

**Taiwan-Malaysia Workshop on Clean Water and
Sustainable Energy 2019**

**Investigating the Sanitation Profile of Households in Ogun
State, Nigeria**

By

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Background of the Study

- ▶ A lack of access to sanitation represents a great threat .
- ▶ 2.3 billion of global citizens face sanitation problem.
- ▶ 892 million defecate in the open.
- ▶ 856 million employ unimproved facilities .
- ▶ Sub-Sahara Africa represents 16 of the 24 countries where at least one person in five cannot access improved sanitation services.
- ▶ 46,017,300 million Nigerians defecate in the open



Background of the Study

Economic Losses

US\$ US\$222.9 Loss
for the global
economy(Water Aid,
2016)

US\$ 3 billion (1.3%
of GDP) Loss for
Nigeria(Water Aid,
2016)

•2.4 days a year to
find open space(WSP
,2012)
•Treatment and
Funeral Costs

Health Issues

1.7 billion diarrheic
cases on yearly basis
(Thompson, 2015).

Diarrhoeal diseases
130,610(6.85%) of total
deaths in Nigeria (WHO,
2017).

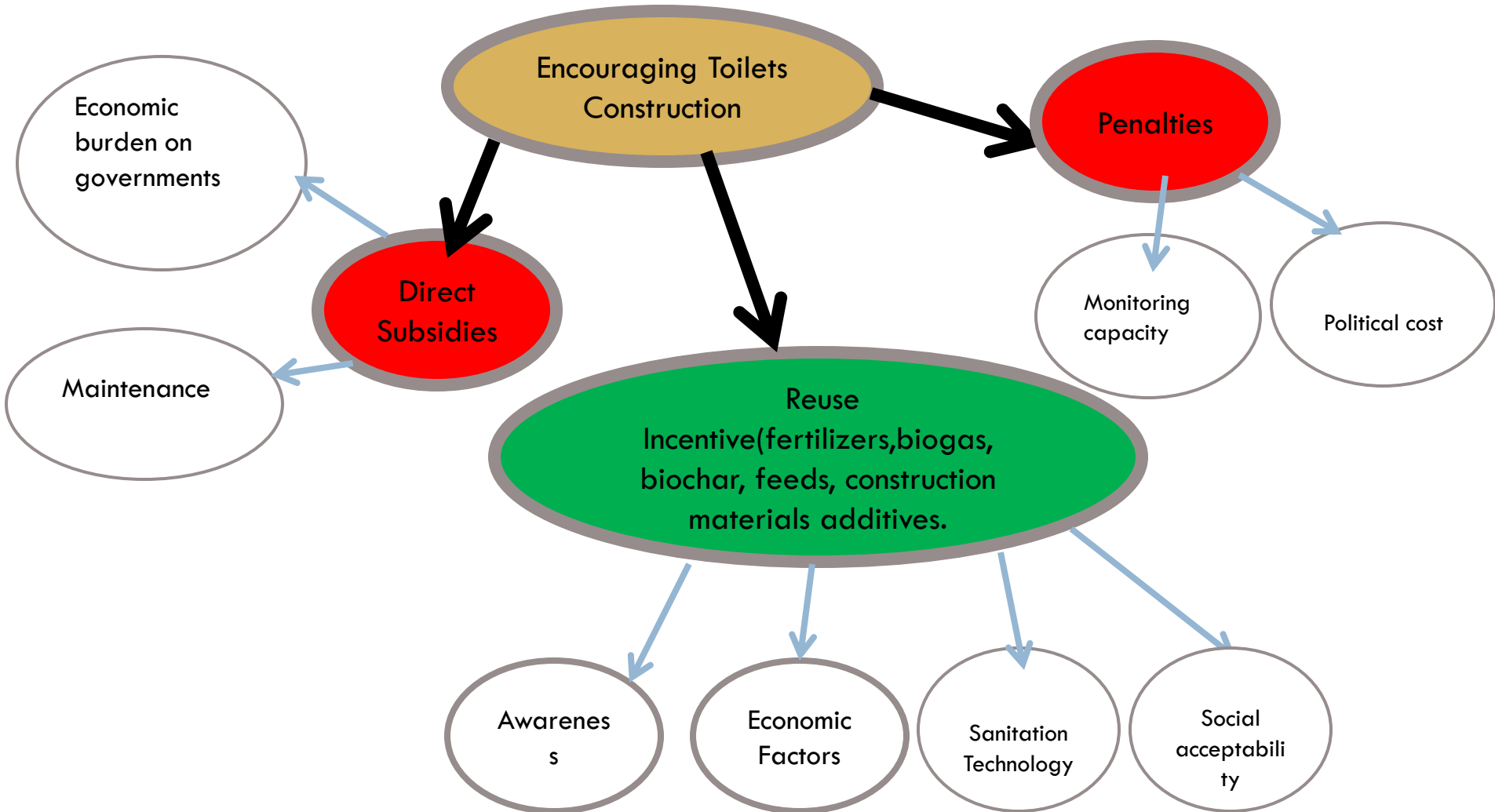
Toilet
infections(Aung,2017)

