FEDERAL MINISTRY OF WATER RESOURCES

MAKING NIGERIA OPEN-DEFECATION-FREE BY 2025

A National Road Map

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Acronyms

BCC:	Behavioural Change Communication
CCD:	Community Contact Drive
CCT:	Community Contact Team
CHEO:	Community Health Extension Worker
CLTS:	Community Led Total Sanitation
DfID:	Department for International Development
DPHE:	Department of Public Health Engineering
EHO:	Environmental Health Officer
EU:	European Union
FCT:	Federal Capital Territory
FMWR:	Federal Ministry of Water Resources
FME:	Federal Ministry of Environment
FMEdn.:	Federal Ministry of Education
GDP:	Gross Domestic Product
IDA:	Iron Deficiency Anaemia
IYS:	International Year of Sanitation
JMP:	Joint Monitoring Report
KAP:	Knowledge, Attitude and Practice
LGA:	Local Government Area
MDG:	Millennium Development Goal
MICS:	Multi Indicator Cluster Survey
NDHS:	National Demographic and Health Survey
NGN:	Nigerian Naira
NGO:	Non-Governmental Organization
NTGS:	National Task Group on Sanitation
NWRI:	National Water Resources Institute
ODF:	Open Defecation Free
PHC:	Primary Health Centre
RSC:	Rural Sanitation Centre
RSM:	Rural Sanitary Mart
RUWASSA:	Rural Water Supply and Sanitation Agency
SEPA:	State Environment Protection Agency
SH:	Sanitary Hub
SM:	Sanitary Mart
SMSU:	Sanitary Marketing Scaling Up
SPC:	Sanitation Promotion Centre
SRC:	Sanitary Resource Centre
STGS:	State Task Group on Sanitation
SUBEB:	State Universal Basic Education Board
UN:	United Nations
UNICEF:	United Nations Children Fund
WHO:	World Health Organization
VHP:	Voluntary Hygiene Promoter
VIP:	Ventilated Improved Pit
WASH:	Water Sanitation and Hygiene
WASHCOM:	Water, Sanitation and Hygiene Committee
WSP:	Water and Sanitation Programme

Foreword

Nigeria is among the nations in the world with the highest number of people practicing open defecation, estimated at over 46 million people. The practice has had a negative effect on the populace, especially children, in the areas of health and education and had contributed to the country's failure to meet the MDG target. The sanitation situation in the country prompted the National Council on Water Resources in 2014 to prioritize the development of a roadmap towards eliminating open defecation in the country, in line with the United Nations global campaign for ending open defecation.

This initiative tagged "Making Nigeia Open Defecation Free by 2025: A National Roadmap" was developed by the Federal Ministry of Water Resources with invaluable support from UNICEF and other key sector players across Nigeria. In 2016, the National Council on Water Resources endorsed this road map as a mean to eliminate open defecation in Nigeria.

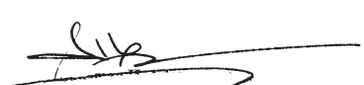
The Roadmap provides a guide towards achieving an open defecation free country using different approaches such as capacity development; promotion of improved technology options through sanitation marketing; provision of sanitation facilities in public places; Community-Led Total Sanitation; promotional and media campaigns; creating enabling environment and coordination mechanism.

In this strategy document an indicative investment required for achieving the roadmap is estimated, showing the cost by government at all levels and the private sector, especially for construction of sanitation facilities in public places and the cost by households for construction of household sanitation facilities.

I am glad to stress that the cost benefit of investment in sanitation on the health, economic and education sectors cannot be overemphasized as reduction in diarrhea diseases among children, increased school attendance, reduction in health care cost and job creation for sanitation services will contribute to economic growth and development.

The Roadmap also provides a basis for the development of the Partnership for Expanded Water Supply and Sanitation (PEWASH) programme which aims to establish a multi-sectoral partnership between government, development partners and the private sector to support the empowerment of rural dwellers in Nigeria through the provision of adequate water supply and sanitation services.

The Federal Ministry of Water Resources will provide the enabling environment, leadership and coordination required in achieving this target by working together with communities, civil society, development agencies, private sector and government at sub-national levels.



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Preface

Iimproved sanitation and hygiene practices is fundamental to child survival, socio-economic development and wellbeing of the society at large. Eliminating open defecation has benefits from the health, nutrition, learning, social and economic perspective. In addition it safeguards girls/women's dignity and protects them against sexual harassment, while they are out to relieve themselves.

Access to improved sanitation in Nigeria has declined over time. Between 1990 and 2015, the WHO-UNICEF Joint Monitoring Program data reveals an 8% decrease in access to sanitation in rural areas and 3% decrease in access to sanitation in urban areas. The decline in access is further pronounced for the poorest. Nigeria was significantly off track with regard to the MDG-7 target on sanitation. As a result there are over 70 million people without access to improved sanitation and more than 45 million people practicing open defecation in Nigeria.

Recognizing the public health risks, the National Council on Water Resources at the 2014 council meeting recommended the development of an Open Defecation Free (ODF) Roadmap for Nigeria. The present ODF Roadmap is an attempt to clearly articulate the strategies, plans and investments needed to eliminate open defecation by 2025. Achieving an ODF environment implies having access to toilets not only in the communities but also within schools, health centres, markets and other public places.

The roadmap is organized into nine sections encompassing current sanitation situation, past efforts and lessons learned in the implementation of sanitation programmes, rationale, suggested strategies and action plan, phasing for implementing the road map, roles and responsibilities of key stakeholders, implementation plan, the required enabling environment and investment needs for eliminating open defecation by 2025.

Community Led Total Sanitation (CLTS) has proven to be an effective approach towards accelerating sanitation access in the country having exponentially grown from a mere 15 ODF communities in 2008 to over 14,000 ODF communities in 2016. The expansion of CLTS program has led to a growing pool of trained CLTS facilitators and has improved the quality of triggering and ODF certification process. In terms of providing the enabling environment for the implementation of the ODF road map, the Ministry of Water Resources has clearly prioritized elimination of open defecation in its recently launched “Partnership for Expanded WASH (PEWASH)” program.

The ODF roadmap is an actionable costed plan to achieve PEWASH targets on sanitation as well as the attainment of SDG-6.1 target. Achieving an ODF Nigeria would require constructing nearly 20 million household toilets and 43,000 toilets in schools, health centres and public places requiring an average annual investment of about NGN 100 billion (approximately 75% household investment; 25% government contribution). The implementation of the roadmap will be in phases – the initial preparatory phase, followed by the consolidation phase and the final assault phase as we approach 2025.

We sincerely commend the efforts and the contributions made by Bidhu Bhushan Samanta, the international consultant engaged to lead the development of this roadmap. We would also like to place on record the contributions made by the members of the National Task Group of Sanitation, CLTS practitioners across the country and the development partners.

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Executive Summary

The Government of Nigeria is committed to end open defecation in the country by 2025 which is in line with the revised global target set by the United Nations. Towards this end, FMWR requested UNICEF, Nigeria to undertake the development of a road map for making Nigeria open-defecation-free by 2025.The present exercise is the outcome of this resolve.

Presently (2015) around 46 million people in Nigeria defecate in the open. Another 56 million people are estimated to be added during the next ten years. This means a total of 102 million people or 20 million households should have access to a toilet and use it. Besides, sanitation facilities have to be provided to numerous institutions such as schools, health centres, market centres, motor parks, highway eateries, jetties and religious places so as not to have any open defecation around these places.

The adverse impact of open defecation is now well documented. According to a World Bank Report (2012), around 122,000 Nigerians including 87,000 children under 5 die each year from diarrhoea; nearly 90% is directly attributed to water, sanitation and hygiene. A very comprehensive review of 21 studies, covering several countries found out a 36% reduction in diarrhoeal morbidity due to improved sanitation.

According to the NDHS (2013), 37% of Nigerian children, under 5 were stunted (height for age), 18% wasted (weight for height) and 29% under-weight (weight for age). According to the same study while the percentage of stunted children declined between 2003 and 2013, there was an increase in the percentage of wasted and under-weight children. Studies have shown that a large part of malnutrition burden owes to the unhygienic environment in which the children grow up.

One of the major reasons for iron deficiency anaemia (IDA) among adolescent girls and young mothers is found to be worm infestation that is attributed to open defecation. An anaemic mother, in all probability, will deliver a low-birth-weight baby not only endangering the life of the new born but also the mother. It is, therefore, not surprising that one in every fifteen Nigerian children dies before reaching his/her first birth day and one in every eight does not survive to see his/her fifth birth day.

Open defecation is not only a social stigma but also a factor contributing to violence against young girls and young married women. As per a study sponsored by Water Aid in selected slums in Lagos, a quarter of women, defecating in open, had either first or second hand experience of harassment, a threat of violence or actual assault in the previous 12 months and over two-thirds felt unsafe using a shared or community toilet in a public place.

As per a World Bank Report (2012), Nigeria loses NGN 455 billion or US$ 3 billion annually due to poor sanitation. This works out to US$ 20 per capita/year and constitutes 1.3% of Nigeria's GDP. According to the same report open defecation alone costs Nigeria over US$ 1 billion a year. The market potential of sanitation in the country is huge. If the 46 million people that defecate in the open at present opt for a toilet, the demand for material and labour, on a conservative estimate, will work out to NGN 1250 billion or over US$ 8 billion.

The road map proposed in this report examines the justification for an open-defecation-free Nigeria, assess the adequacy of the steps taken in the past and the strategies needed to achieve the goal. This has been done through a set of strategies and action points. These strategies and action points relate to i) technology options to suit different geo-physical conditions, ii) technology options to suit

households' preferences and paying capability, iii) developing and promoting a 'Sanitation Ladder', iv) promoting low-cost and low-water consuming pour flush latrines, v) developing an appropriate alternate delivery mechanism and social marketing for sanitation, vi) refocusing the triggering process under CLTS, vii) developing relevant IEC materials and using appropriate mass media, viii) addressing the special needs of semi-urban and urban areas, ix) providing toilet facilities at public places, x) training of personnel and human resources development, xii) administrative back up and coordination mechanism and xiii) modification of the certification for ODF and beyond.

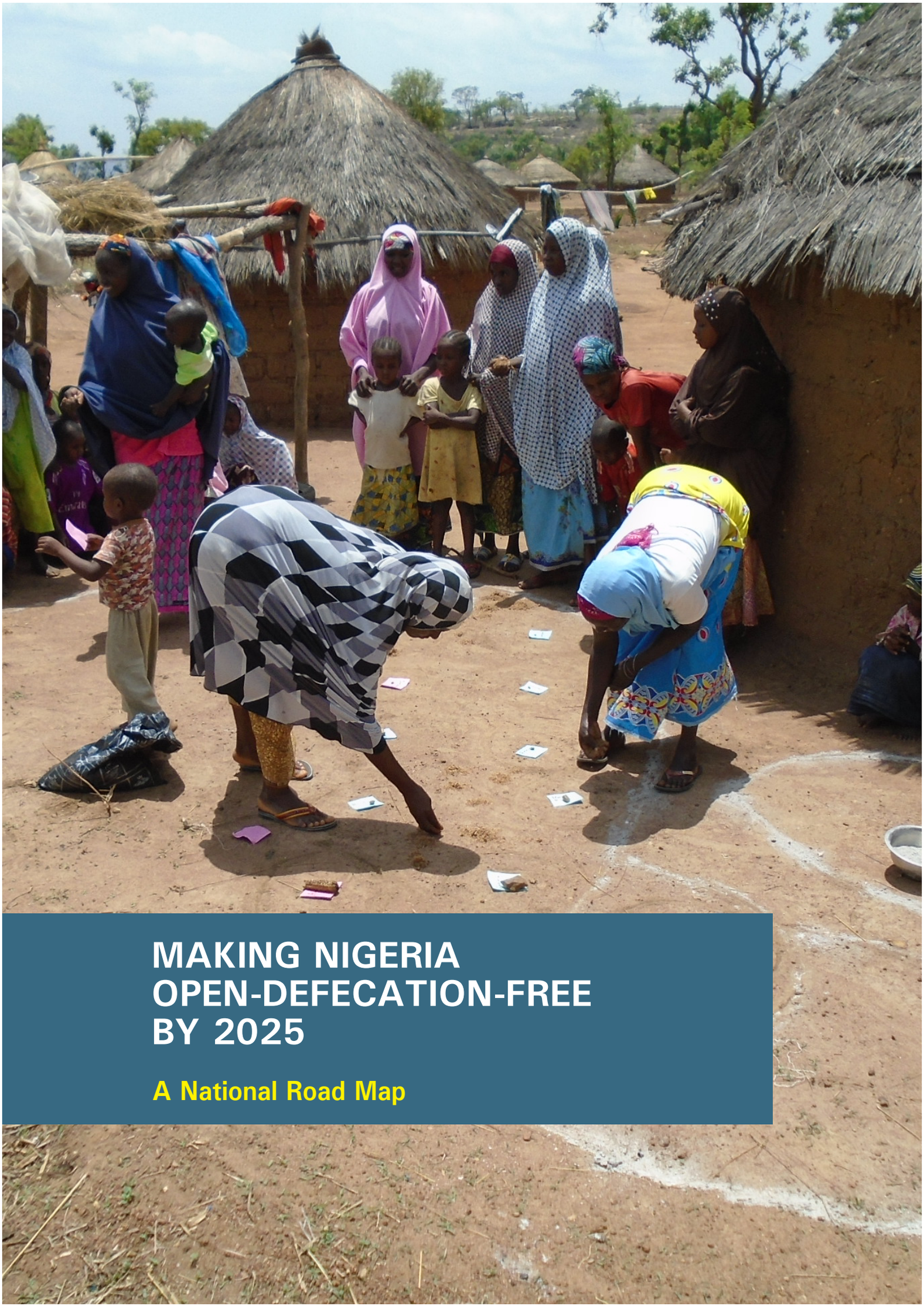
A time plan for implementing the proposed road map has been prepared. The various time lines suggested are, state of preparedness and period of transition (2016-2017), assessment (2018), years of consolidation and moving forward (2019-2021), year of self-assessment (2022) and the final assault (2023-2025).

Suggestions have been made to phase out the targets set, in terms of population to be covered. The yearly targets set were 4.3 million population during 2016-2018, 8.6 million population during 2019-2022 and 21.5 million during 2023-2025 with the exception of 2025 during which 11.588 million is targeted.

In order to achieve the targets, the road map has also come out with a bottleneck analysis and a set of enabling environment. Such analysis relate to, i) political will, ii) legal framework, iii) policy on sanitation, iv) long-term vision with an investment plan, v) need-based budgeting, v) well-defined organizational structure, vi) proper programming and investment plan, vii) a robust review and monitoring system, viii) effective coordination among stakeholders, ix) a strong network of CSOs/NGOs and CBOs and x) a responsive private sector.

An exhaustive list of activities under each of the strategies has been identified keeping in mind the time line proposed for implementation of the proposed road map. Ministries/Departments/agencies to be responsible for these activities have also been identified.

The road map has also worked out the indicative investment for making the country open-defecation-free by 2025. The total investment estimated works out to NGN 959 billion. Of this NGN, 725 billion will be the share of household latrines that will be totally met by them. The share of Government (National, State and LGA) will be in the order of 234 billion or around 23.4 billion per year. In terms of US$ it works out to around 150 million per year or less than one US$ per capita/year. In view of the fact that Nigeria loses NGN 455 billion each year (equivalent of US$ 3 billion or US$ 20 per capita/year), the investment proposed is justified. Even if the entire cost of NGN9.59 billion is taken into account, still an open-defecation-free Nigeria can pay back more than what has been invested.



MAKING NIGERIA OPEN-DEFECATION-FREE BY 2025

A National Road Map

SECTION I: SANITATION SITUATION IN NIGERIA

General Background:

Nigeria is one of the West African countries and is located on the gulf of Guinea. With a total area of 923,768 square kms. It is world's 32nd largest country, after Tanzania. However, in terms of population, Nigeria is the most populous country of Africa. The population of Nigeria, as per the National Population Commission, is around183 million (2015 projection) spread over its 36 States and Federal Capital Territory (FCT), 774 Local Government Areas (LGAs), 9522 wards and around 123,240 communities. The population growth rate is a little over 3% per annum. The country's most expansive topographical region is that of the valleys of the Niger and Benue River. These two rivers converge and empty into the Niger Delta which is one of the world's largest river deltas and the location of a large area of Central African Mangroves. While on the south-west of Niger is a "rugged" highland, on the south-west of Benue are hills and mountains; the latter forms the Mambila Plateau. Nigeria is a heterogeneous country of more than 250 ethnic groups.

The country is divided into six geo-political zones viz., North West, North East, North Central, South East, South South and South West. The States falling under each of these regions are given below. Their location can be seen from Map-1

North-East: Yobe, Borno, Bauchi, Gombe, Adamawa and Taraba
North-West: Kebbi, Sokoto, Zamfara, Katsina, Kaduna, Kano and Jigawa
North-Central: Niger, Kwara, Kogi, Nasarawa, Benue, Plateau and FCT-Abuja
South-East: Enugu, Imo, Anambra, Abia and Ebonyi
South-West: Oyo, Osun, Ekiti, Ogun, Ondo and Lagos
South-South: Edo, Delta, Bayelsa, Akwa Ibom, Rivers and Cross-River

These regions show wide socio-economic divergence (Table -1).

Table -1 Basic Socio-economic Indicators across Regions in Nigeria

Indicators	North -East	North -West	North -Central	South -East	South -West	South South	National	Rural	Urban
Poverty Incidence (%)	72.2	71.2	67.0	26.7	43.0	35.1	54.4	63.3	43.2
Health Access (%)	48.4	55.3	61.1	37.1	73.1	45.9	55.1	47.8	70.9
Infant Mortality	125	114	103	66	69	120	100	121	81.0
U-5 Mortality Rate	260	269	165	103	114	176	201	243	153
Safe Water Source (%)	30.7	50.6	48.9	40.8	73.5	45.9	51.4	40.0	73.4
Safe Sanitation (%)	45.4	61.6	46.6	69.5	62.1	55.0	30.0	28.0	43.0
Improved Waste disposal (%)	6.2	10.7	8.8	9.0	36.0	13.2	16.1	4.8	37.9
Diarrhoea incidence (%)	5.5	4.8	5.5	5.7	4.1	4.1	4.9	5.1	4.3

Source: National Bureau of Statistics, Annual Abstract of Statistics 2007

Over all the North-East, North-West and North-Central regions have higher incidence of poverty, higher infant mortality and under five mortality rates, less access to safe water and sanitation (except for North-West with regard to sanitation). Regions in the South seem to be in a more advantageous position in terms of socio-economic development. There is no significant change in the situation over the years.

National Scene: Sanitation coverage, in terms of access to latrine, is available from more than one source with different figures. Notwithstanding these deviations it can be concluded that access to latrine in Nigeria is far from satisfactory. According to the 2003 National Demographic and Health Survey (NDHS), around 18 percent of households in Nigeria used improved sanitation facility like flush toilet or VIP, over 56 percent used traditional pit latrines and 26 percent had no access to sanitation facility forcing them to go for open defecation. In rural areas close to one-third of the households were practising open defecation.

The same source for 2013 indicates an increase in the percentage of households (29%) reporting open defecation although there was a decrease in the percentage of households using traditional pit latrine (37%) and an increase in the use of improved sanitation facility (30%).

A more comprehensive data on the use of sanitation facilities by population is available from the JMP on Drinking Water and Sanitation brought out by WHO and UNICEF annually and the latest NDHS carried out in 2013. A time- series data available from 1990 through 2015 indicate a marginal decline in the use of improved sanitation facilities (from 38% to 29%) and a slight increase in open defecation from (24% to 25%). At the same time, use of shared and other unimproved latrines has increased from 38% to 46%).

