It would be treated in an appropriate manner (such as boiling for a period, chlorination as per standards, etc.). It would be stored preferably at a height, be always covered, taken from the container using a vessel (such as a ladle) so that hands don't touch the water.

15.4. Costs

90. The costs of the enabling access to household sanitation includes the software and the hardware:

Software costs:

91. As the demand generation for hygiene facilities is done along with that of the sanitation facility, and as this cost has already been inputted at the enabling environment stage, it is excluded from here to avoid duplication.

Hardware costs:

92. The cost of constructing a handwashing facility is included in the cost of construction of the toilet. Infant feces disposal and potable water handling does not require additional hardware costs.

16. Access to, and usage of basic Sanitation and Hygiene: Schools

16.1. Expected outcome and indicator:

- i. All schools in the rural areas (townships and below) have access to sex-segregated sanitation and hygiene facilities. This includes all schools run by the education department, monastic schools, private schools, or others.
- ii. The number of facilities must be in the ratio of number of urinals and toilets for girl and boy children and staff, as set by national level standards
- iii. The facilities must be child friendly, considering the age of the children using them.
- iv. Appropriate arrangements must be in place to take care of the O&M of the facilities
- v. Facilities must be available in the schools for MHM, including safe space for changing, safe places / pits / incinerators for disposal, etc.
- vi. All schools to include and conduct sanitation and hygiene behavior change lessons in their curriculum.

16.2. Targets:

	2021 (baseline %)	2022 (%)	2025 (%)	2030 (%)
Latrines for boys and girls as per ratio	TBD	60	80	100
Urinals for boys	TBD	60	80	100
Private space for girls for MHM	TBD	40	70	100
Handwashing facilities	TBD	60	80	100
Special facilities for children with disabilities	TBD	60	80	100
Disposal facilities for MHM	TBD	40	70	100
Sanitation and hygiene behavior lessons	TBD	100	100	100

16.3. Approach

93. The school sanitation facility would include gender-separated facilities, have urinals and toilet facilities for both boys and girls and staff, and have facilities for Menstrual Hygiene Management (MHM) for girls/women.

- a. The national level standards or how many urinals, toilet facilities and handwashing stations would be present for a set number of children, specified by the national or sub-national Government(s), shall be followed while designing the number of facilities. The facilities shall correspond to the age of the children using the facility and would therefore be user-friendly. Toilets would be well ventilated and have enough light, children would have access to help in times of emergency, heights of handwashing stations would be as per the height of the children, etc., shall be some of the design elements. Within a set budget framework, a localized consultative

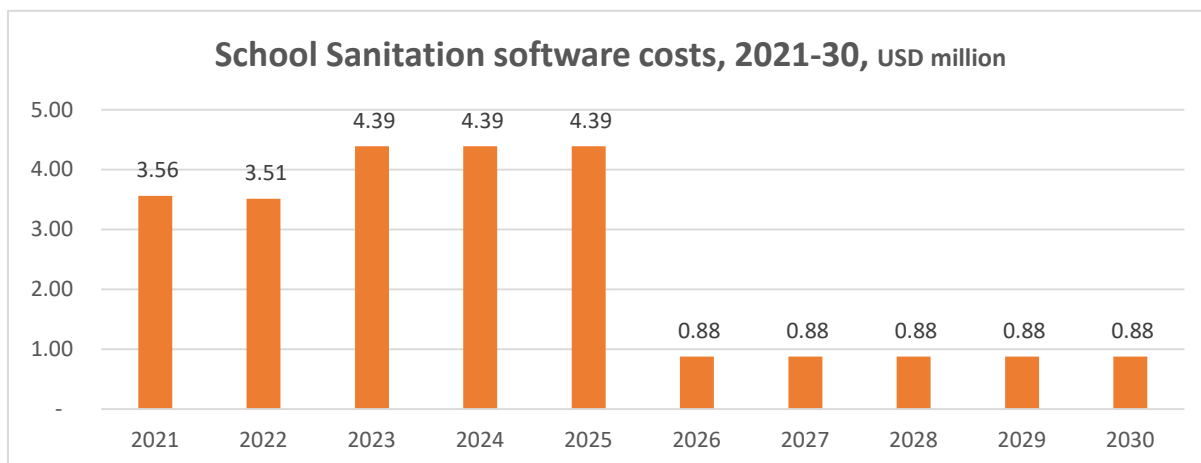
process shall be followed in the design. The security of the facility shall particularly be kept in mind – this should be close to the school and be in a well-lit area, preferably with CCTV cameras outside the facility (without compromising on privacy concerns).

