



Acceptability and Perceptions of Ecological Sanitation in poor Urban set up in Rwanda: Case of Huye, Butare Town

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August 2007, ICSS 2007; Dongsheng - CHINA

RWANDA

'in memory of all victims of the 1994 Rwanda genocide. May they rest in peace!'

- ⑩ Size: 26,338 sq km
- ⑩ Population:
9,038,000(2005):
0.99 male(s)/female (2007 est.)
- ⑩ Density: 347 people/sq km (High!)
- ⑩ Total per capita GNP:
230 US \$(2005)



INTRODUCTION

- 50% of Rwanda's population is less than 15 years old: young population
- Current population growth is 2.7% per year (population will double in 28 yrs)
- The life expectancy varies between 44 years among men and 47 years among women.
- Total fertility rate (TFR) is 6.1 children per woman :very high!
- The infant mortality rate of under 5 was estimated to be 192 deaths per 1,000 infants in rural areas.

INTRODUCTION (Cont.)

- Urbanization and agglomeration of population into Villages after 1994 genocide (for security, infrastructure etc)
 - Lack of inadequate waste disposal and water supply problems
 - The public health (related diseases) and environmental problems together with the pressure to the ecosystem
- Butare Town is the 2nd in Rwanda, after the capital Kigali, and is located in the South, near Burundi
- Only 20% of Butare town population is connected to the central sewage system

AIM OF THE SURVEY

- Assess the acceptability and perceptions of poor urban residents of Butare town in regards to EcoSan, type UDD toilets: very new
 - Influencing factors
- Promote, raise awareness and popularize EcoSan (UDD toilets) :sanitation solution
- Determine the focus of RVCP sanitation projects

RVCP=Rwanda Village Concept Project

NEED FOR THIS SURVEY

OBSTACLES TO ECOSAN IN BUTARE AND RWANDA IN GENERAL:

- Lack of experience and limited awareness
- Rwandan culture and taboos: use of human excreta

METHODOLOGY

- Data collection in a total of 120 households through individual questions
- Show them some EcoSan types and pictures of UDD toilet :first impression
- Discussions with the community& local leaders
- Direct observation

The survey have been conducted in January 2007 in 3 sub-sectors around Butare Town centre:Matyazo,Muyogoro and Mpungwe village

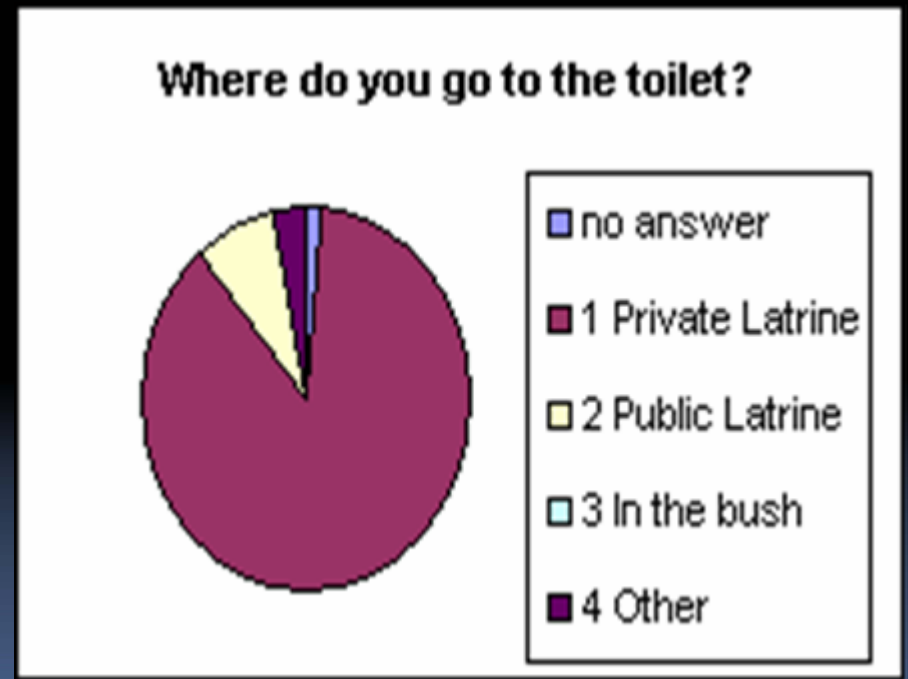
RESULTS AND DISCUSSION

- 71% showed that people perceive UDD toilets as a good and benefic system of sanitation
- Data showed a remarkable poor sanitation and the problem of wastewater outcome



Sanitation Facility and Problems

- Question: Where do you go to the toilet?
 - no answer: 2 families = 1.66%
 - Private latrine: 102 families = 85.00%
 - Public Latrine: 10 families = 8.33%
 - In the bush: 2 families = 1.66%
 - Other: 4 families = 3.33%



Sanitation Facility and Problems (Cont.)