NIGERIA

Figure -1 Geo-Political Regions of Nigeria

While this trend holds good for rural areas, in urban pockets, use of improved sanitation facilities has gone up from 36% to 43% (Table -2). Nevertheless, open defecation in urban areas shows a significant increase during the same period (from 7% to 15%).

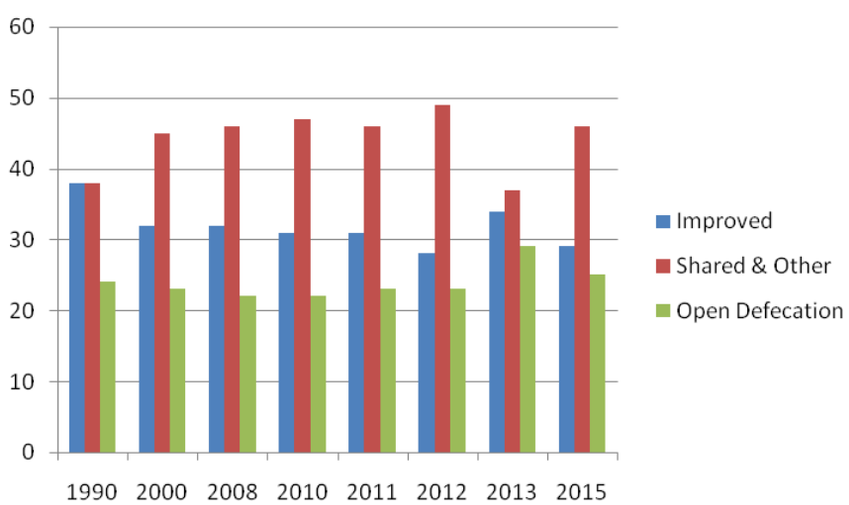
The above analysis brings out two points. One, the increase in the population using a latrine (any type) has not kept pace with the population growth that is currently estimated at over 3% annually and second, climbing up the 'Sanitation Ladder' has yet to pick up in the country.

Table - 2 Use of Sanitation Facilities in Nigeria: 1990-2013 (% of population)

Facility	1990	2000	2008	2010	2011	2012	2013	2015
National								
Improved	38	32	32	31	31	28	34	29
Shared	24	27	26	25	24	26	20	24
Other unimproved	14	18	20	22	22	23	17	22
Open defecation	24	23	22	22	23	23	29	25
Urban								
Improved	38	34	36	35	33	31	43	33
Shared	43	43	38	38	36	40	34	38
Other unimproved	12	13	14	15	18	14	8	14
Open defecation	7	10	12	12	15	15	15	15
Rural								
Improved	38	32	14	27	28	25	28	25
Shared	16	16	27	13	13	12	11	11
Other unimproved	15	19	31	29	28	32	23	30
Open defecation	31	33	32	31	31	31	38	34

Source: JMP Reports of WHO and UNICEF, 2010, 2011, 2012, 2013 and 2015 NDHS, Nigeria, 2013

Figure - 2 Change in type of sanitation facilities used by households in Nigeria (1990-2015)



Source: JMP Reports of WHO and UNICEF 2010, 2011, 2013 & 2015 and NDHS, 2013

Situation in States and FCT:

Use of sanitation facilities in different States and the FCT is available only for 2011 from the results of MICS. This may not give a correct picture for all states due to the implementation of CLTS. In many of the donor funded States sanitation coverage would have jumped significantly over the last two years due to the Community-led Total Sanitation (CLTS) approach. Nevertheless, it does give an idea about the degree of variation among the different States and among the different segments of the population as may be seen below.

- The extent of open defecation varies from as low as 1.2% of households in Abia to as high as 65.8% in Kogi. Other States that show higher than the national average (37%) with regard to open defecation practices are Ekiti (60.8%), Plateau (56.2%), Oyo (54.0%), Cross River (53.6), Benue (52.9%), Taraba (52.5%), Nasarawa (50.8%), Kwara (50.5%, Enugu (48.6%), Jigawa (48.1%), Ondo (47.6%), Niger (47.5%), Ebonyi (45.5%), Osun (39.2%) and Kebi (37.6%)
- In urban areas the most popular toilets used are flush to septic tank or to a pit. In rural areas pit latrines without slab or open pit are more in vogue.
- It appears use of improved latrine facilities are strongly related to the economic status of a household. Thus while 95% of the richest households use improved latrines the same is only 12% among the poorest ones.
- Use of improved latrines seems to move with the educational level of the head of a household. While the use of flush latrine connected to a septic tank is only 3% among those with no education, the same is over 27% where the head of the household had studied up to secondary education or higher.

SECTION II: PAST EFFORTS TO PROMOTE SANITATION

The Government of Nigeria is committed to promoting sanitation and hygiene, along with drinking water. Towards this end, it has formulated policies and strategies from time to time. Some of these policies are i) National Water Supply and Sanitation Policy, 2000, ii) National Environmental Sanitation Policy, 2005, iii) National Health Promotion Policy, 2006 and iv) Strategy for Scaling up Rural Sanitation and Hygiene to meet MDG, 2007.

Water-Sanitation Policy 2004 (Draft): The Draft National Water-Sanitation Policy developed by the Federal Ministry of Water Resources is the most comprehensive one that focuses on sanitation and hygiene including disposal of liquid and solid waste. Although it is yet to get approved by the Federal Executive Council, it does speak of the thinking on the subject and the spirit of making sanitation as an important component of the social sector programs in the country. The objective of this policy is to ensure that all Nigerians have access to adequate, affordable and sustainable sanitation through the active participation of Federal, State and Local Government, NGOs, development partners, private sector, communities, households and individuals. The draft has laid down the following milestones to achieve an open-defecation-free Nigeria by 2025. Thus, Nigeria was probably one of the few countries that were more practical to fix the target within a reasonable timeframe even in 2004, much before the UN revised the target of universal sanitation coverage by 2025.

- Review and improve coverage of sanitation to 60% of the population by 2007
- Extension of sanitation coverage to 65% by 2010
- Extension of sanitation coverage to 80% by 2015
- Extension of sanitation coverage to 90% by 2020
- Achieve 100% sanitation coverage by 2025
- Sustain 100% sanitation coverage beyond 2025

The Policy had also laid down the service level for different areas viz., rural, semi-urban and urban (See Box). With regard to funding the Sanitation Program, the Policy envisaged that all tiers of the Government shall appropriate with timely release of a separate vote for sanitation of an amount which is equivalent to not less than 15% of their annual appropriation for water supply to implement sanitation programs.

Rural: Each household in rural areas (community of population less than 5,000) must own and have access to safe sanitary facility with at least minor improvements that would reduce flies, odour, etc (at least upgraded pit latrine)
Semi-urban: Each household in semi-urban areas (population of 5000 to 20,000) must own and have access to safe sanitary facility that is adaptable to existing traditional pit latrine and uses superstructures which blends very well with other buildings within community (at least a Sanplat latrine)
Urban: Each household in urban areas (population above 20,000) must have access to safe sanitary facility that uses suitable and affordable water conveyance systems (at least a pour- flush toilet)

Subsequently, the Strategic Framework for the National Rural Water Supply and Sanitation Program 2005 envisaged the share of different stakeholders of sanitation program as follows:

Federal Government:	5%
States:	15%
LGAs:	20%
Communities:	60% (including full cost of latrines)

The above arrangement did not define as to what component of the program each tier will fund. However, so far as household latrines are concerned, the entire cost of construction and their operation and maintenance was to be fully borne by a household irrespective of its socio-economic status. Thus the policy promoted a non-subsidy and demand driven approach to expand sanitation coverage.

The policy advocated for promoting a range of options for upgrading the traditional pit latrines that can be called the 'Sanitation Ladder'. These were:

- Upgraded traditional pit latrines by covering the pit opening/squat hole with a suitable cover, plastering of the latrine floor with cement and introduction of a vent pipe to improve the hygiene conditions of the latrine
- Sanplat slab and vent
- Ventilated Improved Pit Latrine (VIP)
- Pour-flush toilet; the toilet could be squatting or sitting type
- Septic tank/soak-away system, particularly for semi-urban and urban areas
- Conventional sewerage system suitable for large cities

National Task Group on Sanitation: The Government established a National Task Group on Sanitation (NTGS) with its Secretariat presently in the Federal Ministry of Water Resources (FMWR) in 2002. This is an inter-ministerial/agency group that include Federal Ministries of Water Resources, Environment, Housing and Urban Development, Health, Education, Women's Affairs, National Orientation Agency, MDG Office, National Planning Commission and National Agency for Food, Drug Administration and Control. Other members include UNICEF, Water Aid, European Commission, DfID, World Bank and NEWSAN. Later similar Task Groups were formed at State level.

Establishment of RUWASSA and WASH Departments/ Units: As a part of decentralizing the WASH Program and advocacy from agencies like UNICEF, some State Governments started establishing a full-fledged Rural Water Supply and Sanitation (RUWASSA) Agency by law followed by WASH Department or Units at LGA level for better planning and implementation of the Sanitation Program. This was more conspicuous in states having external funding from donors. States/LGAs where no full time RUWASSA or WASH Department/ Units exist, WASH matters are handled by either Health or Environment Department.

Government efforts to meet MDG: Keeping its commitments to meet the MDG and the ensuing International Year of Sanitation (2008), the Federal Government came up with a very comprehensive strategy for scaling-up Rural Sanitation and Hygiene in 2007. It was realized that although the National Task Group on Sanitation was created in 2002, more work needed to be done to cover all critical components, at all levels, to scale up rural sanitation so as to meet the MDG. The scaling up strategy aimed to rectify this, particularly in the areas of harmonizing federal policies with State and Local Government approaches, facilitating integrated planning and target setting, supporting improved communication and advocacy for behaviour change and developing a menu of appropriate technology options. It was realised that at the prevailing rate of progress Nigeria could probably reach a coverage level of 49% where as the MDG (2015) expected this to be around 65%. Hence a target of constructing one million household latrines annually, during 2008-2015, was envisaged.

CLTS Approach to sanitation: In order to accelerate sanitation coverage to meet the MDG, Nigeria was one of the first few countries in Africa to have resorted to the Community-Led-Total- Sanitation (CLTS) Approach in 2005-2006. However wider application of this approach was adopted from 2008 onwards as a prelude to the International Year of Sanitation (IYS). The main objective of the CLTS approach was to empower the community, through a triggering exercise, to realize the extent and magnitude of the problems associated with open defecation and take necessary action collectively towards solving the problems for improved health and well-being of the people. It focuses on igniting a change in sanitation behaviour rather than constructing toilets. This is done through a process of social awakening that is stimulated by facilitators from within or outside the community. It concentrates on the whole community rather than on individual behaviour where the community resolves to make it open-defecation-free. Unlike the earlier subsidized sanitation program, CLTS is fully non-subsidized.

In Nigeria initially a scattered approach involving triggering communities all over the State was adopted. But soon it was realized that such an approach was not effective and hence an LGA-wide approach was introduced with encouraging results. As of July, 2014 CLTS has been initiated in all 36 States and FCT. Triggering has taken place in 19,467 communities of which 9,728 (around 50%) were declared ODF. Of this 3,276 (close to 34%) have been certified.

SECTION III: RATIONALE FOR A ROAD MAP

The need for developing a road map for making Nigeria open-defecation-free by 2025 emanates from three principal factors. These are:

- The benefits that Nigeria is losing every day due to a large number of people (50 million) defecating in the open.
- Nigeria's lagging behind the milestone on sanitation coverage set by the Draft National Water-Sanitation Policy, 2004.
- Apprehension on meeting the MDG by 2105 and an open-defecation-free Nigeria by 2025.
- Nigeria's commitment to SDG-6 Goal and the PEWASH strategy

A. Benefits from sanitation

The multi-faceted benefits of sanitation are now well publicised through various studies/reports and review of documents. Even then it might not have reached all who matter. It will not be out of place to examine these findings for a better understanding and appreciation of what sanitation can contribute to the economy of Nigeria and why it should be one of the major priorities of the present Government.

The health perspective: The impact of inadequate sanitation on the health of people in general and children in particular is now too well known. Diarrhoea is the second largest killer of children below 5 years in Nigeria, only next to Pneumonia. WHO says that 88% of diarrhoea cases are attributable to factors essentially originating from poor management of human excreta. According to a World Bank Report (2012), approximately 121,800 Nigerians, including 87,000 children under 5 die each year from diarrhoea – nearly 90% is directly attributed to water, sanitation and hygiene.

The adverse impact of open defecation can be judged from the fact that one gram of faeces of a person can contain 10,000,000 viruses, 1,000,000 bacteria, 1,000 parasite cyst and 100 parasite eggs and pathogens. If left in the open, these are carried by flies, fluid (water), finger and field (the famous four of the F-Diagram of disease transmission) and infect another person through the faecal-oral route. Hookworm, that enters the body through unprotected feet, has a direct link with open defecation. A very comprehensive literature review of 21studies, covering several countries (1991), found out a 36% reduction in diarrheal morbidity due to improved sanitation. In another review of lesser dimension carried out in 2004, such reduction was estimated at 32%. In a related practice pertaining to hand washing with soap at critical times (including hand washing after defecation) studies have shown a reduction of the diarrhoeal morbidity by over 40%.

The nutrition perspective: Children weakened by frequent diarrhoeal episodes are more vulnerable to malnutrition and opportunistic infections such as pneumonia. According to the NDHS (2013), 37% of Nigerian children below 5 years were stunted (height for age). Similar figures for wasted (weight for height) and under-weight (weight for age) were 18% and 29% respectively. The most distressing trend is that although the percentage of stunted children somewhat decreased from 42% in 2003 to 37% in 2013, the extent of wasting was worsened during the same period (an increase from 11% to 18%) and also underweight from 24% to 29%. According to Dean Spears, a well known Health Economist, a large part of malnutrition burden owes to the unhygienic environment in which children grow up. Poor sanitation accompanied by high population density act as a double whammy on children half of whom grow up stunted.

In a study on the impact of sanitation on stunting, made in Ahmednagar district of Maharashtra (India), it was found out that on an average the height of children in the project villages had increased by about one cm compared to those in control villages. In the words of Dr Spears, "wild spread child stunting is a human-development emergency in India and it matters for everybody". Hence the current thinking is that environment has a greater role in improving the nutritional status of a child than the diet. Questions are, therefore, now raised whether the large investments made in improving the nutritional status of children will produce the desired results without creating a safe environment for them. Iron deficiency anaemia (IDA) among adolescent girls is to a great extent linked to worm infestation for which the major culprit is open defecation. An anaemic mother, most likely, delivers a low-birth-weight baby there by not only endangering life of the new born and but also can become a victim herself due to her poor health conditions. It is, therefore, not surprising that one in every fifteen Nigerian children dies before reaching his/her first birth day and one in every eight does not survive to see his/her fifth birthday.

The Learning-Outcome Perspective: It is a known fact that a healthy child (physically fit and mentally alert) is expected to do well in learning than a sick child. Stunted children are generally admitted in school late and are less likely to complete their schooling. Tests have shown that a stunted child is less intelligent than their peers who are better nourished. Recent studies have shown that it is not diet but the adverse impact of poor sanitation and hygiene that contribute to stunting. Children with heavy worm burdens are likely to be absent for a greater proportion of the time than those who are lightly infected or free from worms. Also frequent sickness of a child can affect his/her learning achievements adversely. Adolescent girls are especially vulnerable to dropping out, as many of them feels reluctant to go to a school where there is no toilet for their privacy. There are empirical evidences, although limited, to show an increase in school attendance by girls where adequate sanitation facilities are available. A study conducted by Dasra, a strategic philanthropy foundation, in 15 Indian cities, revealed that almost 23% of girls drop out of school when they start menstruating. In some places, nearly 60 % of girls skip school during menstruation and one-third of them eventually drop out. A DPHE-UNICEF study in 1994 and 1998 in Bangladesh showed that provision of water and sanitation facilities in schools increased the girl's attendance by about 15%. In another study in Bangladesh by Water Aid, a school sanitation program increased girl's enrolment by 11%. Sanitation can contribute to the learning outcome of the children for which huge investments are made.

The social perspective: Open defecation is a social stigma, whether one likes it or not. Nothing is more disgusting than seeing the helpless young girls and women squatting in open. The dignity of women and girls is compromised without a latrine at home as they have to wait for the night or early hours to relieve themselves lest seen by others. The violence against young girls and even young married women in rural areas points at the social evil that is seen more and more in recent years. In Delhi (India) slums, a study by one NGO shows that 66% of women interviewed were verbally abused, 46% stalked and more than 30% were physically assaulted while going for the urgent call of nature. A study conducted by Water Aid in selected slums of Lagos in 2012 revealed the following

- A quarter of women defecating in the open (as they did not have a latrine at home) had either first or second hand experience of harassment, a threat of violence or actual assault in the previous 12 months.
- 67% of women felt unsafe using a shared or community toilet in a public place.
- Only half of the women felt safe using a toilet in the local market.
- 56% of women avoid using toilets at certain times of the day to avoid putting themselves at risk.

If this is the situation in a mega city like Lagos, one can well imagine the plight of women and girls in smaller cities and rural communities.

The economic perspective: The economic benefits of sanitation to an economy are not always well understood. This is mainly because of paucity and limitation of data on the subject. However, in recent years there is increasing realization of the cost and benefits of sanitation on making a country open-defecation-free. Some studies indicate that for every US $ spent on sanitation the return varies from US $ 9 to over US$ 40.

In a desk study on the Economic Impact of Poor Sanitation in Nigeria, undertaken by the World Bank and published in 2012, it was estimated that Nigeria loses NGN 455 billion or US$ 3.6 billion annually due to poor sanitation. This amounts to US$ 20 per person in Nigeria per year or 1.3% of the national GDP. The loss to the country from some of the major components was estimated as follows.

- US$ 243 million loss each year in Access Time, that is, the time lost in finding a suitable place for defecating. This cost falls disproportionately on women as care givers who may spend additional time accompanying children or sick or elderly relatives. According to the Water Aid Study mentioned above, 68% of women opined that the cost of using public toilet is a problem for them.
- US$ 2.5 billion lost due to premature death every year.
- US$ 13 million lost due to Productivity Losses whilst sick or accessing health care. This includes absent from work or school due to diarrhoeal diseases, seeking treatment from a health clinic or hospital and time spent caring for under-5s suffering from diarrhoea or other sanitation-attributable diseases.
- US$ 191 million lost on health care. Costs associated with health seeking behaviour include consultation, medication, transport and in some cases hospitalization.

The marketing perspective: The market potential of Sanitation Program in a country like Nigeria does not seem to have been understood. Presently in Nigeria 50 million people (or 10 million households) defecate in open. If we assume a very conservative cost estimate

of a pit latrine with slab to be NGN 25,000, the total market potential for material and labour will be worth NGN 1.25 trillion. If up-grading of the existing latrines and construction of institutional toilets are taken into account, the figure will shoot up further. According to the World Bank estimates, the annual growth of global sanitation market will be from US$ 6 billion in 2007 to US$ 14 billion in 2020. This can create a huge potential for employment both in production and service.

B. Nigeria's lagging behind the milestones set by the National Water-Sanitation Policy, 2004

In spite of the efforts put in the past, sanitation coverage in Nigeria is still falling behind the expected targets. The country is yet to reach the various milestones envisaged by the Draft National Water-Sanitation Policy, 2004. As already mentioned, as per the Joint Monitoring Report (JMP) of WHO and UNICEF (2014), 23% of Nigeria's population were still defecating in the open and another 49% were using shared or traditional pit latrines in 2012 that were not considered improved by WHO. As per this report 39 million people were defecating in open. The latest data from NDHS (2013) put this figure at 50 million people or close to 10 million households. These figures do not include those who are sharing a latrine or using unimproved sanitary facilities like traditional pit latrines that are not considered as improved by WHO. If we add those using unimproved facilities, the figure goes up further. As per the JMP report, 31% of population in Nigeria were using improved latrines in 2012. This seems to have come down to 30% as per the results of NDHS 2013. However, the percentage of population defecating in the open has not reduced; instead, it has increased marginally from 22 in 2010 to 23 in 2011 and 2012, as per JMP but has gone up to 29% in 2013, as per the NDHS. This clearly indicates the challenges that the country is going to have to reach its goal to make it open-defecation-free.