- b. The facility shall be disabled-friendly, with ramps and extra wide cubicles for wheelchair-users, braille signages for the visually impaired, etc. International and national norms/best practices shall be adopted towards this end.
 - c. The MHM facilities shall be located within the toilet block for the girls/women, and shall contain, at a minimum, changing facilities and proper disposal of sanitary pads, such as a functioning incinerator.
 - d. The school authorities shall coordinate with the Department of Rural Development (DRD) to ensure availability of water for use in toilets, for handwashing, proper O&M and cleaning. The water shall be part of the overall community water supply or located within the school premises, with adequate backup in case of emergency. The water shall preferably be available as running water within the toilet blocks and the MHM facilities.
 - e. An approach for operation and maintenance of the facility shall be put in place by the school, which shall include availability of soap and water, disposal of solid waste, daily and periodic cleaning of the toilets and the related facilities, as well as pty emptying when full.
94. The resources for the construction/strengthening (such as digging new pit) of school sanitation and hygiene facilities would be borne by the appropriate owners – ministry of education, ministry of religious affairs, private school owners, or private sector (e.g. CSR). In situations where the demand outstrips supply, other factors like contribution by the school/PTA would be taken into consideration.
- a. A national level budget per school toilet (per seat, per urinal) shall be set by the ministry considering the design of the toilet, handwashing stations and MHM facilities. Additional hardship budget may be allowed for difficult to reach areas or other conditions. Beyond the allocated amount, schools are at liberty to top up with additional resources from other sources (such as its own budget, funds from the PTA). The design of the facilities shall be decided by the school based on local conditions.
95. Sanitation and hygiene environmental education in schools.
- a. Curriculum on sanitation and hygiene environment is developed/strengthened
 - b. Capacity building of teachers on environment education is undertaken / strengthened
 - c. Regular lessons on S&H, water, MHM and environment issues are undertaken in schools in rural areas across the country.

16.4. Costs

96. The costs of the software required for basic school sanitation is considered in this implementation plan. The costs of hardware will be borne by the Ministry of Education / other owners of schools (ministries/private entities, etc.), and a costed implementation plan will be prepared by the respective stakeholders.

Activity	Details	Amount (USD)
Curriculum development for schools	lumpsum USD 50,000	50,000
Capacity building for teachers	175,607 teachers * USD 100 per teacher	17,560,700
Refresher for teachers	10% of teachers every year @ USD 50/teacher	7,024,280
Total		24,634,980



17. Access to, and usage of basic Sanitation and Hygiene: Health Care Facility

17.1. Expected outcome and indicator:

- i. All Health Care Facilities at rural areas are equipped with adequate sanitation and hygiene facilities, as per the standards.

17.2. Targets:

	2021(baseline)	2022	2025	2030
Use of basic toilets for inpatients / outpatients	TBD	90	100	100
Use of basic facilities for staff	TBD	90	100	100
Handwashing facilities with soap	TBD	90	100	100

17.3. Approach

97. All Health Care Facilities from Township and below levels have safely managed sanitation and hygiene facilities. The facilities shall be constructed/upgraded (if toilets already exist) out of the infrastructure budget of hospitals from the ministry of health or the owners of the facility. The existing guidelines for WinHCF shall be followed in this regard.
- a. The number of facilities available shall be commensurate with the standards set by the national government for urinals and toilets per inpatients, outpatients and medical staff. The facilities shall be gender segregated. As the patients may be temporarily or permanently disabled, special considerations for toilets for them will be addressed in all HCFs.
 - b. As cleanliness is the lifeline of any HCF, they shall, in addition, also provide and maintain facilities for bathing, laundry; water supply shall be continuously assured. Additional focus shall be given to medical waste management (separate policy to be evolved for this) and Infection Prevention Control. All HCFs shall follow the “Hospital infection control guidelines” and “Health care waste management guidelines”, in letter and spirit.
 - c. The upkeep of the sanitation and hygiene facilities shall be undertaken as per the facilities maintenance protocols and from the routine O&M budget of the HCFs.
 - i. The health staff shall be trained on medical waste management, and effective sanitation and hygiene practices.

17.4. Costs

98. No costs are computed under this, as the costs of hardware of HCFs will be borne by the Ministry of Health and Sports / other owners of HCFs and a costed implementation plan will be prepared by the respective stakeholders.

18. Access to Sanitation and Hygiene in public places

18.1. Expected outcome and indicator:

- i. Visitors transiting public places have access to sanitation and hygiene facilities.
- ii. The facilities in these public places are maintained out of predominantly user-generated fees.