Human integrity and gender issues

**Threat to human
dignity**
(WHO/UNICEF JMP,
2017).

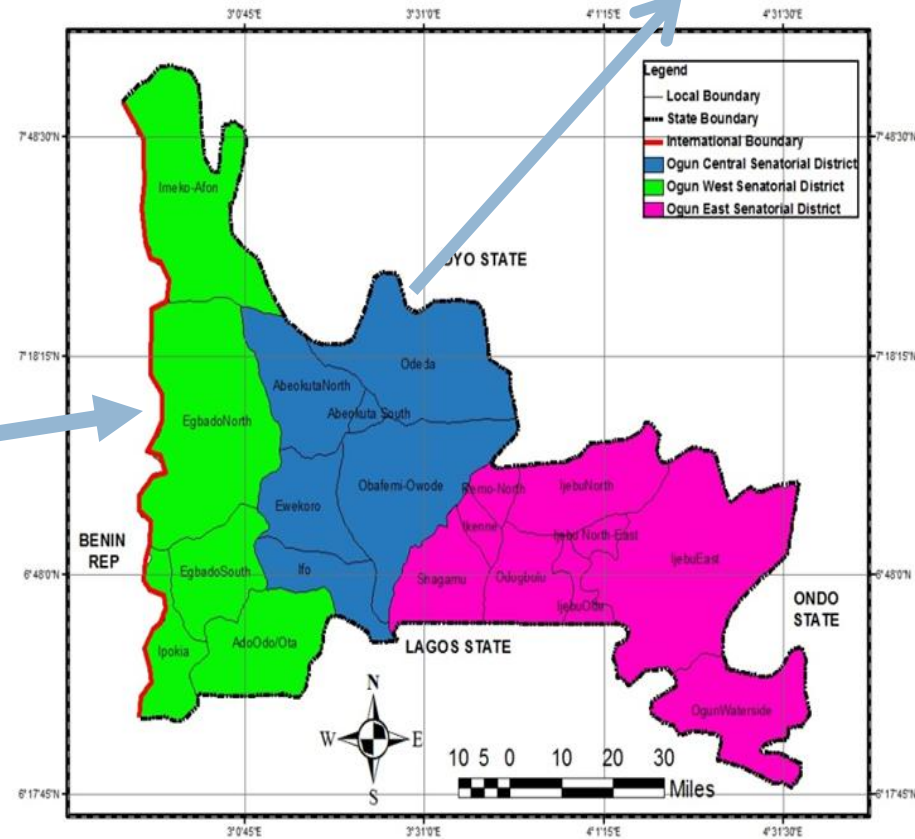
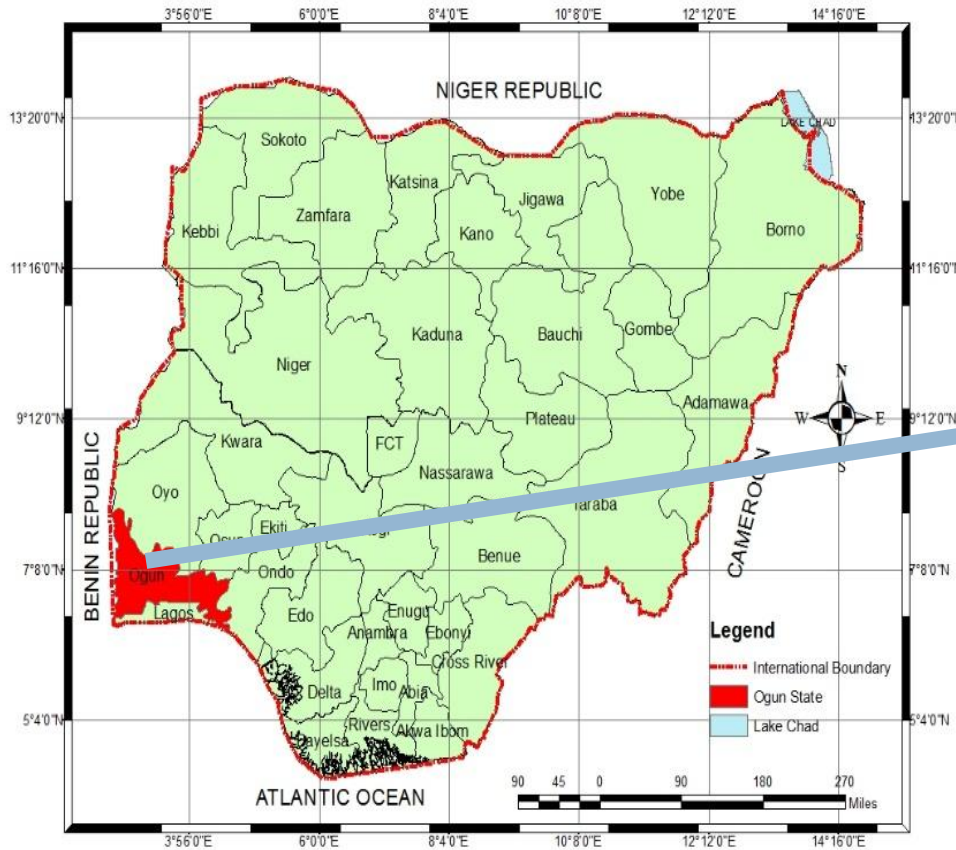
**Sexual
Harassment**(Water
Aid, 2013; Aung,
2017)