It is pertinent to note that Nigeria has around 123,240 communities. Of this the triggering under CLTS has been carried out in 19,467 communities that work out to less than 16% (Annex: 1). Covering the remaining communities will be a big task. Of the communities implementing CLTS, around half have declared ODF. However of this only 34 % have been certified. This only shows the challenge that lies ahead in covering all communities and making the certification process more efficient and effective.

Another point that emerges from Annex – 1 is the inter-state variation in terms of the adoption of the CLTS approach and its impact. While States like Zamfara (44), Plateau (56), Gombe (42), Edo (75), Delta (65), Borno (95) and Bayelsa (92) and FCT (98) have less than 100 communities implementing CLTS, in States like Bauchi (2200), Benue (1607), Katsina (1595), Kano (1569), Osun (1500) and Cross-River (1461), where WASH programs had been initiated by UNICEF, Water Aid and other agencies with support from DfID, EU, UNILEVER etc., a large majority of communities have been approached.

A region-wide analysis of the progress of CLTS implementation, presented in Table -3, further brings out the status of CLTS in the six geo-political regions of the country. As may be seen from Table -3 the percentage of communities declaring ODF is highest in South-East (78%) followed by North-Central (65%) and North-East (57%).

The remaining three regions show lesser progress, in terms of communities declaring themselves as ODF. However, when it comes to the percentage of communities ultimately certified for ODF, the situation is somewhat different. Thus, North-East Region where only 30% of community reported ODF has the highest rate of certification (57%) where as South-East where 78% of communities reported ODF has the lowest certification rate (10%).

Table -3 Region-wise Progress of CLTS Implementation (As of July, 2014)

Region	Total No. of LGAs	N No.of Triggered Com.	No. of Com. Declared ODF	%	No. of Com. Certified	%
North-East	112	3486	1955	57	484	25
North-West	186	5706	2171	30	1237	57
North-Central	121	2806	1827	65	659	36
South-East	95	2310	1795	78	187	10
South-West	137	3118	1238	40	336	27
South-South	123	2041	742	36	373	50
National	774	19467	9728	50	3276	34

Source: Ministry of Water Resources, Abuja

C. Apprehensions on meeting the Open-Defecation-Free Nigeria by 2025 and SDG-6

Nigeria had a commitment to meet the MDG of 65% sanitation coverage (improved sanitation) by 2015. It is now a foregone conclusion that Nigeria will not be able to meet this target. At the present rate of progress, even reaching the goal of open-defecation-free Nigeria by 2025 seems to be a far cry unless there are drastic shifts in the approach and strategy pursued in the past. It is a fact that if Nigeria cannot achieve the open-defecation-free target now set by the UN by 2025, Africa will not be able to achieve the same since Nigeria is the most populous African Country accounting for nearly one-fifth of Africa's population. According UN, 82% of the 1.1 billion people practising open defecation live in 10 countries and Nigeria is one of them. The others are India, Indonesia, Pakistan, Ethiopia, Nepal, China, Sudan, Niger and Mozambique.

It is these compulsions that led the Federal Ministry of Water Resources to develop a road map for making Nigeria open-defecation-free by 2025 with the support of UNICEF.

D. Challenges ahead

If the objective is to make Nigeria open-defecation-free then the focus should be on those who are defecating in the open. This means even a traditional pit latrine should be acceptable although there would be room to climb up the Sanitation Ladder. Similarly, there should not be any open defecation in public places including schools, health centres etc. In this regard the definition of WHO on the use of sanitation facilities is worth examining.

Open defecation: It is a condition where human faeces are disposed of in fields, forests, open bodies of water, beaches or other open spaces or disposed with solid waste.

Unimproved sanitation facilities: These facilities do not ensure hygienic separation of human excreta from human contact. Unimproved facilities include pit latrines without a slab or platform (the traditional pit latrine), hanging latrines and bucket latrines.

Shared latrines: This refers to those sanitation facilities that are of an otherwise acceptable type but shared between two or more households. Only facilities that are not shared or not public are considered improved.

Improved: These facilities are likely to ensure hygienic separation of human excreta from human contact. They include the following facilities:

- Flush/pour flush to i) piped sewer system, ii) septic tank, and iii) pit latrine (this could be on-site and off-site)
- Ventilated Improved Pit Latrine (VIP)
- Pit latrine with slab
- Composting toilet

Based on the above definition, the target for 2025 would be to stop people from defecating in fields, forests, open bodies of water, beaches or other open spaces or disposed excreta with solid waste.

The Protocol for Certification and Verification of Open-defecation-free and Total Sanitation Communities in Nigeria also defines 'Open Defecation Free' status as follows.
'This (ODF) refers to when no faeces are openly exposed to the environment. Achieving ODF might involve the use of any form of latrines that prevent exposure of faeces to the environment with provision for moving up the Sanitation Ladder'

As per United Nations Population Projection, Nigeria is likely to have a population of 239.874 million by 2025 from the present level (2015) of 183.524 million. This means an addition of 56.350 million between 2015 and 2025. According to JMP Report (2015), 45.738 million people in Nigeria were defecating in the open. This means the target for the population that should have access to a toilet by 2025 would be 102.088 million (56.350 additional population plus those 45.738 million presently defecating in the open).

The fact that between 2010 and 2011, Nigeria created access to latrine for 2.3 million people and 4.03 million people respectively (thanks to the push given under the CLTS strategy) would only indicate how big the tasks are to make the country open-defecation-free. In addition, provision of latrine facility and its use has to be ensured in all schools, health centres, markets, motor parks, jetties and religious places. For all this it is essential to look at the strategy adopted so far, find the gaps and develop a well-thought out road map to facilitate the goal of making Nigeria open-defecation-free by 2025.

E. Lessons learnt from past efforts and problems associated with slow progress in sanitation coverage

In recent years Sanitation has received a very high priority among the Government Programmes. As mentioned earlier there has been no sitting back on the part of the Federal, State and Local Governments to push the Program. Besides there has now been more frequent reviews and Round Table Conferences to discuss about the issues related to planning and implementation of the Sanitation Programme and the CLTS strategy adopted. Several studies have been carried out by the Government, UNICEF, Water Aid and others to understand the various aspects of the problem. It may not be out of place to put down the issues as revealed from the recent major findings of these reviews/studies to understand the

factors that are likely to come on the path of making the country open-defecation-free by 2025.

- Inappropriate technology options to meet the needs of various geo-physical conditions like loose and collapsible soils, high ground water level, flooded area, rocky terrain etc.
- Lack of appropriate technology option to suit the preference of the people and their paying capacity
- Slow pace in moving up the Sanitation Ladder
- Lack of appropriate tools and methodologies for social mobilization, advocacy, demand generation and behaviour change
- Inadequate skilled facilitators for effective scaling up of CLTS
- Weak institutional arrangements and limited technical knowhow
- Non-availability of effective alternate delivery mechanism
- Low private sector participation in service delivery
- Low involvement of NGOs and CBOs
- Lack of understanding at all levels of the importance of sanitation and hygiene to public health, economy and protection of the environment
- Lack of harmonization across many policies, implementation guidelines and tools for sanitation management
- Low political and financial commitments
- Absence of a suitable credit mechanism at community level to support sanitation
- Inadequate follow up and monitoring by the LGA WASH Departments/ units due to irregular and inadequate financial supports from the LGA authorities and States
- Poor documentation and record keeping of CLTS outputs at the LGA and State levels
- Heterogeneous population groups in peri-urban and urban areas
- Lack of adequate space, particularly in peri-urban and urban areas and the land tenure ship for constructing household latrines
- Slow progress in promoting sanitation in schools, health centres market places etc.
- Lack of uniformity in the provision for subsidy at household level

SECTION IV: SUGGESTED ROAD MAP AND STRATEGIES

In order to address the problems raised above, a set of strategies with action points are suggested below.

Technology options to suit different geo-physical conditions: Nigeria's most expansive topographical region is that of the valleys of the Niger and Benue valleys which merge into each other and form a "Y" shaped confluence at Lokoja. http://en.wikipedia.org/wiki/Geography_of_Nigeria - cite_note-encarta-12 North to these valleys are plain lands. To the south-west of the Niger there is "rugged" highland and to the southeast of the Benue hills and mountains are found all the way to the border with Cameroon. Southwest and the southeast have coastal plains. The Niger delta that is located in the southern part of Nigeria is one of the world's largest fan-shaped river-delta. The riverine area of Niger delta is a coastal belt of swamps bordering the Atlantic Ocean.

With such diversity in the geo-physical conditions, it is absolutely essential to develop suitable latrine designs that would not only be cost-effective, environment-friendly and easy to construct but also would be acceptable to people. In areas with high ground water, the conventional pit latrine is going to contaminate ground water used for drinking and hence not advisable. Similarly in flood affected areas, latrine with raised platform will probably be more suitable. Areas with loose and collapsible soils, a protected wall with cement rings or even drums could be an alternative with provision for adequate seepage. Effect of climate change should be taken into consideration in the design of appropriate technology options for the different geo-physical conditions in the country.

In some areas communities have made attempts to address this issue with success by using local materials. But this is confined to a few communities. Efforts to bring further improvement on those local designs are too few and far between.

The design and cost of a household latrine will vary significantly in areas with high water table, area frequented with flood, rocky areas, hilly areas and areas with loose soil formation. Hence together with the design, the cost options should also be worked out. This will call for developing a range of latrine designs for different areas and also within a given area. Cases where the cost is likely to be very high even for a simple design attempts should be made to work out the funding modality.

UNICEF had sponsored a study on this subject and the outcome has been a range of technology options for household latrines to suit different geo-physical conditions along with the costs. However, this has to be put in a simplified chart for better understanding among the functionaries at State and LGA level and also the WASH team to be used during their follow up activities.

Action:

1. At national level a Technical Committee may be appointed to examine the options recommended for household latrines and suggests its adoption.
2. While dong so the affordability of the large majority of poor people may have to be taken into account besides the special needs of those physically challenged.
3. The committee may also develop designs for institutional latrines for schools, health centres, motor parks, market centres, jetties, religious places along with the bill of quantities and costs.
4. While doing so the innovations already carried out by communities and the designs already in use should be documented across the country and taken into account.
5. It is also expected of the Committee to suggest alternate options for superstructure for each design (s).
6. Experts from different regions and technical universities may be included in the Committee along with selected result-oriented implementers.
7. This should be done at the earliest preferably with in the first six month of 2015 so as not to lose time.
8. Once the designs are accepted, promotional materials pertaining to various options identified for a given geo-physical condition are developed for wider circulation.

Technology Options to suit household's preferences and paying capability:
Preference for a latrine design will depend upon the choice of household and at the same time the money that it could raise for the option so chosen. It can also be related to the social customs and beliefs prevalent in the community. This means even under a particular geo-physical conditions more than one option could be possible to meet people's preferences. Such option could be pertaining to the basic latrine unit (without superstructure) or a basic unit with different superstructure. It could be one unit per household or more than one to take care of the social customs, if any among the family members.

The socio-economic diversity of Nigeria is manifested in several ways. Nigeria is a heterogeneous country of more than 250 ethnic groups. Their social customs and beliefs are not always the same. As regards their economic status, although the per capita GDP of Nigeria in 2013 was estimated at US$ 3,010, there is wide disparity in income distribution among different population segments.

Data available from World Bank shows that in 2011, 70.2 % of people in Nigeria earned less than US$ 1 a day that is considered extreme poverty. Information from the same source

indicates that in 2010 the lowest 20% of the people accounted for only 4.41% of income where as the highest 20% took away with over 54% of income (Figure -3).

North-East, North-West and North-Central regions are relatively poor. Data available from the National Bureau of Statistics show that in 2007 the incidence of poverty in these three regions was 72.2%, 71.2% and 67.0% respectively; the country average being 54.4%. Similarly, the rural-urban differential in the incidence of poverty is also quite pronounced; 63% of rural people are below poverty level as compared to 43.2% among their urban counterpart. It is also noticed that presently agriculture, the main occupation in rural areas are looked after by the old as the young have migrated to urban areas in search of greener pasture. The literacy level of these people is low so also is their attitude towards life.

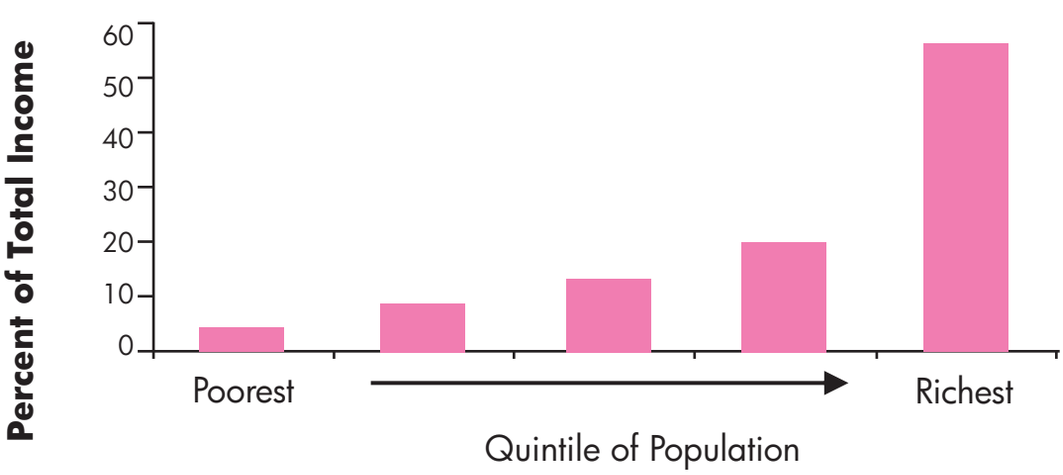
All these factors justify why there should be a range of latrine options to meet the demand from the people with diversified socio-economic characteristics.

In 2013 UNICEF had sponsored a Sanitation Marketing Study in six States, viz., Katsina, Benue, Jigawa, Cross River, Anambra and Osun. The purpose was to assess people's opinion on use of latrine with diverse socio-cultural, religious and economic conditions across the country. The findings of this study, presented below, are worth looking at for a better understanding of the issues.

- 85% of respondents were willing to stop open defecation and majority would like to construct a pit latrine with slab followed by water closet.
- 50% of respondents were willing to pay for improved sanitation.
- 73% of respondents were aware of other type of toilet facilities.
- Half of the respondents expressed their willingness to pay N2,000 to N5,000 for toilet construction.
- 63% were willing to use public toilets
- And most of them were willing to pay between N10 and N20 per use.

These findings do indicate that most people irrespective of their socio-economic status are inclined to stop open defecation. However their ability to pay differ.

Figure 3: Distribution of Income, Nigeria



Action:

1. Communication materials on latrine designs, as suggested by the Technical Committee, should be appropriately developed to give a household choice of various options.
2. Social customs and beliefs may vary significantly within a State. It will therefore be appropriate to use the local knowledge and build on those customs and beliefs.
3. In difficult areas where the cost of constructing a latrine may be beyond the capacity of a household, introducing appropriate credit mechanism may have to be thought of.
4. Public toilets should be encouraged only where space is a big problem like peri-urban and urban areas and market places and these should be pay and use type. In all other cases construction of household latrines should be encouraged depending on the willingness of the households, in terms of their preference and capacity to pay.

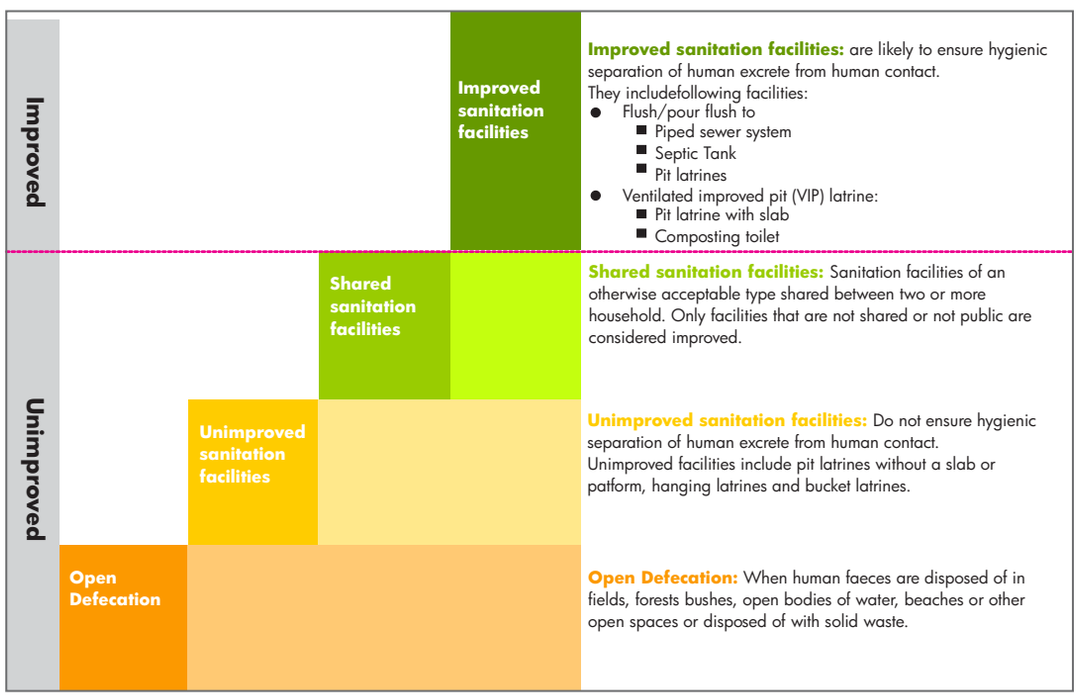
Sanitation Ladder: It is of common knowledge that at any given point of time, households will be using different types of latrine based on their choice and affordability. As the socio-economic status of a household increases and with that the life style, there will be, most likely, a shift in upgrading the existing latrine as it does for other household utilities.

The open-defecation-free condition implies the absence of any excreta in open. For this purpose even squatting on a whole and covering it amounts to an open-defecation-free condition. From that to a flush toilet connected to a septic tank or sewer, there could be a range of options for safe disposal of excreta that could be thought of. It is something like climbing a ladder from a low cost option to a high cost option (Figure -4).

The Sanitation Ladder helps people to identify options for improving sanitation in their community and realize that this can be a gradual process. Explaining the concept of Sanitation Ladder helps people to i) describe the community's sanitation situation, ii) identify options for improving sanitation and iii) discover that improvements can be made step by step. The idea that a community can progress up the ladder at different rates can be very appealing to the people.

Experience in many Asian countries has shown that sometimes ignorance of the people with regard to the pros and cons of having a particular latrine is responsible for households to delay the decision to upgrade their existing latrine or even construct a latrine. It is, therefore, essential that people are made conversant with how to upgrade their latrines in line with their socio-economic status and life style.

Figure 4: Moving up The Sanitation Ladder



It may not be uncommon to see people jump several steps in the Sanitation Ladder once they become aware of the different options. For example the KAP study on WASH sponsored by UNICEF, Nigeria in 2008 in FCT and six other States gives the following interesting findings on this issue.

- More than two-thirds of the households conveyed their willingness to pay for improvement of the sanitation facilities now available at home.
- In FCT, Kaduna and Kogi, although majority of the households were either defecating in the open or using the traditional pit latrines, they want to jump the ladder and would like go for pour flush latrine.
- This is different in Zamfara, Sokoto and Kebbi where only a small proportion of households wanted to opt for a pour flush latrine and preferred the Sanplat type.