18.2. Targets:

Type of public place	2020	2022	2025	2030
Market places	NA	40%	90%	100%
Bus stops/hubs (city and transit)	NA	40%	90%	100%
Religious festivals	NA	40%	90%	100%
Others	NA	40%	90%	100%

18.3. Approach

99. The sanitation and hygiene facilities at public places will be constructed at those places where there is a high footfall of floating population. These are permanent locations like markets, bus stops, religious centers, public gardens, but also temporary locations like festivals, which are held monthly/annually; the latter may have permanent or temporary structure, depending on the periodicity of these events.
100. The toilets shall include gender-segregated urinals and toilets, disabled-friendly facilities, washing facilities, facilities for babies and toddlers, arrangements for MHM and the disposal of diapers and menstrual waste.
 - a. Toilets which are disabled friendly (mobility, hearing, seeing) would compulsorily be included. The toilets shall be situated in areas which are accessible to all, be in a secure area especially for women and children, be in a brightly lit area, have privacy and protect dignity.
101. The need for a structure and the size of the structure and other details shall be understood through a needs-assessment. A cost-benefit analysis shall be part of this, to understand the input costs and the sustainability of the structure based out of affordable user fees.
 - a. The budget for each of these structures will be set at the national level (cost per urinal/toilet seat/shower), as part of the overall guidelines for these S&H facilities; budget for each complex shall be determined based on these unit costs and its size. Some difficult to reach areas or other characteristics may have a hardship component to compensate. The costs of these facilities will be borne out of public funds or credit. The government will also set up a viability gap fund, to part support O&M in rare cases.
102. The construction and/or operation and management of these facilities will be undertaken through a Public-Private Partnership mode, wherein the private sector shall be involved in either the construction or O&M or both. The private sector here shall mean large or local private

companies, NGOs, Self-Help Groups, or any registered entity, which is ready to take up the construction and/or O&M. this agency shall be procured on a competitive basis, with special consideration given to local entities / NGOs / SHGs, etc. A contract, based on templates to be created at national level, shall be drawn up between the public and private parties.

- a. If the construction is undertaken by private entities, they may put in the capital expenditure themselves or depend on public funding sources. In case of the former, the O&M costs shall also reflect recovery of the capex from the user fees; if the capex is from public resources, the entity shall recover the opex (O&M fees) and capital management (capmanex) expenditure out of the user fees.

103. The user fees shall be kept affordable to the type of users typically using the facility; if it is located at a rural market, the fee may be kept low, while it may be higher at peri-urban bus stops, and so on. At the initial needs-assessment stage, the user fees shall be one of the considerations which decides the 'go/no-go' status of the facility. The user fee collection shall contribute to the O&M of the project as per agreed standards, besides minor maintenance and contributing to a profit for the managing entity.

- a. In the rare case of the user fee, having been kept affordable, not able to meet the costs of the overall O&M costs + profit, the facility would still be constructed; however, the managing entity would be entitled to resources from the viability gap fund of the Government. This would however be preceded by a detailed study of the operational costs of the facility, to make sure that the deficit between O&M costs and user fee generation is real and needs the support from the viability gap fund. The viability gap funding shall not be more than 40% of the overall O&M costs of the facility. Detailed transparent and objective guidelines for provision of the viability gap funding would be prepared by the national government, to guide this process.
- b. Major maintenance of the facility shall follow the same approach as the initial capex, i.e. out of the public funds or private credit.

18.4. Costs

104. The costs of the software required for basic public place sanitation is considered in this implementation plan. The costs of hardware will be borne by the respective ministries/local bodies/private entities, etc.), and a costed implementation plan will be prepared by the respective stakeholders. All costs below are expected to be incurred in Year 1, 20201

Activity	Details	Amount (USD)
Guidelines for S&H facility in public places	Lumpsum	50,000
Guidelines for viability gap funding	Lumpsum	50,000
TOTAL		100,000

19. Access to sanitation and hygiene in emergency situations

19.1. Expected outcome and indicator:

- i. Policies, plans, standards, procedures and capacity are in place ready for humanitarian responses for Sanitation and Hygiene at national, state/region, district and township levels.
- ii. WASH Government agencies, communities and local humanitarian actors respond to humanitarian situations in a timely and targeted manner, to meet national humanitarian standards, based upon humanitarian principles.
- iii. WASH Government agencies, communities and humanitarian organisations restore and build back better the damaged WASH services and infrastructure

19.2. Approach

105. Sanitation and Hygiene in disaster and emergency prone areas would be under the overall leadership and coordination of the Disaster Management Committees, set up at the national and sub-national levels, especially the township level committee.
- a. A management plan to deal with disasters and emergencies, along with Standard Operating Procedures (SOPs) shall be prepared by the township and disseminated to all stakeholders. The plan shall include emergency rescue locations, identify human resources to support the situation, material to be made available, and the financial needs.
 - b. Supply chains for disasters and emergencies, which includes pre-cast material for quick set-up (mobile toilets/handwashing stations), emergency kits, etc., shall be set up at township level, to enable quick response during such situations.
 - c. A township level emergency fund shall be made available to be exclusively used for emergencies, which shall enable rapid response in times of emergencies.
 - d. A monitoring system which responds to emergency situations and captures the status in real-time shall be designed and tested, ready to be put into operations as the situation emerges
106. Awareness sessions shall be conducted in various institutions and among the general public on actions to be taken during these events.

19.3. Costs

107. The costs of hardware will be borne by the respective ministries / other entities, and a costed implementation plan will be prepared by the respective stakeholders.