- Low-income families :no toilet facility at home, use of public toilet ,few use pit latrines and bushes (RVCP provide them with VIP and EcoSan later after awareness raise)
- The middle-income households (36%) mainly use private pit latrines located in their homes.
- High-income category (17%) have WC toilets and septic tanks installed at their homes
- The maintenance of toilets in the middle- and high-income households is mainly the responsibility of women and girls (75% of asked people)

Examples of UDD toilets and Pictures as shown to people

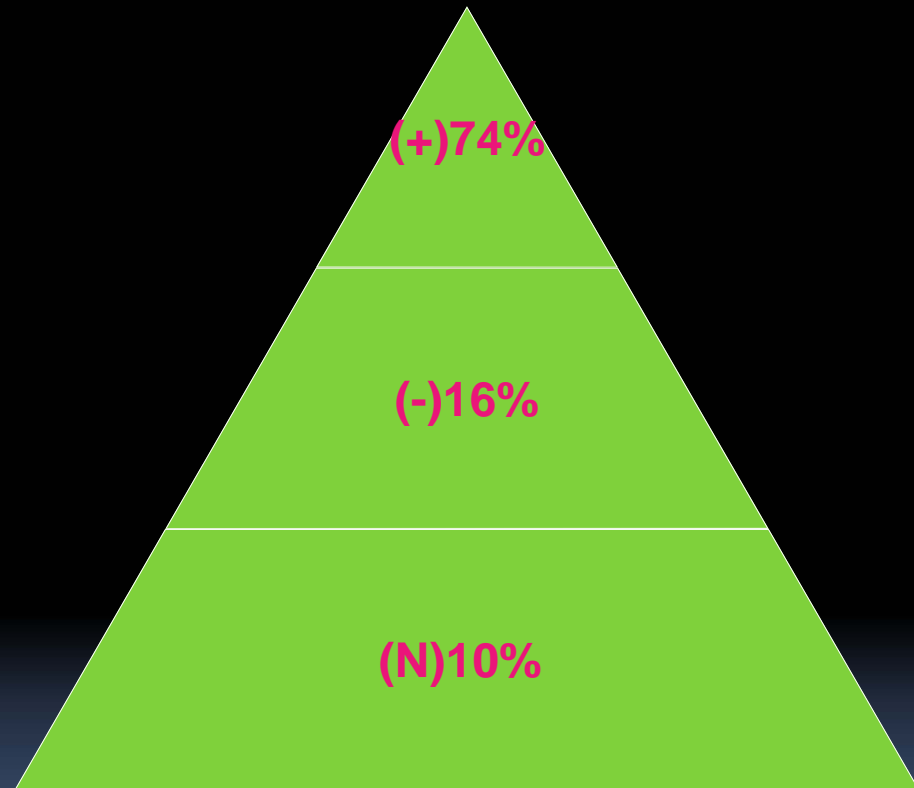


Examples of UDD toilets and Pictures as shown to people (Cont.)