It was not clear whether the study tried to find out the knowledge of the households interviewed on the features of different latrines and their cost. In its absence it could be presumed that imparting the latrine options available to the households of Zamfara, Sokoto and Kebbi probably could have influenced their preference. The same study shows that more than two-thirds of the households conveyed their willingness to pay for improvement of the sanitation facilities now available at home. It is here that the Sanitation Ladder concept comes handy. The Sanitation Ladder that shows how improvements can be made step by step will be very appealing to the community. Community members soon realize that progress could be made over time and at a pace that is appropriate to them.

On the perception of a good latrine, the same study found out privacy (50.5%), ability to prevent diseases (43.45%) and safety (33.8%) as the major responses from the households. How to link these opinion and perceptions in Sanitation Ladder so as to facilitate a conscious

decision by a household will be a challenge. The financing mechanism has also to be linked with it so that preference for a particular type of latrine is supported by ability to pay, either from one's own funds or through credit.

Action:

1. Before the concept of Sanitation Ladder is introduced to the community it would be essential to have information on:
   - Design principles of different sanitation options
   - The effectiveness of different options and the benefits
   - The use and maintenance of different options
   - The cost of different options
   - The durability and sustainability of different options
2. It will be necessary to have a very clear idea on where to get the materials and technical advice on the options so identified.
3. There should be one page showing all the options in a sequence and one page for each option depicting what is mentioned at items 1 and 2 above.

Pour-flush toilets using less water as a low cost option: As seen earlier, among the latrine users, majority are currently having the traditional pit latrine that is not considered as improved by WHO. Also many households want to start with a higher option. It is pertinent to note that cleaning and disposing off the raw excreta from a traditional pit latrine or a Sanplat latrine or even a VIP latrine is a major problem especially in peri-urban and urban areas. Absence of cess pit emptier and availability of a safe spot to off-load the raw excreta poses serious problem. Even in FCT area this is a problem.

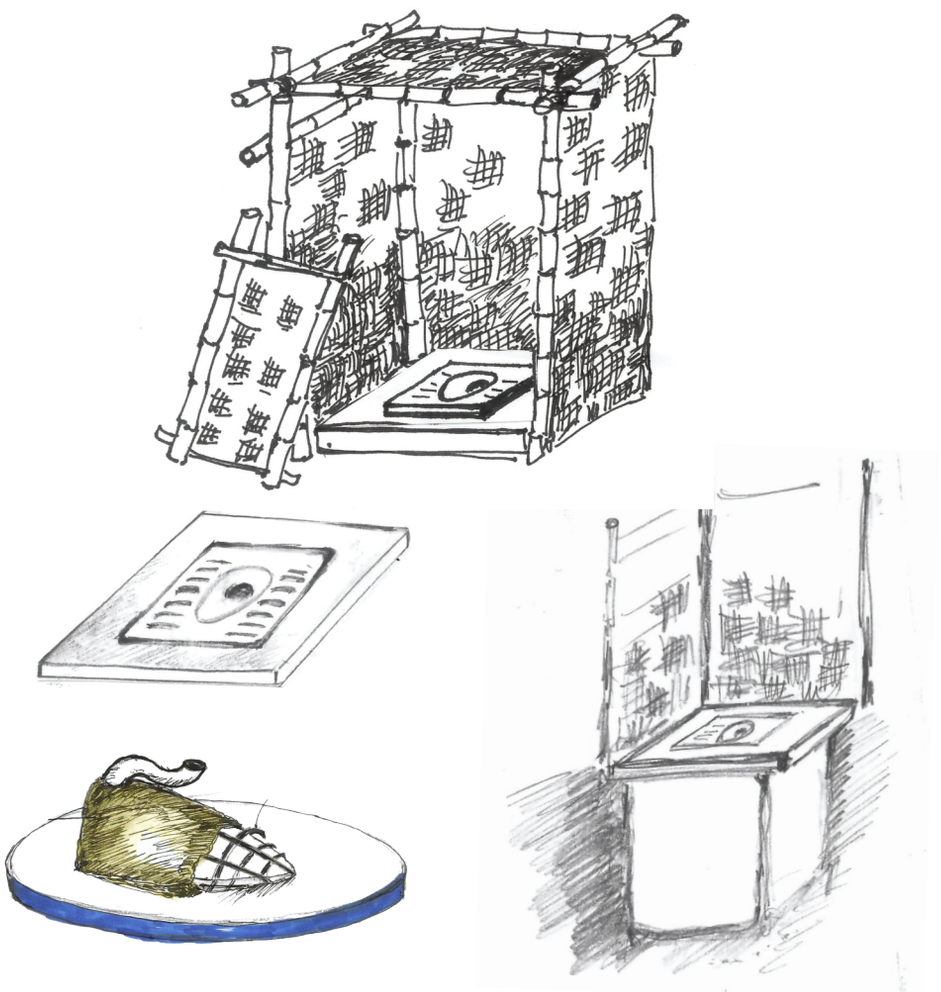
Results of the KAP study, referred to above, indicates while privacy is perceived as the most important factor for a good latrine (50.5%), factors like safety, prevention of disease, and cleanliness were also perceived as the characteristics of a good latrine. Since flush toilets are at the top of the Sanitation Ladder, it may appear very costly. But it is not always so. While flush latrines, linked to a sewer line or a conventional septic tank, could be quite costly, simple pour-flush latrines with a single pit (on-pit) or two pits (off-pit) to be used alternatively can be less costly than the VIP latrines. The problems of flies, mosquitoes and smell in simple pit latrines and even in Sanplat can be overcome simply and cheaply by the installation of a pan with water seal in the defecating hole. The pan is cleaned by pouring around two litres of water after each use. The flushing water need not be clean. If access to clean water is limited, laundry, bathing or any other similar water could be used.

These latrines are most appropriate for people who use water for anal cleaning and hence could be popular in Nigeria. These toilets also do not need any vent pipe since the gas produced in the pit easily percolates into the surrounding wall.

Pour flush latrine could be mainly of two types, one where the pan is fixed on the hole (Figure - 5) and another where the pits will be away from the pan. Called Off-site Dual Pit Four Flush Toilets, this type of latrines have two pits to be used alternatively (Figure – 6). The pits are generally of one meter deep and it takes four to five years for a family of 5 members to get it

filled up, enough time for the excreta to get free from pathogens and virus. In this way these latrines are very hygienic.

Figure – 5 Sketch of Single Pour-flush Latrine (Floor slab fitted with a water seal pan)



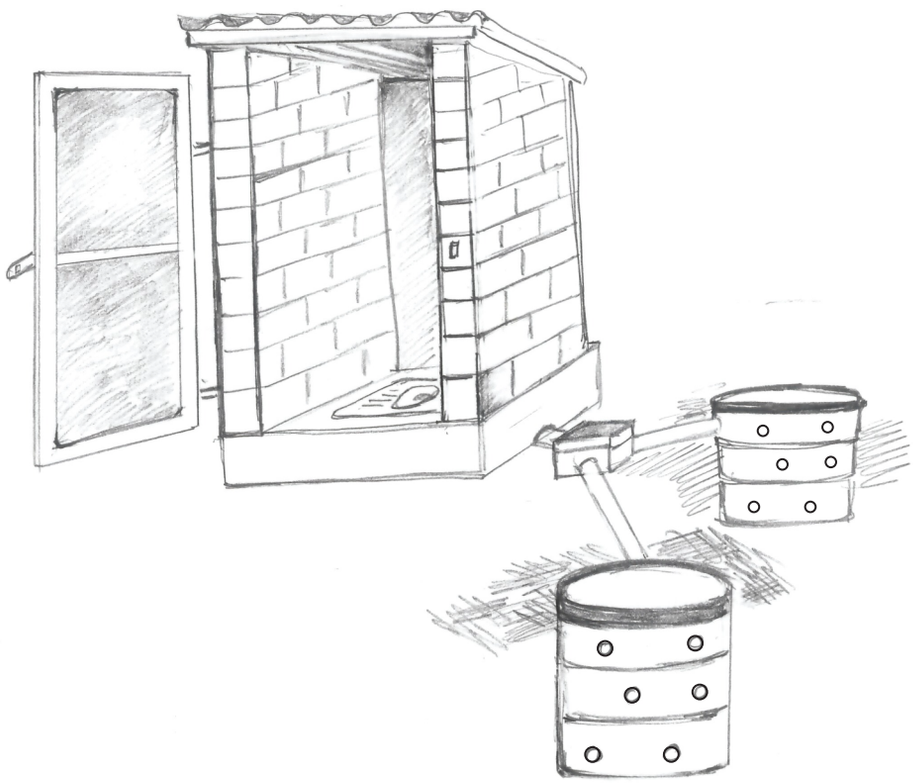
Features: The cheapest kind of sanitary toilet. No flies no odour. Pit need not be lined if the soil is form but if the soil is sandy and loose, then the pit will have to be lined with cement rings, or blocks.

Even in the case of one pit pour flush latrine, once the pit gets filled up it can be covered with soil to turn into compost; and the unit could be shifted to a new location to be brought back again to the same spot after cleaning the earlier pit that would not be hazardous to handle.

The platform could be rectangular or circular, although the latter is generally recommended. The pan could be cement, mosaic, and ceramic or fibre glass with a steeper slope and a 20 mm water seal needed to flush out the excreta with minimum water of one and half to two litres.

These latrines are extensively used in many Asian countries. While cement and mosaic pans are made in local production centres, ceramic and fibre glass ones are specially manufactured in selected factories. These are specially designed pans, different from the one normally available in the market.

Figure – 6 Sketch of a Dual Pit Off-Site Pour Flush Latrine



Features: The best choice for the price. Two pits which can be used alternately and the toilet will last a life time. No flies, no odour. Just pour one bucket of water after each use.

Action:

1. The Technical Committee proposed for developing latrine designs to suit different geo-physical conditions may be requested to examine this option.
2. Areas where people are using water for anal cleaning, single on-pit pour-flush latrines may be promoted with option to go for a dual pit later.
3. Suitable training of technical personnel and master masons should be organized on these new options.
4. Visits to other countries in Africa and outside Africa could be organized for exposure and also to learn how to make the cement and mosaic pans/cement rings for wall lining in community level production centres.
5. Depending on the demand, manufacturing of ceramic or fibre glass pan/trap could be encouraged in the concerned States/region for which technology could be borrowed from other countries.

Appropriate delivery mechanism and social marketing of sanitation: If the strategy to develop and promote a range of technology options to suit different geo-physical conditions and peoples' preferences is to be implemented, it is essential to strengthen the delivery system not only to provide the materials and services but also to provide the required technical guidance. In its absence households may either choose from a very limited option that may not be to their liking or may wait for better options available to them in future.

A study conducted by the Water and Sanitation Program (WSP) of World Bank in East Java in 2011 revealed that when CLTS ignited demand for improved sanitation, local markets failed to meet expectation of poorer consumers. This is particularly important where a large majority of people are poor. Findings from this study suggested that understanding consumer preferences and supply capacity of local markets are essential even before starting the triggering. Developing pro-poor marketing strategies and then using CLTS and BCC interventions generate demand have to be thought of. Considering the high poverty level in Nigeria the marketing strategy has to be pro-poor, if the goal is to make the country open-defecation-free by 2025 where every household has a sanitation facility that is not only acceptable but also affordable.

Experience from some of the Asian countries indicates that an effective delivery mechanism can contribute significantly to enhancing sanitation coverage. In Bangladesh the Rural Sanitation Centres (RSC), in India the Rural Sanitary Marts (RSM) and Production Centres and in Cambodia the Sanitation Marketing Scale Up (SMSU) project have been quite effective in ensuring appropriate delivery services.

In 1994 UNICEF Nigeria introduced the establishment of Sanitation Centres (named Sanicentres) to provide goods and services for construction of latrines and also better hygienic practices. A Sanicentre was supposed to be a one-stop retail outlet that dealt in construction materials for various types of latrine and also other materials for maintaining personal and domestic hygiene. In addition, it was expected to provide technical advice and also trained masons for construction of latrines in its area of operation, when needed. Storing hand pump spare parts was also added later.

In 1998 UNICEF carried out a study to assess the effectiveness of these centres. The results were rather disappointing as only 20% of these centres were found to be fully functional rendering all required goods and services where as 59% were involved only in production and sale of Sanplat. Based on this, some changes were made in the functioning of these centres. However, such changes did not look into some basic issues behind the performance or non-performance of these centres. In 2006 UNICEF sponsored a very comprehensive study in 14 States of the country that aimed at assessing how far the Sanicentres have met the expectations. Study results revealed that the percentage of fully functional centres providing full range of services was only 7.5%. More than one-third of them were non-functional.

A fully functional Sanicentre was providing the following goods and services.

- Production and sale of Sanplat
- Promotion of hygiene education
- Promoting sale of Sanplat and its installation
- Upgrading of traditional pit latrines

- Sale of ORS sachets and advice on control of diarrhoeal diseases
- Sale of household water security wares such as buckets fitted with taps
- Sale of broom, soap and other sanitary wares
- Sale of fast moving hand pump spare parts

According to this study, the management structure of these centres had a direct impact on their functionality. While 63% of these centres were managed by the community, 34% were owned by private entrepreneurs. NGOs were managing 8% of these centres; only 2% were managed by LGAs. The management structure also brings into fore the location of these centres. Centres owned by the community mostly through the WASHCOMs were within a community restricting their marketing area. Also, majority of the people working in Sanicentres, including the manager, were not full time people. Many of them were farmers while some were teachers, community health workers and artisans (masons, plumbers and fitters). None of them has any business acumen to run a centre of this type nor were paid any remuneration. Lack of proper financial management also contributed to the failure of these centres.

The study brought out the following additional factors that contributed to low level of success of the Sanicentres.

- Inadequate understanding of the Sanicentre concept
- Lack of commitment to sanitation program by State and Local Government
- Lack of coordination, monitoring and follow up
- No remuneration for Sanicentre managers/operators and other workers
- Inconsistency in the operational modalities with private operators

Both the studies mentioned above have not found anything wrong with the Sanicentre concept. Moreover, the demand for sanitary materials have increased manifold over the last few years with the introduction of CLTS and promoting the 'Total Sanitation' concept that has brought to the fore that sanitation goes beyond latrine construction and should include domestic and personal hygiene. Recently (December, 2013) UNICEF has undertaken a Market Research Study on Sanitation in 12 LGAs from 6 States viz., Katsina, Benue, Jigawa, Cross River, Anambra and Osun that represent diverse socio-cultural, religious and economic situations in the country. The main objective of this study was to have better understanding of community's sanitation needs and preferences, motivation for adoption of improved sanitation practices, supply chain for sanitation-related products and services and the policy and enabling environment for designing and promoting sanitation marketing approach in Nigeria. Major findings of the study are placed below.

Demand Side:

- 85% of respondents were willing to stop open defecation. Of them majority would like to construct pit latrine with slab followed by seated water closet
- 42% of respondents were willing to pay NGN2,000 to NGN5,000 for construction of their toilets
- 73% of respondents were aware of their types of sanitation facility
- 68% of respondents were willing to construct an improved latrine
- 53% of respondents hoped to use personal savings for construction of improved latrines while 35% would seek financial support from relatives of the same. Only 2%

of the respondents wanted to approach a bank for credit
- 90% of respondents would require the assistance of artisans to build their latrine
- 63% of respondents did not mind using a public latrine
- 92% were willing to pay for using public toilet and most of them (87%) were willing to pay NGN 10 to NGN 20 per use
- More than one-third of the respondents spent NGN 10,000 to NGN 15,000 to construct their latrine
- Basic materials used for construction were mainly supplied by the artisan who constructed the toilet; for some other materials they had to go to the nearby market.
- The three motivating factors influencing the decision to go for a latrine are privacy, safety and disease prevention (more or less same response observed in the KAP study conducted a few years back).

Supply Side:

- Most artisans were aware of various types of latrine such as pit latrine with slab, water closet manual flush and non-seated manual flush
- 44% of the artisans considered water closet/manual flush latrine connected to a septic tank or soak away system as the best latrine, followed by pit latrine with slab (30%).

Action:

1. The re-structured version of Sanicentres may be tried out to meet the demand for sanitary materials and services generated under CLTS.
2. If needed such centres may be renamed as Sanitary Mart (SM) or Sanitation Resource Centre (SRC) or Sanitation Promotion Centre (SPC) or Sanitary Hub (SH).
3. There should be one such centre in every LGA with a Mini Centre at WARD level depending upon the demand. The Mini Centres can also have a production unit to manufacture/sell materials for latrine construction, with the flexibility to carry out even in situ production of slabs, cement rings and other heavy products, so as to be close to the community.
4. Depending on demand the location of these centres can be changed from place to place.
5. The centre should be located at a place that satisfies the three basic principles of Central Place Theory viz., the marketing principle, the transportation principle and the administrative principle.
6. The centre should be run, primarily by private entrepreneurs, on commercial basis but with a social objective; the latter refers to social marketing.
7. The centre can implement the suggested modalities relating to sanitary activities (loosely called as models by a study conducted by UNICEF, Nigeria) such as the Private Artisan (PTA) Model and Public Toilet Operator (PTO) Model (includes Turnkey and Private Operator Model) besides undertaking emptying of excreta from pits/septic tanks.
8. The role of Government and international agencies can be that of a facilitator and not as a provider.
9. Such role could be in the form of orienting the centre manager/owner on basic

principles of social marketing, supporting training of at least 10 master masons per centre, providing the required IEC materials, facilitating bank credit, facilitating procurement of pan/trap from other countries and so on

10. The list of materials to be stocked in the centre should be expanded to include more number of sanitation and hygiene related materials so as to make the centre perform as a mini-sanitation-super market that could be sustainable (Annex -2)
11. Wide publicity should be given with regard to the establishment of these centres and their roles and responsibilities

The study suggests an effective supply chain to meet the demand created under CLTS that should include stocking, supplying and transportation of sanitation materials to communities. This could be a small business that should be promoted to support business of artisans involved in the construction of latrines. This study looked into both supply and demand aspects of sanitation and suggested some alternatives, loosely called as Models. These are, i) Private Toilet Artisan Model, Public Toilet Operator Model, Turnkey Model (build and operate) and Private Operator Model. Considering the potential market for sanitary materials, both for construction and hygiene promotion, and repair and maintenance of hand pumps, the potential for encouraging local entrepreneurs to establish Sanicentres would be a step in the right direction. In view of the fact that now LGA wide approach is adopted under CLTS, it will be appropriate to revisit the Sanicentres and see how the limitations noticed in their functionality could be overcome. Action:

1. The re-structured version of Sanicentres may be tried out to meet the demand for sanitary materials and services generated under CLTS.
2. If needed such centres may be renamed as Sanitary Mart (SM) or Sanitation Resource Centre (SRC) or Sanitation Promotion Centre (SPC) or Sanitary Hub (SH).
3. There should be one such centre in every LGA with a Mini Centre at WARD level depending upon the demand. The Mini Centres can also have a production unit to manufacture/sell materials for latrine construction, with the flexibility to carry out even in situ production of slabs, cement rings and other heavy products, so as to be close to the community.
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9. Such role could be in the form of orienting the centre manager/owner on basic principles of social marketing, supporting training of at least 10 master masons per

centre, providing the required IEC materials, facilitating bank credit, facilitating procurement of pan/trap from other countries and so on

10. The list of materials to be stocked in the centre should be expanded to include more number of sanitation and hygiene related materials so as to make the centre perform as a mini-sanitation-super market that could be sustainable (Annex -2)
11. Wide publicity should be given with regard to the establishment of these centres and their roles and responsibilities.

Refocusing the Triggering Process under CLTS: Presently, the triggering process, under CLTS, is initiated by a team composed of functionaries from the WASH Departments/ Units at LGA level with RUWASSA over viewing the operation. This is mostly happening in States and LGAs supported by external funding. In other States/LGAs functionaries of Health and Environment departments constitute the team for triggering. In States/LGAs with external funding, the team for triggering generally consists of 3-5 people from the WASH Department/Units who may have to visit each village/community a few times, after triggering, for follow up and monitoring. They take the help of the local leaders (traditional, religious and opinion leaders), WASHCOM (wherever exists) members, women and youth groups and Voluntary Hygiene Promoters (VHPs). The focus of CLTS is on the community through inter-personal contacts and not individuals. Nevertheless, preferences of individuals cannot be ignored. For example, the choice of community may not always be the choice of an individual. More over the triggering team is not starting their activity from scratch. In each village/community there would always be many people who are currently using a latrine.

