

POLICY BRIEF

WASTE MANAGEMENT BEHAVIOR

Professor Hans Joachim MOSLER, EAWAG, Zurich, Switzerland.

Anna GAMMA, EAWAG, Zurich, Switzerland.

Professor Abdoulaye DIAGNE, Consortium Pour la Recherche Economique et Sociale (CRES), Dakar, Senegal

PROJECT IDENTITY:

Project's name: Live With Water

Funding scheme: DFID

Project's partners: CRES, BG, GROUPE SENHOR, NIYEL, REFDAF, EAWAG, TPH Swiss, University of BERNE, MRUHCV and EVE.

Intervention's areas in Senegal: Yeumbeul nord, Yeumbeul Sud, Grand Yoff, Djidda Thiaroye Kao, Malika, Thiaroye Gare, Rufisque Ouest, Medina Gounass, Whakinane Nimzatt et Mbaou



Contact for more information:

- **Pr Abdoulaye DIAGNE**, Executive Director, CRES, cres@cres-sn.org

- **Nafissatou BALDE**, Project Manager, CRES nbaldesow@cres-sn.org

+221 33 864 77 57.

INTRODUCTION

This research component examined the contextual and behavioral factors contributing to behavioral change in the context of the project's waste management intervention.

The study revealed what people's practices of waste management in Dakar's suburbs are and how high their intention was to bring their household waste to the collection place. The contextual and behavioral factors underlying the intention for bringing the household waste to the collection place were assessed. A second aim was to examine the impact of several interventions, which the project planned to implement between the baseline data collection and the follow-up survey.



EVIDENCE AND ANALYSIS

In general the intervention group did not change differently compared to the control group from baseline to follow-up. However this was not surprising because a large part of the intervention group did not receive the full interventions. The Yeumbeul Nord group did receive the full intervention package and therefore we found large changes compared to the control group.

Summarizing the households in the Yeumbeul Nord group developed a bigger intention, habit, and commitment to bring the garbage to the collection place. This finding is very positive for the effectiveness of the intervention. It seems that the intervention reduced the perception of needed effort to bring the garbage to the collection place. It also had the effect of generating positive feelings towards this behavior and the expectation of having a safer and healthier environment. Additionally it created a positive attitude towards the community with regard to waste management behavior.

POLICY IMPLICATIONS

It can be concluded that people when having received the full interventions they perceive the community as more performing, caring about and approving correct waste management behavior. This fact is very encouraging to fostering community action and resilience with regard to climate change hazards.

RESEARCH PARAMETERS

Four research questions are addressed. The first two can be answered with the baseline data, the third and fourth can be answered with the implementation and promotion of the planned service for waste management.

- 1. Which are the crucial behavioral determinants for waste management practices?**
- 2. Which contextual factors predict waste management practices?**
- 3. How effective were the implemented promotion activities in changing the waste management practices?**
- 4. How effective were the implemented promotion activities in changing the behavioral factors of waste management practices**

From June to October 2017, quantitative data from 2962 respondents in Dakar's suburbs were gathered by a team of 50 male and female local employees in the research sector. All data were collected through structured face-to-face interviews on electronic devices. The interviews were carried out in the main local language Wolof.



All interviews were based on a structured questionnaire developed specifically for this study. The questionnaires contained items to measure the contextual and the behavioral factors of the RANAS model, the waste management behavior and habitual aspects of this behavior, and the intention to perform the behavior in the future.

Comparing control with treatment group only the variable Attitude effort changed significantly different meaning that the people in the treatment group perceive it now much less effortful to bring the waste to the collection place than in the baseline.

Comparing the treatment group of Yeumbeul Nord with the control we can state that the intervention created a much bigger intention, habit, and commitment to bring the waste to the collection place. It also reduced enormously the perceived time, effort, and difficulty to bring the waste to the collection place as well as the perceived disgust when bringing the waste to the collection place. Compared to the control group in Yeumbeul Nord the intervention increased massively that the people

- belief to contribute to a safer environment when bringing the waste to the collection place
- belief that this behavior will prevent children from getting a disease
- think that bad smells will be avoided
- think that many other people perform the behavior
- think that the community cares about bringing the waste to the collection place
- think that friends, family, and the community approve bringing the waste to the collection place

- think that they are able to bring the waste to the collection place.