First impression

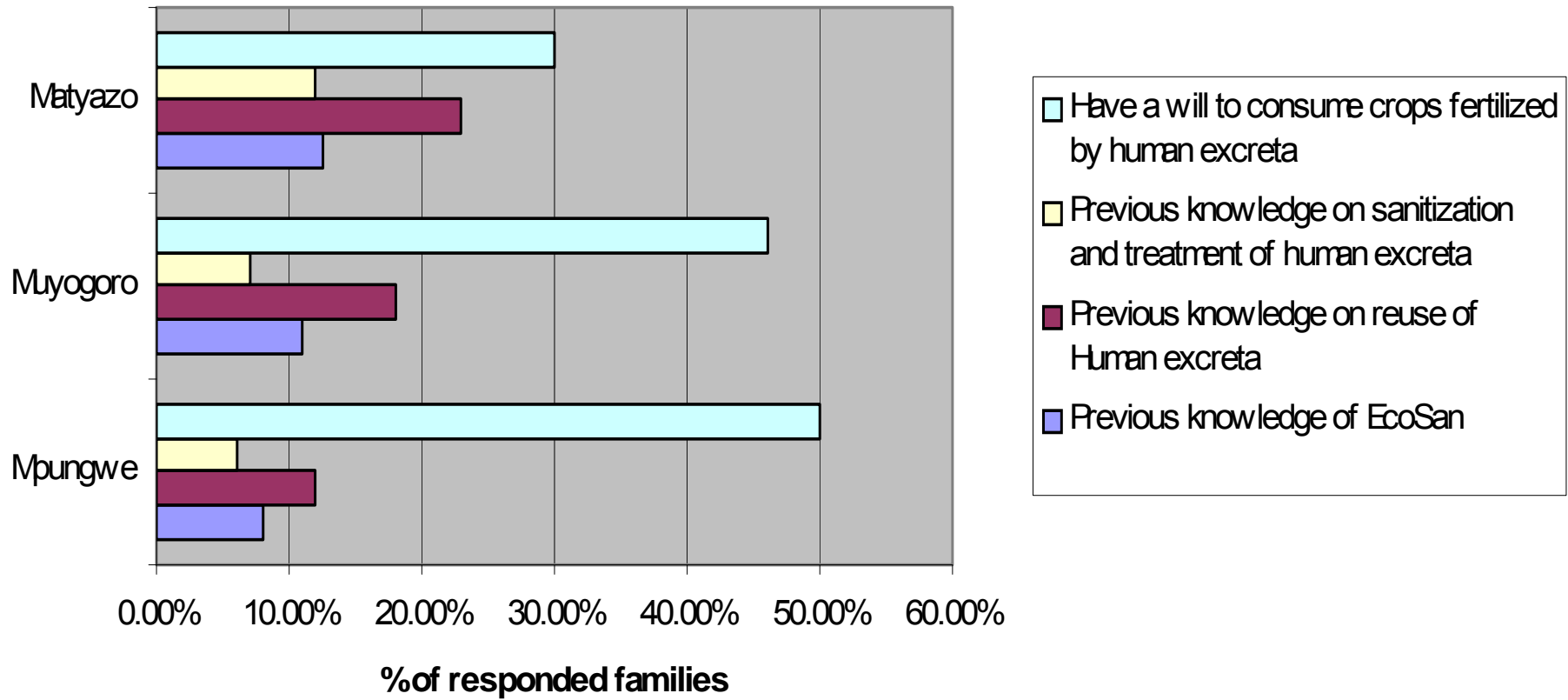
- Positive:74%
- Neutral:10%
- Negative:16%



Current level of awareness on EcoSan

- Residents in areas near Butare center town (Matyazo sub-sector) showed a higher level of previous knowledge on EcoSan (UDD toilets),
 - But a lower level of willing to use UDD toilets and consume crops grown up using human excreta
- Opposite case away from the center town.
 - The probable reason:their choice strongly influenced by their currently used toilet (WC,...)

Fig.2:Current level of awareness of ECOSANpractice amongst residents



LISTED CHOICE OPTIONS FOR PRI URBAN AREAS OF BUTARE TOWN

- Option 1:UDD toilet with solar drying chamber: squatting type
- Option 2:Poor flush no separation with a drying chamber(near center town:Matyazo)
- Option 3:UDD with biogas generation (Dry anaerobic treatment)

CONCLUSIONS

- People in poor places of Butare town still ignoring the use human excreta in food production
 - Small places to cultivate
 - Need of UDD toilets for demonstration.
- Waterless or water saving sanitation technologies may be appropriate for Matyazo very close to the centre town
- Sharing of toilet by many families:increase health problems (diarrhea...)
- Low awareness of re-use options for human waste in Matyazo sub-sector.
- Preferences for EcoSan depend on toilet in use
- Strong willingness to use EcoSan practices(if hygiene and technical aspect can be addressed)

RECOMMENDATIONS

- Address hygiene and technical aspect of Ecosan:
↑willingness to adopt its practices and technologies
- Waterless or water saving sanitation for Matyazo with permanent water scarcity.
- Use of these results by RVCP together with other factors to select sustainable sanitation systems incorporating EcoSan principles for its target group:
 - Matyazo, Muyogoro and Mpungwe Village (were still providing VIP toilets)

THANK YOU!

Murakoze - Merci

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