As has been noticed, in Nigeria 71% of population are not defecating in the open. It is only the remaining 29% that should be the target to make the country open-defecation-free. This, of course, will vary from one community to another. Under CLTS it is presumed that these households are motivated through different methods including peer pressure to stop open defecation. Feedback from the field indicates that during the CLTS process these households tend to avoid the meeting so as to avoid embarrassment. For this reason it may look appropriate to develop a strategy that combines the merit of both community and individual approaches. This will call for bringing some changes in the triggering process currently adopted under CLTS without losing the basic CLTS principles.

It is proposed to name the CLTS drive as Community Contact Drive (CCD) and for this the CLTS team may be called Community Contact Team (CCT). These members need not be from WASH Department/Units alone. Functionaries from other departments at ward level and NGOs (wherever available) could also be involved. After all sanitation is not the responsibility of the Ministry of Water Resources alone. Other Ministries that have a stake in this program are Health, Education, Housing and Urban, Environment, Women Affairs and so on. Besides, in order to cover all communities in an LGA the staff currently available with the WASH Department/ Units will not be adequate, hence the need for a multi-disciplinary team. While triggering could be done by this multi-disciplinary team, the subsequent follow up could be done by the staff of WASH Department/ Units or others responsible for sanitation at LGA level. A Tentative one-day Program for the CCT is given in Annex – 3. A part of the task for the team is to meet individual households that do not have latrine and use a simple format, with a very few questions, to collect information. This will also give an opportunity to talk to the households (who may not have attended the community meeting)

on the issue of open defecation as already discussed in the community. In this process the CCT member can find out the reason why the household is not having a latrine and what are its future plans to have a latrine and use it, for making the community free from open defecation. In case it wants to have one, the type of latrine it may like to choose and the amount it is willing to invest can also be obtained and if not reasons.

Nigeria has 774 LGAs and 9522 Wards. Each ward has around 15-20 communities besides the ward headquarters which is generally a peri-urban or urban area. The rural population of a ward will be 15,000 to 20,000 with an estimated 3,000 to 4,000 households. In addition, there will be peri-urban or urban population.

Since LGA wide approach has now been initiated to implement CLTS, ideally, the number of CCTs should be in line with this number. Presently, in a typical ward, the following government functionaries from different departments are available and they could be engaged for the triggering with support from their respective departments at LGA level. If planned properly their support will be needed for a couple of days in a month only for triggering and this may probably be feasible without affecting their normal work.

WASH Department: *

1. Environmental Health Officer (EHO) – He or she has the overall responsibility of WASH in the ward and the supervising officer for those at 2-4)
2. Community Health Assistant
3. Environmental Health Technicians
4. Community Health Extension Worker (CHEO)

*Staffing pattern can vary among different States. Where only WASH units exist, none of the above staff may be available at ward level

Other Departments:

1. Agriculture Extension Worker
2. Education Supervisor
3. Community Development Officer
4. Staff of Primary Health Centre

Other Agencies:

1. National Orientation Agency
2. Association of Traditional Birth Attendants
3. Traditional Religious Institutions
4. Religious Groups
5. Community Development Association
6. Women and Youth Groups
7. Praise Singers
8. NGOs/CBOs

If some of the above-mentioned functionaries could be involved there is no reason why a CCT team of 7 persons could not be raised in each ward. This is big challenge but doable.

Presently, in some areas, the CLTS team visiting the community is expected to help in the formation of WASHCOM if the community has been provided with safe drinking water facility. It may be mentioned that forming a WASHCOM is a process oriented activity as it requires interaction with the communities to convince them about its utility, the process of its formation and management. It may be too much for the CLTS team to take this up without affecting their main functions. Moreover, WASHCOMs, to be more effective to influence the community, needs some time to settle down and demonstrate their ability, as an organization, to undertake community welfare activities in their respective fields. Such time gap should be given to these organizations so as to get the best out of them.

As it will not be possible to start the triggering process in the targeted villages/communities, simultaneously, it is necessary to take it up in phases. Besides the awareness and motivational level of the communities and the environment in which they live will vary from area to area. While some will require more intensified efforts, others may be easy to motivate. In this connection, findings of a study carried out by the WSP of World Bank, in East Java region of Indonesia, is worth mentioning. While analysing the factors associated with achievements of ODF, the study found the following factors deterring the ODF in a community.

- When located next to water bodies
- When located in remote swamp areas
- Very poor CLTS process (No CLTS tools used or a single tool used incorrectly, only the leaders or the latrine-less invited for triggering, facilitators exhorted everyone to build latrines)
- Low social capital (Leaders not trusted, conflict between hamlets/communities, lack of tradition for collective action)
- Community leaders did not buy into the idea of ODF communities and no- subsidy-approach
- Little or no post-triggering by outsiders or by the community itself
- Reluctance to accept low-cost dry-pit solutions
- Lack of community awareness of lower cost options for the smell-free, pour-flush systems that consumers prefer the most but often believe to be unaffordable

The same study has also brought out the factors that helped in communities achieving ODF within two months as follows.

- High social capital (Trusted leaders and pride in collective achievement)
- Triggering in response to demand for it from the community leaders
- High quality CLTS triggering
- No history of some households receiving external subsidy
- Access to information about affordable sanitation products/designs
- Access to latrine supplies at easier payment terms through bulk orders or instalments negotiated by community leaders
- Regular community monitoring of both behaviour change and construction with enforcement of sanctions against open defecation

It would be necessary to keep the above mentioned factors in mind while planning for the triggering process in villages/communities in phases. It will be advisable to prioritise villages/communities that are likely to achieve ODF within a short time and take those that are likely to require special attention a little later.

It may be borne in mind that longer is the time gap between triggering and ODF, less is the chance of that community reaching ODF in near future unless intensified efforts are made to get back the momentum lost. These communities will require more frequent monitoring to facilitate the community achieve the ODF status.

At community level, besides the teacher and PHC dispenser (wherever it exists), other government functionaries that are available and brought to fold of the CLTS process are as follows.

1. Traditional leaders
2. Religious leaders
3. WASHCOM members
4. Members of the School-based Management Committee
5. Traditional Healers
6. Traditional Birth Attendants
7. Voluntary Hygiene Promoters
8. School Teachers
9. Members of School Environmental Health Clubs

Their help would be extremely useful not only for organising the CCDs but also carrying out the required follow up for ODF community and its sustainability besides motivating the households to go up in the 'Sanitation Ladder'.

Action:

1. As a part of the triggering process, the Community Contact Drive (CCD) should be organized in the community as per the program suggested at Annex – 3.
2. The Community Contact Team (CCT) of 7 persons may be carefully chosen from among the functionaries (Government and non-government) at ward level to play the role of facilitators and trained to undertake the job.
3. The members of this team may be those included under CLTS, at present plus a couple additional members from other agencies.
4. If possible, there should be one CCT in every ward. This will call for massive organizational efforts in each state.
5. Help from other departments and agencies at ward level need be taken to make this happen.
6. It is advisable to take up the triggering in phased manner by carefully prioritising communities with different environment, both physical and social and also the sanitation coverage level.
7. Attempts should be made to get the community reach ODF as early as possible before the momentum created through triggering is lost.
8. WASHCOMs should be organised much before the visit of the CCT to make their role more effective in triggering.
9. The CCT is expected to establish rapport with local leaders (both traditional and opinion) teachers and students, member of the local youth and women organizations plus the preachers from the local churches and mosques and involve

them in the triggering process.

10. While the CCT along with WASHCOM and traditional leaders/preachers shall perform all the functions prescribed under CLTS and carried out at present, an additional task would be to contact every household not having a latrine at present and collect data on their present defecation practices, their preference and ability to pay for latrine and support needed (Refer Annex – 3).
11. Additional IEC materials in the form of an appeal to the different stakeholders such local leaders, teachers, women and youth organizations, preachers in Church/Mosque should be developed.
12. Besides the CLTS tools, the F-diagram and the life cycle of different worms (to be used for post- triggering activities), a chart (preferably in colour) showing the Sanitation Ladder and the tentative costs for different designs should be prepared

Need for developing relevant IEC materials and using appropriate mass media: In view of the low literacy level and the scattered nature of communities, the IEC strategy should focus more on inter personal contacts and more effective use of popular information channels. As per the KAP study conducted by UNICEF in eight states and the FCT, the four major popular communication channels are Radio (53.2%), Town Announcer (46.9%), Traditional Rulers (35.6%) and Churches/Mosques (23.9%). According to the Nigeria Demographic and Health Survey, 2013, more than 68% of households had a radio and 48% had a television at home. While under CLTS, traditional rulers and preachers of churches/mosques are involved, use of radio, television and the Town Announcer are not so much in vogue.

Presently for triggering the prescribed CLTS tools are being used. These materials are found to be useful in mapping of the community with identification of areas used for open defecation, water sources, location of human habitations etc., in carrying out the demonstration of how open excreta contaminates food that a person eats, etc. So far use of IEC material on technology options is grossly inadequate. There is no chart showing the 'Sanitation Ladder'. Also, showing the community charts on the transmission of different worms that is a major cause of mal-nutrition among children and adolescent girls will further enforce the hazards of open defecation.

Action:

1. LGA wide approach to CLTS will call for arranging at least double the number of all CLTS tools. As there are 9522 wards the required number of such tools (including those required for the training) will be at least 20,000 sets.
2. A similar number of charts will be needed on technology options, 'Sanitation Ladder' and life cycle of different worms.
3. Materials developed may be done at national level that can, at a later date, be translated into local languages keeping in mind the needs of different States so as to keep uniformity in the contents of the message
4. Wherever required, the States may be encouraged to adapt such materials to suit

their local areas, their local customs and beliefs.

5. A national workshop of selected writers of folk songs, story/skit writers may be organized to develop skits, songs, jingles etc., on the hazards of open defecation that can be used during triggering, in schools and TVs/ radios and also through theatre groups/praise singers.
6. TV spots of 15 to 30 seconds duration could be developed and aired through the national TV and other popular channels. Such spots can also be shown in cinema halls too. Help from popular sports/TV/Cinema personalities could be sought for this.
7. Use of other electronic media such as Face Book, Twitter, SMS etc. could also be used to generate awareness and discussion.
8. Hoardings/electronic boards at central places and places of people's congregation with relevant messages could be thought of.
9. For reinforcing the CCT activities mobile vans with an entertainment-cum-education package of say 45 minutes could be introduced.

Rural vs Semi-Urban and Urban Areas: As per the definition used by the National Water-Sanitation Policy 2004 (Draft), communities with a population less than 5,000 are called rural, where as those with population between 5,000 and 20,000 called semi-urban. Those with a population above 20,000 are categorized as urban. It is difficult to get the exact number of semi-urban and urban areas. Census data does not give the number of these centres but gives the semi-urban and urban population which is estimated at almost half of the total population. However, data from different sources indicate that Nigeria has over 43,000 semi-urban and urban centres of which 70 are cities with population over 100,000. Covering these areas is a big challenge.

CLTS is considered basically a rural strategy that presumes homogeneity of the population in a community. Since semi-urban and urban areas are considered heterogeneous there are apprehensions how far this strategy would be applicable effectively in an urban setting. In addition, availability of space and the tenure status of the households in semi-urban and urban areas pose a problem for enhancing sanitation coverage in these areas. In semi-urban and urban areas, it is the poor that is generally denied access to a latrine and these people generally live in urban slums where there is gross shortage of basic services. Most of the slum dwellers do not own land and generally encroach upon whatever little space available. This restricts the space needed to have separate latrine for the exclusive use of their family members. In its absence they either share latrine with their neighbours or go to a public toilet on payment. In the absence of both, they are forced to go for defecating in open.

A close look at the composition of these communities will indicate certain pattern relating to their choosing a particular slum. It is generally observed that either people of a particular ethnic group or a particular occupation tend to be together in a slum or peri-urban areas that generally come up around a city. A study on WASH challenges in six Peri-Urban areas (these are nothing but the urban outgrowths with all the characteristics of a slum) reveals that residents of each of these areas belonged to a particular ethnic group that make them a homogenous group in many respects. Some of them are also in one way or the other related to one another. Discussion with the authorities handling water supply indicates that the concept of community does exist there. In fact water supply in these areas are undertaken at

the request of the community that undertakes to maintain the water supply system. Also, for administrative purpose, an urban area is divided into certain wards with a population size almost comparable to that of a rural area. Moreover, in urban areas institutions like Church and Mosque are always available that could always be approached for help. Proximity to sanitary materials and technical knowledge are the greatest advantage in urban areas. Presently, since the focus has been on rural areas, CLTS in an urban setting may look difficult. But through careful planning and keeping the issues mentioned above, it should be possible to have the CLTS approach effectively even under urban settings and motivate the urban dwellers to stop open defecation.

Action:

1. Identification of slum areas and ward-wide homogeneity should be done in consultation with the officials of the urban local body and validated.
2. Once such identification is done, the CLTS process could be same as that adopted in rural areas.
3. Wherever space is a constraint, attempts should be made to go for shared latrines or public latrines.
4. The feasibility of giving the encroached land on lease may be explored as that could encourage the households currently staying on encroached land to build their own latrine. This will also facilitate getting bank credit when needed.
5. Wherever essential, sanction against open defecation could be revoked by the urban local body or the Environment Protection Agency.
6. Public toilet should be built purely on PPP mode and should be pay and use type.

Toilets in Public Places such as Market Centres, Motor Parks and Highways, Jetties, Religious places and Schools and Health Centres: An open-defecation-free Nigeria implies that there are no shits on both sides of a highway, around motor parks, market centres, religious places, jetties etc.. Similarly, provision of toilets in schools (separately for boys and girls) has to be ensured so that the children are not forced to use the open ground in the vicinity. This is also true for the health centres that are frequented by a number of visitors and they must have place to answer the urgent call of nature. In fact construction of school toilets can be a part of the School Sanitation Programme and providing similar facilities in health centres an integral part of the Primary Health Care Programme.

Nigeria has 70 cities with population over 100,000. While all the State headquarters (including the FCT) and LGAs are major market centres, there could be numerous weekly markets that exist in the country. Even on a very conservative estimate, each LGA will have a minimum of 3 to 4 such weekly markets.

In addition, Nigeria has over 36,000 Kms. of Federal Highways passing through the different States. On these roads several thousands of trucks ply every day and night. As these are generally long distance routes, often extending to more than one night, these are provided with one driver and two helpers. It is quite common to see them stop for the night in a motor park or at a roadside eatery to have their dinner, sleep and finish the morning rituals before commencing their trip further.

As majority of these places, although may have water supply, do not have adequate facility for sanitation, the drivers/helpers have no other option but to defecate in the nearby field. This means majority of the thousands of truck drivers/helpers defecate in open that belongs to some settlement. Hence if Nigeria is to become open-defecation-free, one cannot ignore this phenomenon. In fact having toilet facilities in a road side restaurant will itself attract more customers and that could be a selling point for the restaurant owner.

There may not be any problem for banks to finance this activity. Government may think of giving some incentive. The other strategy is not to give permission to open such restaurants and motor parks unless they agree to provide both water and sanitation facilities. Violation of this may attract penalties. It is expected that once these people (drivers and helpers) get used to using a toilet, they are more likely to have one in their houses. A similar situation also exists in market centres where it is not uncommon to see excreta all over the place.

The State Environmental Protection Agencies (the nomenclature used for these agencies varies in different States) that are currently responsible for sanitation in semi-urban and urban areas have constructed several toilet complexes in Motor Park and Main Market Centres on PPP mode. While earlier they had constructed VIP latrines, now they have shifted to flush latrines connected to a septic tank. It may be mentioned that once the flush latrines were introduced, there was no taker for the VIP latrines that shows the popularity of the flush latrines.

While currently the State Environmental Protection Agencies are generally investing in construction of the toilet complexes and handing these over to a private entrepreneur for maintenance, scope exists to ask the latter to go for the investment with government providing the space on long-term lease. A major problem faced by these agencies is lack of funds.

Action:

1. The States should undertake a quick survey of market towns, motor parks and highway eateries, religious places and jetties to find out availability of water and sanitation facilities there.
2. Discussions should be held with the Motor Park and Market Unions to explore the possibility of their undertaking the establishment of community toilets on pay and use basis.
3. The Education and Health Department may carry out a facility survey of schools and PHCs respectively to assess the water and sanitation facilities and draw of a time-bound programme to provide these facilities.
4. It expected that the religious places that do not have toilets will construct one with proper advocacy without any external financial support. This also applies to the agencies owning and operating jetties.
5. Wherever required the proposed Sanitary Mart/SRC/SH may be asked to undertake this activity on a turn- key basis.
6. Providing water and sanitation facilities may be made mandatory for highway eateries, wherever available.
7. Suitable toilet designs may be developed for these toilets, based on the expected

number of daily users.

8. The feasibility of bio-gas plants attached to these toilets could be explored so that the power generated could be used for providing lights to these centres and also generate some revenue by selling the compost generated from the plant.
9. If persuasion with the Motor Park and Market Unions fail, SEPA may resort to imposing penalties. Acton like this has reportedly worked in some areas but may be taken as the last resort

Training of personnel: Implementation of the road map suggested above will call for large number of trained manpower. The two broad types of manpower needed will be related to the technologies proposed for sanitary facilities and for social mobilization to make the community open-defecation-free. As already mentioned there should be at least one CCT in each of the 9522 LGAs to carry out the CLTS strategy with some modification. On the assumption that there should be 7 persons in each team, the number of CCT members to be trained would be 66,654 and keeping in mind a drop our rate of 10%, the number would be a staggering 73,000 plus. Besides, village level functionaries need also to be oriented. Adoption of the different technology options to suit different geo-physical conditions and preferences of the people will call for training of technical personnel and master masons.

Presently, resource persons are available on CLTS approach at national level. In donor funded States trainers are also available for community triggering under CLTS and monitoring. While these persons are exposed to the technology options hither to propagated, there will be a need to also expose them to the new technologies that may come up from the study on technology options to suit different geo-physical conditions and preferences of the people. Similarly, the managers of the proposed Sanicentres/SM/SRC/SH need to be trained on social marketing. Besides, the key personnel in State and LGAs have to be exposed to the road map proposed here that will help to take them along in planning and implementation of state-specific road maps.

Presently the institutional infrastructure for training on WASH in the country does not seem to be adequate. At State level it is still weak. This needs to be addressed since the proposed road map will call for massive human resources development in different themes and at various levels. Availability of the present number of resource persons both at national and State level is grossly inadequate to meet the challenge.

Action:

1. In each State and in the FCT there should be a one-day workshop of all the key persons of the concerned departments from State and LGAs under the State such as Water Resources, Health, Environment, Education, Housing and Urban, Women Affairs etc. and also selected NGOs to expose them to the proposed road map and seek their support. This could be considered as a kick-off for the campaign towards making the LGAs and the State open-defecation-free.
2. The National Water Resource Institute (NWRI) should be strengthened to take on the responsibility of training National and State level resource persons both on technology and the CLTS Approach (includes organizing the CCD).
3. The Hands-on training on technology options could be of five days duration while Hands-on CLTS training should be for a minimum duration of five days to allow for practical demonstration of triggering processes.
4. Once a group of resource persons is available at State/FCT level, the next course of action will be to create another group of trainers at LGA level that will ultimately be responsible for the triggering process and follow up activities.
5. State Government should provide adequate funds for these training that will be crucial for the successful implementation of the road map.
6. It will be useful to organize exchange visits with other countries (could be Africa or South Asia) to see the new technologies adopted there. Exposure to pour flush latrines (both single pit squatting plate and two pit off-site pour flush that are very popular in South Asian countries) will be very useful.