Strategies For Encouraging Households' Toilets Construction



THE STUDY AREA

- Yoruba by tribe
- 3.75 million people
- 16,432 km²
- \$10.47 billion GDP



Objectives of the study

- Investigate households' ownership of sanitary facilities and their conditions
- Assess open defecation behaviour, and determine latrine management measures in Ogun state Nigeria, with the view to suggesting sustainable sanitation measures

Quantitative Sampling Design and Procedure

Classification of Ogun's 3 main senatorial districts: Ogun East, Ogun West, and Ogun Central

Random selection of Sagamu , Egbado South, and Abeokuta South Local Governments as the sampling Local Governments in the Districts, respectively

Random selection of the representative wards of Ogiko/Likosi, Ilaro I, Sodeke/Sale-Ijeun in the Local Governments, respectively.

Random selection of 10 polling units in each of the wards , iteratively without replacement.

11 questionnaires in each of the 10 random polling units in Surulere(110); 10 questionnaires in Ilaro I(100); and 12 questionnaires in Sodeke/Isale-Ijeun I(130). 330 in totality

This ratio 1.1: 1.0: 1.23 reflects variance in population of 1,250,435(33%), 1,112,761(30%), and 1,387,944(37%) for East, West and Central, respectively .

Main Results

Socio-Economic Characteristics of Survey Respondents

- Most of the respondents were male (55.8%) and essentially of the Yoruba ethnic demographic. Also, majority of the respondents (40.9%) had secondary education as their highest level of education.
- A high percentage of 95.8% were employed either as artisans, civil servants and private sector employees, while the rest are unemployed.
- In addition, while majority of respondents (46.5 %) claimed to live on a monthly income of between 16,000- 30,000 Naira, which when compared with World Bank Classifications would be ranked as falling within the poor to the lower middle-class



Ownership of Sanitary Facilities and their Conditions

- 73.8% have access to toilets, while the remaining 26.2% claimed not to have toilets.
- lack of pressure from environmental authorities with the mean value 4.17 ranks highest as the reason households do not have toilets.
- 38.3% depend on simple latrine with slab. This is followed by those who use on-site WC to septic tank system (35.3%); 18.3% who use simple latrine without slab; 7.4% who use double pit latrine; 0.4% who use bucket latrine; and 0.3 who use aqua privy toilet type.
- Only 26.9% of households who have toilets claimed to have wash-hand basins in their toilets.
- 38% depend on a single toilet facility. This is followed by 36.9% who share more than one common toilet; 14.5% who depend exclusively on more than one toilet; and 10.6% who have just one exclusive toilet to themselves.
- The Fisher's exact probability test, as seen in 0.00 (< 0.05) suggests that there is significant difference in income between households adopting the 5 major latrine technologies prevalent in the study area

Open Defecation Behaviour

- 78% still defecate in the open . 66% of them do it occasionally mostly whenever their sanitary system malfunctions or whenever they are not at home
- Pearson chi-square test has an asymptotic significance (2-sided) value of 0.590 (>0.05). Proportion of male members of households who have toilets and still defecate in the open is not significantly different from the proportion of female members of households who have toilets and still defecate in the open.
- The Pearson chi-square test has an asymptotic significance (2-sided) value of 0.05. This however suggests that there is no significant difference in the age of members of households who have toilets and still defecate in the open

Latrines Management

- 28.4% bury their latrines with sand, and digging another pit within the same compound.
- 23.2% use chemicals.
- The above are borne out of claims of neatness , cheapness ,and fear.
- They also constrain recoverability and reuse of faecal waste
- 22.7% of households empty their latrines with the aid of manual emptiers
- 17.0% empty their latrines with mechanical emptiers; and
- 8.8% of households are yet to empty their latrines.

Recommendation

- Improved marketing of awareness-raising and social/commercial marketing campaigns in respect of reuse
- landscaping of open spaces, provision of bus terminals with adequate toilets, installations of signpost warning against open-defecation, and enlightenment campaigns against open defecation by the authority.



Thank you
Terima kasih