Administrative Back Up and Coordination Mechanism: Promoting sanitation should not be considered as the responsibility of one ministry and that is the Ministry of Water Resources. Concerted efforts of various ministries are required for this purpose with the Ministry of Water Resources taking the lead. As mentioned earlier, at national level, the Water-Sanitation Policy (2004) is still in draft form and yet to be approved by the Federal Executive Council. However, setting up of a Task Group for Sanitation (called NTGS) has been a step in the right direction so far as inter-ministerial coordination is concerned. NTGS is also the highest technical group to provide technical guidance to the States on matters relating to sanitation. It is reported that now States and LGAs have also similar groups to facilitate the required coordination among different Ministries/Departments and also play an important role in the ODF certification process.

Of the 36 States and FCT, only a few States have their WASH Policy duly approved by the State Executive Council. As regards establishment of an independent Water and Sanitation Agency under Law, not all states are reportedly having these units that are called RUWASSA (Rural Water Supply and Sanitation Agency). While in some States a WASH Department has been created at LGA level in many other States/LGAs have WASH Units with a minimum complement of staff.

It must be appreciated that availability of a nodal point with the required staff support is extremely essential for promoting sanitation that is highly process oriented and staff intensive.

Action:

1. The NTGS should facilitate harmonization of existing sanitation policies to provide effective framework for scaling up sanitation delivery towards achieving open defecation country.
2. States that still do not have a WASH Policy may be pursued to get it on board. Those who had such policy quite some time back, it may probably be necessary to have a second look at the provisions envisaged so that it reflects the change in the approach to sanitation under CLTS.
3. States that still do not have RUWASSA should be encouraged to have this agency on board with the required minimum staff and budget.
4. In view of the fact that CLTS is highly staff intensive and requires close follow up, establishment of WASH Department at LGA level is essential.
5. The States and LGAs should make adequate budget provision for the staff in terms of salary, allowance, travel etc., to motivate the staff and make them effective in their role.
6. Instead of setting aside a lump sum amount for the States/LGAs and giving them the option to allocate for different programs, it will be useful for the Federal Government to earmark the amount that should be used exclusively for sanitation. Besides, the States/LGAs should make it mandatory to set aside certain funds for sanitation to attract corresponding amount from the centre.
7. The NTGS may be strengthened so as to make it a decision making body even for matters other than technical. This will make the inter-ministerial coordination more effective.
8. A suitable coordination mechanism between WASHCOM, LTGS, STGS and NTGS may be developed purely for sharing of information and technical guidance.

Certification for open-defecation-free-communities and beyond: The Federal Government has laid down certain protocol to certify an open-defecation free community. Such protocol is in vogue in all countries over the world although the modalities differ. The NTGS has played an important role in developing this protocol. Under this the following processes have been laid down.

1. The triggered community declares ODF status either through WASHCOMs (where it exists) or through NGO responsible for implementing CLTS (if exists) or by the community itself to the WASH Department/Unit of their area or the appropriate agency (where there is no WASH Department/unit) at LGA level.
2. The LGA WASH Department/Unit or the appropriate agency makes an visit to the community to verify the ODF claim as per the guidelines prescribed in the protocol.
3. The WASH Department/Unit or the appropriate agency inform the RUWASSA or the designated agency at State level (where RUWASSA does not exist) along with the detailed information on communities verified by LGA
4. On receipt of the information, RUWASSA conducts further verification in conjunction with the WASH Department/Unit or the appropriate agency to assess the ODF status. At this stage RUWASSA does random checks of about 20% of all communities verified at LGA level.

5. If the outcome of the visit is consistent with earlier one, a team consisting of the members of the State Task Group on Sanitation conducts another round of un-announced visit to certify the status.
6. Based on the outcome of this visit the Task Group recommends to the LGA and the State to declare the community open-defecation-free.
7. The community is, then, officially declared ODF with certificates presented to the communities at a formal function to be attended by the community members, state government functionaries, representatives of the LGA, NGO and development partners.

The following diagram depicts the entire process involved for citifying an open-defecation-free community

As per the former protocol, no official certification can be made unless ODF has been sustain for 6 months. This has been reduced to about 100 days in the revised protocol.

Countries differ on the requirements of the time to declare a community open-defecation-free. Such time varies between 1 to 6 months. For example in Sierra Leone ODF status is conferred after a community has been ODF for at least three months. Some countries require two separate visits from Government authorities to verify ODF status. In Kenya independent bodies carry out the verification of ODF status. In Somalia a secondary action plan is prepared on how to maintain the ODF status in future and the community takes a pledge at the time of certification to maintain the ODF status. In some countries a plaque is erected in the village as a reminder to the community on their commitment. In India, a certified Gram Panchayat (a group of villages) is given a certificate along with cash in a glittering ceremony at the national capital, mostly by the Indian President.

A review of the CLTS by UNICEF ESARO and WCARO indicates that the critical factors for sustainability are very much related to a good programming design. The two key determinants identified were post triggering visits and monitoring as well as the quality of facilitation.

Action:

1. The monitoring and follow up teams at LGA and State level should be strengthened to be able to reduce the delays in the certification process.
2. Adequate funds and required logistic support should be made available for these teams to carry out their tasks timely and effectively.
3. The feasibility of reducing the time lag for official certification of ODF communities from 6 months to 3 months may be examined.
4. Raising the number of certification teams by splitting the STGS team without losing their representation may be thought of. This is already in vogue in some States.
5. The CLTS interventions should be well integrated into government programming so that the community level functionaries like the health workers, school teachers, etc. do not consider follow up and monitoring as an additional responsibility outside their normal work. And ask for compensation that may not be sustainable.

SECTION V: PHASING FOR IMPLEMENTING THE ROAD MAP

If Nigeria has to be open-defecation-free by 2025, 102 million additional people have to have access to a latrine between 2015 and 2025. This is based on the annual projected population growth rate (3.2%) of the Population Commission between 2009 and 2017. This may look a bit high considering the fact that the growth of population may not be at the same rate during the next decade because of the possible changes in the country's demographic parameters. However, in the absence of any other figures it will be appropriate to adopt the same growth rate for future projection. Moreover, planning for a higher target is always better than underestimating the tasks ahead. The ensuing 2016 Census will validate how close or far we are from the projected growth. At that point of time it is always possible to revise the anticipated population. For these reasons a target of 102 million has been used for the present analysis.
An attempt has been made to present a tentative time plan for making Nigeria open-defecation-free by 2025.

The Year 2016-2017 (State of preparedness and a period of transition):

As would have been noticed, the road map suggested in the preceding sections will call for massive preparatory work in a number of areas. This does not mean that no implementation work will be done during this year. Whatever has been happening at present should continue so that the momentum is not lost. Simultaneously, attempts should be made to undertake all that preparatory work needed for the implementation of the proposed road map. In this regard the following major activities are suggested.

1. Sensitizing the policy makers at the highest level at National and State level
2. Sensitizing the LGA council members
3. Flagging off the open-defecation-free campaign at National, State and LGA level by senior government officials and political leaders such as President, Governors and Local Government Chairmen.
4. Harmonization of existing sanitation policies.
5. For those States that have not yet prepared any WASH Policy it is time to do so with adequate focus on sanitation.
6. For those States where the WASH Policy is at a draft stage, it is high time to give a second look at the required changes relating to sanitation and get it approved.
7. Even in States where an approved WASH Policy exists, it may be prudent to see how far this is adequate to take on the challenge now conceived.
8. States that do not have RUWASSA should have one without any further delay along

with the required staff in position.

9. Establishment of WASH Departments in all LGAs with the required staff in position needs attention.
10. Attempts should be made to create a separate budget line at National, State and LGA level for sanitation.
11. Adequate budgetary support should be ensured for proper functioning of RUWASSA and WASH Departments/ Units.
12. Identification of technology options to suit different geo-physical conditions and people's preference along with cost should be prepared for each State.
13. This should be followed by preparing the 'Sanitation Ladder' to suit different areas and people's preferences.
14. Quick survey of schools/health centres to find out the availability and use of latrine facilities by each State and advocacy with the Education and Health Departments to create a separate budget line for sanitation
15. Quick survey of market centres, motor park and wayside eateries by each State to find out the availability of sanitation facility, identify those requiring the facility, hold dialogue with Market Centre and Motor Park Unions and owners of the wayside restaurants on Federal Highways on preparing a time plan for creating the facility by them. Same action is needed for religious institutions and jetties.
16. Equip the National Water Resources Institute (NWRI) with staff and materials to be able to train master trainers on technology options and organizing CCDs to implement the CLTS Approach. There should be at least three persons per State for both.
17. Identification of centres like the School of Health Technology in each State where training of functionaries could be undertaken and equip them with the required materials and audio-visual aids
18. Develop and print sufficient quantities of IEC materials. Wherever needed, these materials should be translated in local dialect?
19. Prepare Appeal Letter for Political Leaders/Traditional/Religious Leaders/ Teachers/Women and Youth Club Office bearers/Preachers of church and mosque and so on.
20. Identify market centres that satisfy the three principles (marketing, administrative and transportation) of 'Central Place Theory' to locate the proposed Sanicentres/Sanitation Resource Centre/Sanitary Mart/Sanitary Hub.
21. Identify and motivate a local entrepreneur who has the experience and willing to open the above centre and train him on social marketing; provide information on the source of materials not available in the country and how to procure it, share the required IEC materials and train at least 10 to 15 masons so as to have at least one mason in each ward. These masons are to be attached with the centre and work under its guidance

It is not necessary that the CLTS Approach is implemented simultaneously in all LGAs as this will require massive staff and organizational support. Moreover, due to the efforts already made in the past, different LGAs may have different level of coverage. It is necessary to assess that and give priority to those that are already at a very advanced stage in achieving the ODF status since that will bring confidence to the functionaries and also encourage other LGAs to follow suit. As already seen, as per the MICS, some States like Abia, Lagos, Akwa Ibom, Kano, Kaduna and Zamfara have only less than 10% of households defecating in

open. It is possible that this 10% may be the hard core people who require more intensified motivational efforts or are just confined to a few LGAs and have not been contacted. It will be useful to undertake a very quick assessment of the communities in these LGAs that still defecate in the open and focus on them. A similar analysis should also be undertaken in other States where the percentage of households defecating in open is high. This will facilitate proper phasing of the CCDs. In these two years the States should in a position to prioritise their focus on different LGAs in a phased manner and the LGAs on different wards.

2018 (Assessment):

Each State should assess how far they have been able to achieve the State of Preparedness proposed for 2015 and implementation of the road map during the first two years viz. 2016 and 2017. This should be done by an independent agency and cover both institutional and organisational status pertaining to the implementation of the road map and gaps, besides understanding the field problems in interacting with the community. This will help the States to find out ways and means on how to overcome the deficiencies to achieve the desired objective.

2019-2021 (Years of consolidation and moving forward):

This will be the most crucial period in the path towards open-defecation-free status and the States should go all out to speed up the implementation process since now they have crossed the period of State of preparedness, have prioritized the areas of intervention and know where the shoe pinches.

2022 (A Year of self-assessment):

Without losing the momentum it is time for the States to sit back and see the loose ends that need to be tightened before making a final assault on the goal of making the State pen-defecation-free. This could be done in-house.

2023 & 2025 (The final assault):

Maximum acceleration will take place during this phase. By this time many LGAs in the State and even some States would have already achieved the ODF status and the experience gained in the past will help the States to reach the summit of zero open defecation. Here it may be mentioned that looking at the certification process attempts should be made to ensure that all the remaining communities have declared their ODF status by the first half of 2025 so as to be able to pass through the certification process successfully before the year ends.

Breakdown of Targets

The targets set aside for the periods mentioned above could be as follows.

2016-2017:	4.3 million population/year	(8.6 million population in 2 years)
2018:	4.3 million population/year	(4.3 million population)
2019-2021:	8.6 million population/year	(26 million population in 3 years)
2022:	8.6 million population/year	(8.6 million population)
2023-2025:	21.6 million population/year*	(54.588 million in 2 & half years)

*Only 11.588 million population to be covered in 2025

SECTION VI: ENABLING ENVIRONMENT TO SUPPORT ELIMINATION OF OPEN DEFECATION

A smooth implementation of the road map/strategy and the corresponding activities will call for a supportive environment not only at national level but also at State and LGA level. In its absence, there would be either difficulty in achieving the desired goal or the goal may not be achieved at all. Based on the experience gathered from different countries in the implementation of development programs in general and sanitation in particular, a set of major environmental factors has been identified as follows.

1. Political will
2. A supportive legal framework
3. Policy on Sanitation
4. A long-term vision with an investment plan
5. Need based budgeting
6. A well defined organizational structure
7. Proper programming and investment plan
8. A robust review and monitoring system
9. Effective coordination among stake holders
10. A strong network of CSO/NGO and CBO
11. A responsive private sector

It will not be out of place to look at these factors from the point of their applicability to the situation in Nigeria and examine the efforts that would be required to create and sustain the same (Table - 4).

Table - 4 Enabling factors influencing smooth implementation of Road Map/Strategy

Enabling Factor	Present status	What needs to be done
1. Political Will	Although political will exists to make Nigeria open-defecation-free at national level, there is not much of its evidence on ground	Advocacy at the highest level to bring sanitation as part of the political agenda through sensitizing exercises at National, State and LGA level
2. Legal Framework	The Legal Framework currently existing relates to enforcement of certain provisions of environment protection law only. This has been used by SEPA in some States	Enforcement of the provisions of environmental protection law in semi-urban and urban areas of all States and LGAs through SEPA or the relevant agency (s) will reduce open-defecation-free activities
2. Legal Framework	The Legal Framework currently existing relates to enforcement of certain provisions of environment protection law only. This has been used by SEPA in some States	Enforcement of the provisions of environmental protection law in semi-urban and urban areas of all States and LGAs through SEPA or the relevant agency (s) will reduce open-defecation-free activities
	Access to sanitation is yet to be recognized as a human right issue	Evidence-based advocacy linking sanitation with drinking water would help
3. Policy on Sanitation	The National Water and Sanitation Policy 2000 focussed more on water than on sanitation.	Advocacy with policy makers. In view of the present resolve of the Government to make the country open-defecation-free, it may be easy to convince the policy makers on the need harmonized sanitation policy.
	The 'Water-Sanitation' Policy with focus on sanitation was formulated in 2004 but yet to be approved by the Federal Executive Council.	
	One of the major reasons for delay in getting it approved is lack of harmonization among the different departments having a stake in the program	NTGS can play a major role in bringing the harmony needed among various departments

	As a follow up to the Water-Sanitation Policy, 2004, implementation guidelines were also prepared but in the absence of the approval to the 2004 policy these guidelines are not officially released. Nevertheless the spirit of the Policy and its guidelines are seen in planning and implementation.	Pending the approval of the policy and the implementation guidelines associated with it, it may be worthwhile to issue stand-alone guidelines by FMWR as the nodal agency for sanitation
	Not all States have an approved Policy for WASH. In a few others it is in a draft form. Still in majority of States no attempt has been made so far to formulate WASH Policy.	Advocacy at the highest political level needed. The present process of preparing road map for States to make the Sate open-defecation-free by 2025 gives an opportunity for such advocacy
4. Long-term vision with an Investment Plan	As a prelude to the International Year of Sanitation (2008) and the nation's commitment to achieve the MDG, the FMWR had prepared a long term plan with an indicative investment in 2007 for the period up to 2015. No follow up to this plan. No such plan available for States.	The Road Map developed now will be the document to be used for the period up to 2025.
	The draft National Water-Sanitation Policy 2004 had a vision to make Nigeria open-defecation-free by 2025. There was no attempt to prepare an indicative budget.	The Road Map prepared now can be the basis for preparing an indicative budget both at national and State level. This could be tried out once the road maps along with the activity are finalized.
	The present effort to develop a roadmap for making Nigeria open-defecation-free by 2025 is a step in the right direction. The states and the FCT are also expected to follow the same line.	Based on the template for the Road Map to be prepared for States, the latter are supposed to prepare their own road maps and activity plan along with an indicative budget.

5. Need-based Budgeting	This is a weak link in the system particularly at State and LGA level. At national level, funds are released to States as lump sum with States to utilize it wherever they want. Same is the situation at LGA level.	Advocacy at national level, especially with the National Planning Commission, to provide sector-wide allocation to States and LGAs will help
6. Awell-defined Organizational Structure	While this exists, to a great extent, at national level, the same cannot be said at State and LGA level as many States do not have an agency like RUWASSA at State level nor a WASH Department at LGA level	Advocacy with States where neither RUWASAA nor WASH Department exist is necessary. Implementation of the strategy for making Nigeria open-defecation-free could be a selling point.
	Even where these organizations exist, staff and fund shortage affect their effectiveness adversely. Late release of funds is also a factor in this regard	Advocate for a review of budget process for the sector and highlight the consequences of insufficient and late release of funds. The present resolve to make the country open-defecation-free could be a
7. Proper programming and investment plan	This is very much in vogue for donor funded projects at national, state and LGA level but not so for non-donor-funded areas.	Once sufficient funds are available, it would be possible to adopt programming similar to that used for donor funded projects
	Uncertainty in the availability of funds and lack of proper guidelines responsible for lack of proper programming and investment plan	Same as above
	Promoting household sanitation in semi-urban and urban areas seems to be no body's responsibility although SEPA in some states is active in providing sanitary facilities in market centres and motor parks on PPP mode.	Planning for household sanitation in semi-urban and urban areas has to be a part of the Sanitation Programme since 15% of the population in these areas still defecate in the open and this remained unchanged over the past three years. Similarly, a comprehensive planning to provide sanitary facilities in all market centres, motor parks and highway eateries will have to be taken up

8. A Robust Review and Monitoring System	The review and monitoring system exists at National, State and LGA level. The NTGS at National level, the STGS at State level and a similar forum at LGA level do monitor the progress.	The NTGS is mainly a technical advisory body providing very useful services to the program. For a more effective coordination among the participating stakeholders, particularly with regard to cost sharing, staff support etc., this could be further strengthened to have also those representatives who can take decision on behalf of their respective departments.
	The progress monitored is mostly input and output oriented and not outcome oriented.	Focus should be on outcome for which indictors may be developed and built into the programme itself
	Data-base available relates to mostly projects or activity (limited) specific. For example, no data is available to know the percentage of sanitation coverage although data on triggered, ODF and certified communities are collected regularly.	Data base on critical parameters should be strengthened. This should start at community level and aggregated at LGA and then at State level.
9. Effective Coordination among Stake Holders	This appears to be somewhat happening at national level and in selected States as well.	Better coordination will be forthcoming once the WASH policies are in place and the required institutions such as RUWASSA and WASH Departments established in all States
	There is no mechanism for coordinated and transparent expenditure and reporting nor responsibility sharing	Same as above
	Weak communication and poorly mobilized stakeholders	This could be done in several ways: i) more frequent meeting of the inter-ministerial and inter-agency groups at all levels, ii) organizing joint training programme involving all stake holders, iii) making joint field visits for monitoring activities, iv) sharing communication materials and v) developing common IEC materials reflecting everybody's interest.

10. A strong network of CSO/NGOs and CBOs	In adequate capacity of civil societies to bring sanitation to the Government's social development agenda	Professional competence and ability of the CSOs/NGOs/CBOs should be strengthened by regular training and sharing of IEC materials and sharing of evidences that can be used for advocacy
	Weak professional and managerial capability of these agencies	Same as above
	Lack of coordination and information sharing among NGOs and CBOs	A forum of these agencies at National/State and LGA level could be formed for breaking the communication gap by exchanging information of common interest
11. Responsive Private Sector	Lack of understanding and appreciation on the part of private sector to see sanitation marketing as a profitable activity	Information sharing and confidence building is needed to break the deadlock
	Absence of sanitation marketing strategy and R&D focus for rural sanitation in the sanitation program	There is an urgent need for developing a marketing strategy that clearly defines the supply chain and services and the role of the private sector to be partner to that. In every programme/project, a certain amount should be earmarked for research.

SECTION VII: MAJOR ROLES AND RESPONSIBILITIES OF KEY STAKEHOLDERS

The success of making Nigeria open-defecation-free depends upon the involvement and cooperation of several ministries at National, State and LGA level and other stakeholders. Some of the major roles to be performed in this regard are place below.

A. National level:

Federal Ministry of Water Resources:
It will continue to be the nodal Ministry for WASH that also includes planning and implementation of the strategy for an open-defecation-free Nigeria. In addition, it will have the following specific responsibility.

- Facilitate the harmonization of Sanitation policy with active participation of all relevant stakeholders.
- Advocate at the highest political level to get its patronage for the goal of making Nigeria Open-defecation-free by 2025, if not earlier.
- Advocate with the Federal Ministry of Finance and the National Planning Commission to provide adequate and a separate budget line for sanitation at National, State and LGA level.
- Take steps to strengthen the NTGS to vest it with decision making powers.
- Strengthen the NWRI with the required resources, in terms of manpower and finance to facilitate the role expected of this institute to take on the responsibility entrusted.
- Strengthen the existing data base for more effective monitoring of the proposed road map.
- Act as a catalyst and facilitator for the States/FCT/LGAs in the implementation of the proposed road map.
- Advocate and coordinate with donor agencies for their support to implementing the proposed road map.
- Develop suitable policy for the involvement of NGOs/CBOs and private sector in the implementation of the road map at all levels.
- Coordinate with the banking sector to evolve an appropriate financing policy for sanitary activities in the country.
- Develop an integrate policy linking water supply with sanitation in semi-urban and urban areas.
- Provide technical guidance, through NTGS, to the STGS and LTGS.

- Provide additional manpower to facilitate carrying out the above-mentioned responsibilities.

Federal Ministry of Environment:

- Shall play a major role in policy changes pertaining to environment.
- Shall enforce the legal provisions, through the State Environmental Protection Agencies (SEPAs), in keeping the environment clean.
- Facilitate, through SEPAs, the provision of toilet facilities in market centres, motor park, highway eateries and jetties though PPM.
- Make separate provision for sanitation in national budget and also advise the State and LGA counterparts to make similar provisions.
- Advise their counterparts at State and LGA level to participate in the joint training programs along with WASH and other functionaries.
- Advise their counterparts at LGA level to be a part of the CCD and take part in the CCT and its follow up.
- Coordinate with the FMWR to develop common IEC materials.
- Coordinate with States and LGAs to have a separate budget line for providing water and sanitation facilities in public places.

Federal Ministry of Health:

- Ensure water and sanitation facilities, in coordination with the State and LGA counterparts, in all primary health centres.
- Advise their counterparts at State and LGA level to participate in the joint training programs along with WASH and other functionaries.
- Advise their counterparts at LGA level to be a part of the CCD and take part in the CCT and its follow up.
- Guide States and LGAs to strengthen the data base at primary health centre level for tracking the impact of ODF community on sanitation-related diseases.
- Coordinate with the FMWR to develop common IEC materials.
- Coordinate with States and LGAs to have a separate budget line for providing water and sanitation facilities in primary health centres.

Federal Ministry of Education:

- Ensure water and sanitation facilities, in coordination with the State and LGA counterparts, in all primary schools.
- Advise their counterparts at State and LGA level to participate in the joint training programs along with WASH and other functionaries.
- Advise their counterparts at LGA level to be a part of the CCD and take part in the CCT and its follow up.
- Guide States and LGAs to expand School Sanitation Program that includes demand generation and hygiene promotion.
- Coordinate with the FMWR to develop common IEC materials.
- Coordinate with States and LGAs to have a separate budget line for providing water and sanitation facilities in primary schools.

Federal Ministry of Housing and Urban Development:

- Guide, through their counterparts at State and LGA level, the urban local bodies to

identify slums in semi-urban and urban areas and provide data on the status of sanitation.
- Advocate with State and LGA to provide community toilets on pay and use basis though PPP mode in areas where space shortage restricts construction of household latrines.

Federal Ministry of Women Affairs:
- Coordinate with States and LGAs to ensure participation of women groups in the community to join CCD and promote construction of household toilets and their use.
- Wherever needed advocate for creating a revolving fund in the women's groups to provide credit to deserving members for construction of household latrines.

National Task Group on Sanitation (NTGS):
- This will continue as the nodal point to provide technical guidance to States and LGAs and serve as a platform for inter-ministerial coordination.
- Can develop a coordinating mechanism involving STGS, LTGS and WASHCOMs.

B. Sate and LGA level:

The corresponding ministries at State level and the departments at LGA level are expected to perform similar functions in coordination with the Federal Ministries. In this regard the STGS/LTGS, the Water Boards, the urban local bodies and the environmental protection agencies have to play a stellar role. The Ministry of Water Resources at State level will perform the same role as that of its counterpart at federal level.

C. Donor/UN Agencies and International NGOs:
- Shall expand their resources base to provide inputs in critical areas to meet the challenge both at National and State level.
- Shall bring in international experience to bridge the knowledge gap.
- Facilitate inter-country visits for exposure to new ideas and interventions
- Contribute to development of appropriate IEC strategy/materials
- Facilitate advocacy efforts at the highest political level
- Support organization of assessment studies
- Participate in the NTGS meetings and contribute to its deliberations

D. NGOs/CSOs/CBOs:
- Shall help the Government in promoting CLTS by becoming a part of the CCT and CCD.
- Facilitate the certification process for ODF and follow up
- Wherever required, can provide the logistic support for construction of latrine at household and community level.

SECTION VIII: IMPLEMENTATION PLAN

Based on the road map/strategy suggested, an attempt has been made to indicate an Activity Plan for the periods mentioned in the previous section (Table - 5). It may be mentioned that as the time frame of the plan is around 11 years, it may not be prudent to consider it a very rigid plan. Instead, as one proceeds there will, probably, be need for modification as the situation warrants. In this way the plan presented here indicates the major directions in which one has to move towards achieving the goal.

Table - 5 Activity Plan for Implementation of the Proposed Road Map/Strategy

Strategy/Activity	2016-17	2018	2019-21	2022	2023-25	Nodal Agency
A.Technology Options to suit geo-physical conditions						
Formation of Tech. Committee	X					FMWR/NTGS
Finalization of different options	X					FMWR/NTGS
Preparation of simplified designs with BOQ & Cost	X					FMWR/NTGS
Printing and distribution of the designs to states (12,000 sets)	X					FMWR
B.Technology Options to suit household preference/paying capacity						
Identification of appropriate credit mechanism and its use by households	X	X	X	X	X	FMWR

C.Promoting Sanitation Ladder						
Developing IEC material on Sanitation Ladder with BOQ and cost	X					FMWR/NTGS
Printing and distribution of the IEC material on Sanitation Ladder	X	X	X			FMWR/NTGS
D.Promoting Pour-flush latrines						
Visit to countries to study the technology and its adoption	X					FMWR/NTGS
Training of technical personnel	X	X				FMWR/NTGS
Training of Master Masons	X	X				FMWR/NTGS
Facilitating local entrepreneurs to manufacture pan/trap	X	X	X	X	X	FMWR
E. Appropriate del. mechanism and social marketing						
Establishment of Sanicentres /SRCs (at least two in each LGA)	X	X	X			RUWASSA
Training of Sanicentre/SRC Manager (1,500)	X	X	X			RUWASSA
Training of master masons for these centres (10 per centre x 1,500= 1,5000)	X	X	X			RUWASSA
Providing the required IEC materials on latrine designs, sanitation ladder, hygiene etc. (5 sets each) (1,500x5= 7500)	X	X	X			RUWASSA
Local manufacturing/ importation of pan/trap for pour flush latrines	X					Private Sector
F. Refocusing the triggering process						
Training of resources persons on CCD at State level (5 person per State/FCT) (37x5=185)	X					RUWASSA
Training on CCD for LGA functionaries by the resource team 5 per LGA)(774x5=3870)	X	X	X			RUWASSA

Training/Orientation of CCT members at ward level (7x9522=66654) *	X	X	X			RUWASSA
Preparation of CLTS tools (12,000 sets) and placards for schools plus questionnaire for households without latrine	X					RUWASSA
Distribution of CLTS tools (one set of tools per rural ward= 9522)	X					RUWASSA
Printing of IEC materials on technology options and sanitation ladder	X					FMWR
Distribution of IEC materials on technology option and sanitation ladder	X	X				FMWR with State agency
Organising CCD for triggering under CLTS in 100,000 rural communities with follow up	X	X	X	X	X	RUWASSA
G. Developing IEC Materials						
Engaging consultant to review the existing IEC materials and develop new/modify existing materials						FMWR
National Workshop of poets/skit writers to develop songs and skits on hazards of open defecation	X					FMWR/NTGS
Preparing CDs on songs						FMWR
Printing of selected skits to be used during the CCD	X	X	X			FMWR
Distribution of CDs and skits (at least one set to all LGAs and States plus training institutes (1000 sets)	X	X	X			FMWR with State agency
Development of jingles for radio (5 types of 100 sets each)	X					FMWR/NTGS RUWASSA

Development of TV spots with personalities in TV, Cinema and Sports (5 types of 100 sets each)						FMWR/NTGS/ RUWASSA
Distribution of materials developed to all states	X	X				FMWR
Advocacy with national Radio and TV for airing the jingles/TV spots	X	X	X	X	X	FMWR/NTGS/ RUWASSA
Use of Face Book/SMS/Twitter etc.	X	X	X	X	X	
I. Semi-Urban and Urban Areas						
Identification of homogenous communities in semi-urban and urban areas	X	X				Urban local bodies/SEPA
Organize CCD for triggering communities in semi-urban and urban areas (0ver 40,000 settlements and 100,000 communities	X	X	X	X	X	SEPA/ RUWASSA
Construction of Public toilets on PPP mode	X	X	X	X	X	SEPA
Sanction against open defecation	X	X	X	X	X	SEPA
Advocacy with Semi-Urban and Urban Water Supply Agencies	X	X	X	X	X	FMWR/NTGS
J. Constructing toilet complexes in market centres, motor parks and highway eateries and schools/health centres						
Survey schools and health centres	X	X				State Min. of Education/ Health
Survey of market towns, motor parks and highway eateries, religious places and jetties	X	X				SEPA
Construction of public toilets with water facility in market centres with each unit 5 compartments, male-3 & female-2) under PPP mode	X	X	X	X	X	SEPA

Construction of one public toilet with water facility at highway eateries (5 compartments – 3 male and 2 female)	X	X	X	X	X	SEPA
Construction of toilets at Jetties	X	X	X	X	X	Authority managing jetties
Construction of toilets at Religious places	X	X	X	X	X	Concerned religious agencies
Construction of school toilets	X	X	X	X	X	Ministry of Education/ SUBEB
Construction of toilets in health centres	X	X	X	X	X	Federal Ministry of Health/NPHCDA
K.Trg. of Personnel						
One day national exposure workshop of all stakeholders at State level on the road map	X					FMWR/NTGS
One day state level workshop (in each State) of all stakeholders of LGA on the road map	X					FMWR/NTGS/ RUWASSA
Strengthening of NWRI	X	X				FMWR
Strengthening of State level school of health technology	X	X				Federal Ministry of Environment
Advocacy with SUBEB for exposing teachers to sanitation	X	X	X			FMWR with FMEdn.
Development of training manual for tech. option training	X					FMWR
Development of training manual for CCD training in rural, semi-urban and urban communities	X					FMWR
Training of resource persons at national level on technology options (one for 5 days)						FMWR
Training of resource persons at national level on CCD (one for 3 days)						FMWR
State level training of resource persons on technology options for LGA staff (one in each State of 5 days duration)	X	X	X			FMWR with State agency

State level training of resource persons on CCD for LGA staff (one in each State of 3 days duration)	X	X	X			RUWASSA
Exposure visits to other countries	X					FMWR
L. Admn. Back up and Coordination Mechanism						
Flagging of the Open-defecation-free campaign at National, State & LGA level by VVIPs	X					FMWR/NTGS
Sensitization of policy makers at national level	X					FMWR/NTGS
Sensitization of policy makers at State level	X					FMWR/NTGS/ STGS
Sensitization of LGA council members	X	X				RUWASSA/ STGS
Harmonization of Sanitation Policy	X					FMWR/NTGS
Formulation and Approval of State WASH Policy in States/FCT	X					RUWASSA
Establishment of RUWASSA in States/FCT	X					RUWASSA
Advocacy for separate budget line for Sanitation at State and LGA level	X	X				FMWR/NTGS
Advocacy with national government for release of funds to States and LGAs specifically for Sanitation	X					FMWR/NTGS
Advocacy with line departments (state and LGA) for involvement of their functionaries in CCD and monitoring	X	X				RUWASSA/ STGS
Annual Review meeting with States at national level	X	X	X	X	X	FMWR/NTGS
Quarterly review meeting with LGAs at State level	X	X	X	X	X	RUWASSA/ STGS
Monthly review meeting at LGA level	X	X	X	X	X	RUWASSA/ STGS
Ind. Assessment of the State of Preparedness and 1st two years of implementation		X				FMWR

Internal assessment of the progress and issues				X		FMWR
M. Certification for Open-defecation-free-communities						
Strengthening of the monitoring team	X					FMWR/NTGS RUWASSA/ STGS/LGA WASHUNIT/ DEPT
Increasing the number of certification teams	X					STGS
Provision of adequate funds for monitoring and certification	X	X				RUWASSA/ LGA/WASH UNIT/DEPT
Advocacy with State/LGA authorities for according priority to ODF certified communities for developmental activities	X	X				FMWR
Celebration on an LGA becoming open-defecation-free	X	X	X	X	X	STGS
Celebration on a State becoming open-defecation-free		X	X	X	X	FMWR/NTGS/ STGS

***Functionaries of WASH Department/Units will do the CLTS triggering in semi-urban and urban areas of their respective LGAs along with the community leaders and other functionaries of urban local bodies**

SECTION IX: INVESTMENT NEEDS AND ALIGNMENT WITH MDG 6.2 AND PEWASH (2016 – 2030)

INVESTMENT:

An attempt has been in the present section to provide an indicative investment for carrying out the activities mentioned above. This has been given by major heads. In the absence of adequate data, some assumptions have been made while estimating the magnitude of the investment. These figures will require revision from time to time.

Sl	No. Major Head	Amount (million NGN)	Who to meet
1.	Construction of household latrines (20 million, 7.5 urban 12.5 rural)	725,000	Households
2.	School Toilets (38,700 units: Separate provision for boys and girls with hand washing facility)	58,050	Government
3.	Primary Health Centres (2,380)	1,785	Government
4.	Motor park (200)	1000	Government / PPP
5.	Market Centres (1548)	7,740	Government / PPP
6.	Triggering	5900	Government
7.	Advocacy / Capacity Development / IEC materials (20% of 1 to 6)	159,895	Government

TOTAL (NGN) **959,370 or 959 billion**

Household 725 billion or 72.5 billion per year
Government 234 billion or 23.4 billion per year

Assumptions:
1. HH Latrine unit cost: Urban NGN 55,000, Rural NGN 25,000
2. 50% of schools and 25% of health centres may need toilet (School unit cost: NGN 1.5 million, HC unit cost: NGN 750,000
3. 2 Market centres per LGA: unit cost NGN 5 million/unit

4. Motor parks: All cities, smaller with one and bigger with 3: NGN 5 million/unit
5. Construction of toilets at religious places will be done by the respective religious institutions. Same is the case with toilets at jetties. No government funds are contemplated.

RETURN ON INVESTMENT:

As may be seen above, the investment proposed for the Government works out to about NGN 24 billion per year or around US$ 150 million per year. In terms of per capita it comes to less than NGN 100 or less than a US$ per year. According to World Bank, Nigeria loses NGN 455 billion annually (equivalent of US$ 3 billion) due to poor sanitation or US$ 20 per person. This constitutes 1.3% of the national GDP. As per the same source, open defecation alone costs Nigeria US$ 1 billion per year (at 2010 prices) and this works out to US$ 6 per capita taking into account the estimated 2010 population. This clearly shows that what the country invests in sanitation for making the country open-defecation-free, the gain far exceeds the cost. Even if the entire cost of building household latrines (for which the household bears the cost) is added to the proposed investment by the Government, the cost (less than US$ 3) is less than the estimated gain (US$ 6) worked out by the World Bank. It may be mentioned that use of toilet by households can bring with it other hygiene practices such as washing hand after defecation that will further contribute to the gain anticipated by the World Bank while calculating US$ 20 per capita. Further, according to the World Bank the cost estimates are somewhat underestimated as it did not take into account the adverse impact of unsafe excreta disposal on water resources, the long-term economic losses related to the adverse effects of poor sanitation on cognitive development and the benefit from recycling the excreta. In view of this investment in sanitation and particularly to stop open defecation, should not be considered as a non-productive and wasteful expenditure. In reality its contribution to country's economy is significant. Hence a higher budget allocation to make the country open-defecation-free is justified from all counts.

ROADMAP POSITION TOWARDS ACHIEVING PEWASH AND SDGs GOAL 6

PEWASH is a multi-stakeholder collaborative program aimed at eliminating open defecation in Nigeria by 2025 and enhancing 100% access to basic water and sanitation services in rural areas by 2030. PEWASH is a comprehensive program covering Sector coordination; Strengthening governance at all levels; Capacity Development; Establishing a Knowledge Management and Sector Learning hub; Scaling-up the WASH Information Management System to monitor and track SDG-6 targets and in identifying the most disadvantaged Nigerians; Sanitation & Hygiene promotion; Strengthening Disaster Risk Reduction & Community Resilience; Innovative Financing including affordable loans for the poor; Investing in water facilities in the rural areas; and Investing in sanitation facilities in Public places.

SDG 6, target 6.2 is to achieve by 2030 access to adequate and equitable sanitation and hygiene for all and end open defecation; paying special attention to the needs of women, girls and those in vulnerable situation. SDG 6.2 indicator is the percentage (%) of population using safely managed sanitation services. The indicator is more ambitious than the previous MDG indicator.

ODF road map covers the entire state and population (including households, institutions and public places) irrespective of gender, age, vulnerability, location and socio-economic status. Part of the suggested strategies in the road map include sanitation marketing, innovative financing and enhanced coordination mechanism to facilitate progressive movement from lower level of improved sanitation up the sanitation ladder and finally ensure safe disposal of excreta.

Figure 7: A comparison of SDG 6.2 and MDG Sanitation Indicator

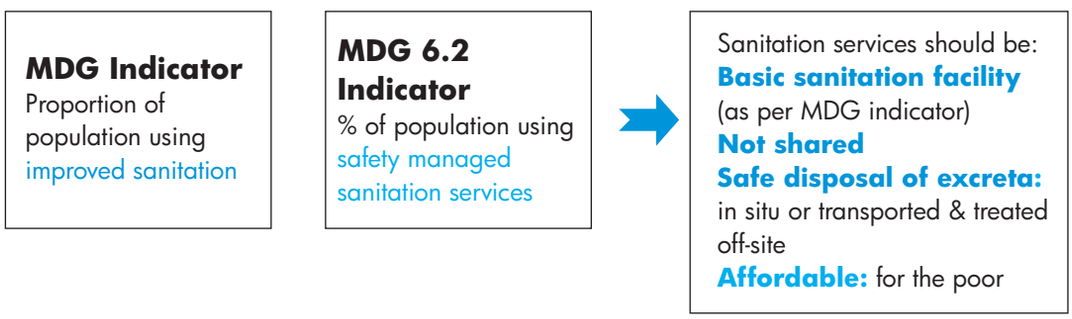
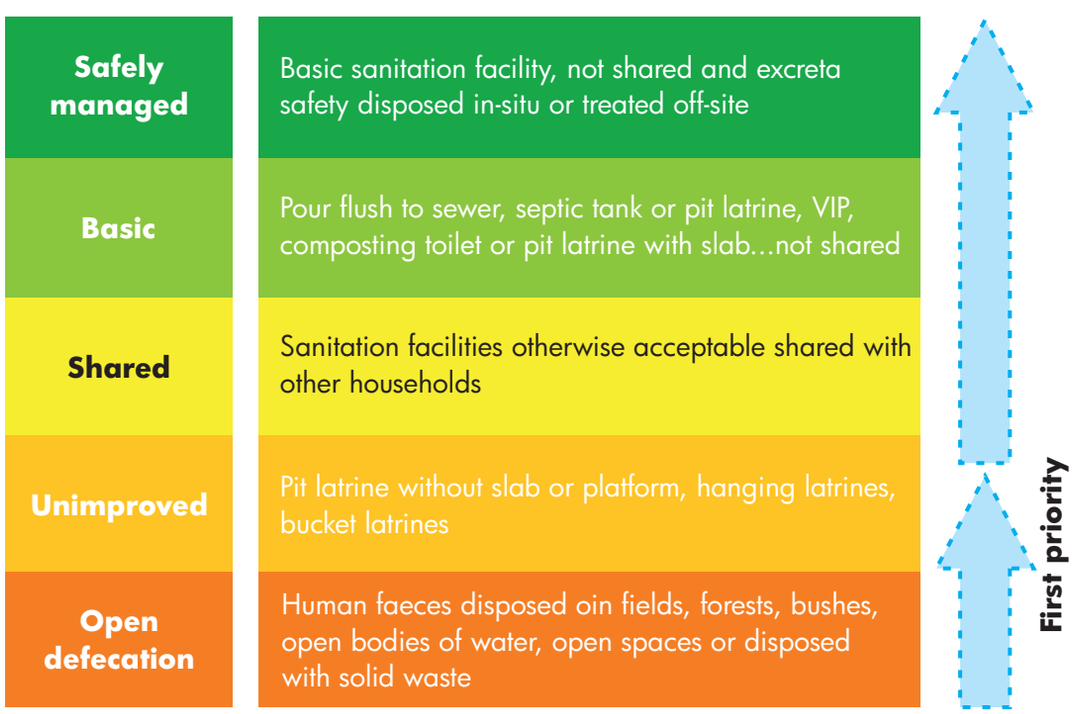


Figure 8: Sanitation Ladder



Annex - 1

Status of CLTS Implementation in Nigeria *(As of July 2014)*

S/N	State/FCT	No. of LGAs	Total No. of Triggered Communities	No of ODF Declared communities	%	No. of ODF Certified Communities	%
01	Abia	17	368	166	45.1	18	10.8
02	Admawa	21	209	3	1.4	0	0
03	Akwa Ibom	31	215	0	0	0	0
04	Anambra	21	559	506	90.5	106	20.9
05	Bauchi	20	2200	1690	76.8	394	23.3
06	Bayelsa	8	92	0		0	0
07	Bebue	23	1607	1385	86.2	639	45.8
08	Borno	27	85	30	35.3	0	0
09	Cross River	18	1461	742	50.8	373	50.3
10	Delta	25	65	0		0	0
11	Ebonyi	13	343	281	81.9	19	6.8
12	Edo	18	75	0	0	0	0
13	Ekiti	16	274	95	34.7	22	23.2
14	Enugu	17	578	441	76.3	34	7.7
15	FCT (Abuja)	6	98	9	0	0	0
16	Gombe	11	42	17	40.5	0	0
17	Imo	27	462	401	86.8	10	2.5
18	Jigawa	27	1404	513	36.5	386	75.2
19	Kaduna	23	226	58	25.7	1	1.7
20	Kano	44	1569	75	4.8	23	30.7
21	Katsina	34	1595	1242	77.9	729	58.7
22	Kebbi	21	197	114	57.9	88	77.2
23	Kogi	21	322	157	48.8	20	12.7
24	Kwara	16	384	230	60.0	0	0
25	Lagos	20	327	5	1.5	0	0
26	Nasarawa	13	149	0	0	0	0
27	Niger	25	190	46	24.2	0	0
28	Ogun	20	679	257	37.8	84	32.7
29	Ondo	18	207	123	59.4	0	0
30	Osun	30	1500	670	44.7	220	32.8
31	Oyo	33	131	88	67.2	10	11.4
32	Plateau	17	56	0	0	0	0
33	Rivers	23	133	0	0	0	0
34	Sokoto	23	671	159	23.7	0	0
35	Taraba	16	721	190	25.4	76	40.0
36	Yobe	17	219	25	11.4	14	56.0
37	Zamfara	14	44	10	22.7	10	100.0
	Total	**774**	**19467**	**9728**	**50.0**	**3276**	**33.7**

Source: UNICEF, Nigeria Country Office

Note: Total No. of communities: 123,240, Total No. of triggered communi ties: 19467
% of triggered communities: 16%

Annex - 2

List of materials to be kept in a Sanicentre/SM/SRC/SH

Present products and services	Proposed products and service
Production, sale & installation of SanPlat Promotion of hygiene education Upgrading pit latrines Household water security wares such as buckets fitted with tap Brooms, soap and other sanitary wares ORS sachets plus advice on diarrhoea Fast moving hand pump spare parts	**Products:** All types of pans/traps Production of SanPlat/ Squatting Plate with water seal, cement rings & pit covers**++** Cement/bricks/chips/empty drums/ low cost doors of different type* PVC pipes of 75" dia Materials for domestic hygiene Materials for personal hygiene Materials for latrine superstructure ORS sachets Fast moving hand pump spare parts **Services:** Social marketing of sanitary services Advice and installation of all types of latrines both at household and institution including school/health centre/market centre/motor park Hygiene Promotion Services of at least one master mason in each ward under its jurisdiction Advice on hand pump repair & its maintenance Advice on diarrhoea prevention Pit emptying facility*

++Can be done at ward/community level so as to reduce the tra nsportation costs

*Can have arrangements with appropriate agencies of the area

Annex - 3

One-day programme of the Community Contact Team (CCT) for Triggering

Time	Activity
08.00 hrs	Team arrives in the community
08-09 hrs	Meet traditional/opinion leaders/ WASHCOM (wherever exists)/Office
	bearers of Women and youth Groups (Advance information on date and time is a must)
09-09.30 hrs	Visit the local school with the above people and address the students on importance of sanitation and hazards of open defecation. In case there is more than one school select the one with more students
09.30 to 10.30 hrs	Go round the community along with the students, WASHCOM members, Youth groups and inform the community members about the venue of the community meeting scheduled for 10.30am to discuss something very important. The purpose of this activity is to generate curiosity in the community about the event.
10.30-13.30 hrs	Hold the community meeting to introduce the CLTS Approach. Make sure that the team carries the required tools as prescribed including the 'Sanitation Ladder Chart' with cost, type of toilet suitable to the area, place where to seek advice and materials etc.
13.30 – 14.30 hrs	Lunch Break
14.30-16.30 hrs	Each team member meets a group of households to collect some basic but crucial information as per the format. It is to be ensured that all households in the community are covered. (In a way this also serves as the first follow up to the community meeting where the household may still have some questions . During this visit tell the household to join for an entertainment at a designated place around 5 pm)
17.00 – 18.00 hrs	Educational entertainment (Developing some skits/songs/mimics can be a part of the training of the facilitators. They can also involve the local talents, including children to perform these shows and praise singers)
18.00 hrs	Team either stays in the community or return to their nearest place for the night halt

References:

1. Agberemi, Z.O and Onabolu B. , Improving sanitation through Sanitation Centre: A Case Studyof Chediya, Nigeria, 34th WEDC International Conference, Addis Ababa, Ethiopia, 2009
2. Amhara National Regional State health Bureau, Ethiopia, Results of Working at Scale for better Sanitation and Hygiene in Amhara, Ethiopia: Baseline and End line Comparison of Institutional, Household and School Surveys, Apirl 2011
3. Bevan J. A Review of the UNICEF roll-out of the CLTS approach in West and Central Africa, 35th WEDC International Conference, 2011
4. Briney Amanda, An Overview of Christaller's Central Place Theory
5. Federal Ministry of Agriculture and Water Resources , Department of Water Supply and Quality Control, Strategy for Scaling up Rural Sanitation and Hygiene to meet MDG Nigeria, July 2007
6. Federal Ministry of Environment, Nigeria, National Environmental Sanitation Policy, 2005
7. Federal Ministry of Water Resources, National Water-Sanitation Policy, 2004
8. Federal Ministry of Water Resources, Nigeria, National Water Supply and Sanitation Policy 2000
9. Federal Ministry of Water Resources, Nigeria, National Water-Sanitation Policy Implementation Guidelines, Third Draft, 2013
10. Federal Ministry of Water Resources, UK Aid, Eurpean Union and UNICEF, Protocol for Certification and Verification of ODF and Total Sanitation Communities in Nigeria
11. Franceys R., Pickford J, and Reed R. – A Guide to development of on-site sanitation, World Health Organisation, Geneva, 1992
12. Galan I. Desise et al, Exploring changes in Open-defecation prevalence in Sub-Sahran Africa based on National level Indices, BMC Public Health , 2013
13. Government of India/UNICEF/UNDP Project on Rural Sanitation, Report of the Committee on Design Criteria for Pour-Flush Water Seal latrines in Rural Communities of India, The Technology Advisory Group, 1985
14. Government of Odisha, Rural Development Department, Nirmal Bhrat Abhiyan, Nov. 2012
15. Hickling S. And Bevan J., Scaling up CLTS in Sub-Saharan Africa
16. IIAD, ATKINS and ENPLAN Group: Assessment of Institutional Capacity in the Water Sector in Six Partner States, October 2010
17. IRC, A Field Tool for Sanitation Marketing Surveys in Bangladesh, February2013
18. Kar Kamal with Chambers Robert, Hand Book on Community-led Sanitation, Plan UK and Institute of Development Studies
19. Ministry of Local Government, Rural Development and Cooperatives, People's Republic of Bangladesh, National Sanitation Strategy
20. Morella, E. Et al, Africa Infrastructure Country Diagnostic, Climbing the Ladder: the State of Sanitation in Sub-Saharan Africa, July 2008
21. National Population Commission, Federal Republic of Nigeria, Nigeria Demographic and Health Survey 2003,2008 and 2013
22. National Task Group on Sanitation, Report: Monitoring and Verification of ODF Communities in Yakur LGA, Cross River State, March 2012

23. ODF Malwai Strategy Document 2011, Minsitry of Agriculture, Irrigation and Water Development, Government of Malwai
24. Orissa State Water and Sanitation Mission Bhubaneswar, Technology Option for Individual Household Latrines in Rural Orissa – Towards an Open-defecation-free Orissa, 2008
25. Pickford, John, Low cost sanitation – A Survey of Practical Experience, 1995
26. Regional Water and Sanitation Group – South Asia, UNDP/World bank Water and sanitation Program, Technical Guidelines on Twin Pit Pour Flush Latrines, 1992
27. Samanta B.B., Open-defecation-free India by 2019 – Challenges and Solutions (unpublished), September, 2014
28. Samanta B.B., Study of Supply Chain System, Orissa: A Case Study Report, March 2009
29. Sanitation Marketing Scale up Project, Market Solutions to Cambodia's Toilet Troubles, June 2014
30. Thomas Ann et al, Developing and Monitoring Protocol for the Elimination of Open Defecation in Sub-Saharan Africa
31. UK Aid, Concept Note: Sanitation Marketing Approach: Sanitation as a Business in Nigeria, 2013
32. UNICEF, Case Study -1: The LGA-Wide Approach to Sanitation in Nigeria: CLTS as an Entry-point intervention for Child Survival and Development,
33. UNICEF, Case Study – 5: How natural leaders and NYS Corps help to accelerate the role of CLTS
34. UNICEF, Case Study – 3 How Traditional, Religious and Political Leaders contribute to the CLTS process
35. UNICEF, Case Study – 6, Local Innovations in Sanitation in Nigeria: Community-based Sanitation Solutions to environmental and Social Challenges
36. UNICEF, Case Study – 4, WASHCOMs, Equity and Sustainability: How WASHCOMs help create and sustain ODF Communities
37. UNICEF, Final Report for Study on WASH Challenges in Per-Urban Areas of Nigeria, Africa Infrastructure Foundation, Sept. 2014
38. UNICEF, India, Technology Options for Household Sanitation
39. UNICEF, International Year of Sanitation, Action Plan for Nigeria
40. UNICEF, Nigeria, Operational Plan: Sanitation, Hygiene and Water in Nigeria (SHAWN – II), 2013-2018
41. UNICEF, Nigeria, Report on the Assessment of Sanicentres in 14 States of Nigeria, December, 2006
42. UNICEF, Nigeria, KAP on WASH in the FCT & 8 other States of Nigeria, Sept. 2008
43. UNICEF, Report of the Fourth National Roundtable Conference on Community Led Total Sanitation in Nigeria, 20th to 24th November, 2012
44. UNICEF, Report on Sanitation Marketing Research for Scaling Up Sanitation Delivery in Nigeria, December 2013
45. UNICEF, Sanitation Fact Sheet, Nigeria, 2008
46. UNICEF, Technology Options for Sanitation under Challenging Environment in Nigeria, Final Report by Centre for African Settlement Studies, Final Report, April, 2012
47. WASH Plus – A market Led, Evidence based Approach to Rural Sanitation, January, 2014
48. Water Aid, We Can't Wait: A Report on Sanitation and Hygiene for Women and Girls

49. Water Supply and Sanitation Collaborative Council, CLTS Foundation, Facilitating Hands-on Training, Workshop for CLTS, A Trainers Guide, April, 2010
50. Water Supply & Sanitation Collaborative Council, UN Breaks Silence on Open Defecation, May 2014
51. World Bank, In Bangladesh, Sanitation Marketing Helps make Toilet More Availbale and Affordable, April 2014
52. WSP, Economic Impacts of Poor sanitation in Africa, March 2012
53. WSP, Factors Associated with Achieving and Sustaining Open Defecation Free Communities: learning from East Java, September, 2011
54. WSP, Long term Sustainability of Improved Sanitation in Rural Bangladesh, 2011
55. WSP, The Case of Marketing Sanitation, August 2014
56. WSP, What Influences Open Defecation and Latrine Ownership in Rural Areas: Findings from a Global Survey, August 2014
57. WHO and UNICEF, JMP on Water and Sanitation, 2010,2011,2012,2013 & 2014
58. WHO and UNICEF , Post-2015 WASH Targets and Indicators: Outcomes of an Expert Consultation
59. WELL Resource Centre for Water, sanitation and Environmental Health, Participatory Intuitional Assessment for Capacity Development in Enugu State, March 2005
60. Yetunde, A, Disparity in Income Distribution in Nigeria: A Lorenz Curve and Gini Index Approach, July 2013

APPENDIX

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01	Mr S.O.Ome	Director, Water Quality Control and Sanitation & Chairman NTGS/Chairman Steering Committee	Federal Ministry of Water Resources (FMWR)
02	Mr Awe O.	Dy. Director, Quality Control	-do-
03	Mrs C.Opara	Assist. Chief Scientific Officer	-do-
04	Mrs A.I. Kogbara	Principal Scientific Officer	-do-
05	Mr Yakubu Barnmas	PSO	-do-
06	Ms O.Felicia	AD	-do-
07	Mr A. Nyozi J.	AD	-do-
08	Mr L.A. Salihu	PSO & Member, Steering Committee	-do-
09	Ms B.U.Waegbu	SSO	-do-
10	Mr A.I. Kogma	CSO	-do-
11	Ms A.Akpeur	SO-II	-do-
12	Mr B. Galachima	ADe	-do-
13	E.Hycinth	ACTO	-do-
14	Mr H Jamilu	AD (LS)	-do-
15	Mr E. A.Ugoh	AD (TS)	-do-
16	Mr Mazi I. Okeh	Chief Statistician & Member, Steering Committee	National Bureau of Statistics
17	Ms Rita A. Okea	ACEHO & Member, Steering Committee	Ministry of Environment
18	Mr J.J.Dada	AD (Health) & Member, Steering Committee	Federal Ministry of Education
19	Mr J. Habu	AD (Lab Services)	FMWR
20	Mr O.Omalade	Policy and Sector Support Coordinator & Member, Steering Committee	Water Aid
21	Mr A.C.Jeminiwa	AD	National Planning Commission
22	Mr Kannan Nadar	Chief, WASH	UNICEF
23	Mr Bisi Agberemi	WASH Specialist	UNICEF
24	Mr Ajibade Olokun	Specialist	UNICEF
25	Mr Raphael Nwozor	WASH Officer	UNICEF
26	Mr Sakiru Otusanya	Consultant	UNICEF
26	Mr Michael Oja	Country Representative	Water Aid
27	Mr Ephrahim Danladi	Coordinator, Sustainable Total Sanitation	Water Aid
28	Mr Tim Kellow	Country Director	Concern Universal

State Level			
Katsina			
01	Mr Amina Dayybu	Assistant Director	RUWASSA
02	Mr Sani Yusuf	Mon. & Evaluation Officer	-do-
03	Mr Iro Mani	Assistant Director, CM & PR	-do-
04	Mr M. Seurjbala	Director, Semi-urban	FMWR
05	Mr Lawal Inusa Charanchi	Executive Director	SEPA
06	Mr Abdu Sale Mashi	Director, WM & Pollution Control	-do-
07	Mr Maurtala Dabo Dutsi	Assistant Director, Env. Protection	-do-
08	Mr Mannir Rabiu	Director, Finance	-do-
09	Mr Sale H. Dutisinma	Secretary	-do-
10	Mr Hassan Wade	Manager, Market	Katsina Traders Association
11	Mr H. Isah Adobo	Secretary	-do-
12	Mr Ibrahim N. Nafada	Rep. from Central Market	-do-
13	Mr Misbahu Maizane	Chairman	-do-
14	Mr Ibrahim Dansuleman	Member	-do-
15	Mr A.Musa Shugaba	Member	-do-
16	Mr Sanibala Macachia	LGA Rep.	-do-
17	Mr M. M. Bakori	Member	-do
18	Mr Halilu Saini	Chairman	RT Workers Union
19	Ms Theresa Pamma	WASH Specialist	UNICEF
Anambra			
01	Dr C.J.Okoye	Director of Public Health	Ministry of Health
02	Ms Ubaka Christiana	Director, Env. Health/pollution Control	Ministry of Environment
03	Ms Ngozi Onwuachu	Director, Academics and Services	State Universal Basic Education Board
04	Mr Nzemeka Emma Olisah	Chairman	State Universal basic Education Board
05	Dr Chinedu Emeka	Hon'ble Commissioner	Ministry of Public Utilities, Water Resources and Community Development
06	Mr Victor Ezekwo	Program Manager	RUWASSA
07	Ms Oluchi Nwankwu	Sanitation Officer	RUWASSA
08	Ms Andy Nwanze	PMEO	RUWASSA
09	Ms Berna Ozuluniye	Hygiene Edn. Officer	RUWASSA
10	Mr Clement Chigbo	WASH Consultant	UNICEF

11	Ms Amina Ominyi	WASH Consultant	UNICEF
12	Mr U. Nigrula	Community Mob. Officer	-do-
13	Mr A.Kevin	WASH Coordinator	-do-
14	Mr N.Emma B.	Water and Sanitation Officer	-do-
15	Mr D. Lawrence	ACMO Officer	-do-
16	Mr E.Joseph	Admn. Officer	-do-
17	Mr A. Moses	Health Extension Officer	-do-
18	Mr O.Charity	Finance Officer	-do-

Note: 1. Interacted with the WASHCOM members and local leaders of the three communities visited
2. During the two-day National Workshop of stakeholders at Abuja interacted with over 100 senior staff of WASH and other departments from 34 States and international agencies/NGOs.