

SUCCESS and SUSTAINABILITY INDICATORS

— a tool to assess primary collection schemes

Case study: Khulna, Bangladesh

*Jenny Appleton, Mansoor Ali
and Andrew Cotton*



Water, Engineering and Development Centre
Loughborough University
2000



Water, Engineering and Development Centre
Loughborough University
Leicestershire
LE11 3TU UK

© WEDC, Loughborough University, 2000

Any part of this publication, including the illustrations (except items taken from other publications where the authors do not hold copyright) may be copied, reproduced or adapted to meet local needs, without permission from the author/s or publisher, provided the parts reproduced are distributed free, or at cost and not for commercial ends, and the source is fully acknowledged as given below. Please send copies of any materials in which text or illustrations have been used to WEDC Publications at the address given above.

This publication is also available on-line at:
<http://www.lboro.ac.uk/wedc/publications/ssi.htm>

Appleton, J., Ali, M. and Cotton, A. (2000)
*Success and Sustainability Indicators:
A Tool to Assess Primary Collection Schemes: A Case Study of Khulna, Bangladesh,*
WEDC, Loughborough University, UK.

ISBN Paperback 0 906055 73 3

This document is an output from a project funded by the UK
Department for International Development (DFID)
for the benefit of low-income countries.
The views expressed are not necessarily those of DFID.

Designed and produced at WEDC

About the Authors

Jenny Appleton is a Research Assistant at WEDC. She graduated from the University of Nottingham with an MEng in Civil Engineering in 1999 and has since been working at WEDC, mainly in the field of solid waste management. She undertook the fieldwork for this study during a period spent in Bangladesh working with the Water and Sanitation Group, South Asia, Bangladesh.

Dr Mansoor Ali is a Project/Programme Manager at WEDC. A specialist in solid waste management for low-income countries, he has researched and published extensively on the subject and is currently involved with the research projects *Capacity Building*, *Micro-enterprise Development* and *Appropriate Landfilling*.

Dr Andrew Cotton is the Director of Urban Programmes WEDC. A specialist in urban infrastructure for low-income countries, some of his recent research includes micro-contracts, operation and maintenance, knowledge management and urban sanitation.

Acknowledgements

The following persons made valuable contributions to this research:

Local Collaborators

Dr Babar Kabir	Water and Sanitation Group, South Asia, Bangladesh
Dr Tanveer Ahsan	Water and Sanitation Group, South Asia, Bangladesh
Shafiul Azam Ahmad	Water and Sanitation Group, South Asia, Bangladesh
Monir Alam Chowdhury	Prodipan, Bangladesh

Others

Rod Shaw	WEDC, UK
Marielle Snel	WEDC, UK
Jon Rouse	Freelance Consultant

Contents

About the Authors	v
Acknowledgements	vi
List of Tables	ix
List of Figures	x
List of Photographs	x
Acronyms	xi
Glossary	xii
Introduction	1
1. Success and Sustainability Indicators for Solid Waste Collection Schemes	2
1.1 Primary solid waste collection schemes: An overview	2
1.2 Why do we need success and sustainability indicators?	3
1.3 The indicators	4
1.3.1 The users' perspective	4
1.3.2 The municipality's perspective	5
1.3.3 The NGO's perspective	6
1.3.4 The CBO's perspective	7
1.3.5 The local politician's perspective	7
1.3.6 The small contractor's perspective	8
1.3.7 The sweeper's perspective	8
1.4 Repetition of indicators	9
1.5 Guidelines for use of these indicators	9
2. Case Study: Khulna City	11
2.1 Solid waste management in Khulna	12
2.2 The solid waste management project	13
2.3 Communities studied	14
2.4 Methods used in fieldwork	14
2.5 Outcomes of fieldwork	14
2.5.1 The users' perspective	14
2.5.2 The municipality's perspective	17
2.5.3 The NGO's perspective	18
2.5.4 The local elected representative's perspective	18
2.5.5 The worker's perspective	19
3. Conclusions	21
3.1 An assessment of the success and sustainability indicators	21
3.2 Limitations of this study / Suggestions for further study	22
3.3 Overall conclusions	23
References	24
Bibliography	24

Appendix 1. The Revised Success and Sustainability Indicators	26
The users' perspective	26
The municipality's perspective	27
The NGO's perspective	28
The CBO's perspective	30
The local politician's perspective	30
The worker's perspective	31
The small contractor's perspective	32
The sweeper's perspective	32

List of Tables

Table 1: The users' perspective	4
Table 2: The municipality's perspective	5
Table 3: The NGO's perspective	6
Table 4: The CBO's perspective	7
Table 5: The local politician's perspective	7
Table 6: The small contractor's perspective	8
Table 7: The sweeper's perspective	8
Table 8: The high-income users' perspective	15
Table 9: The low-income users' perspective	16
Table 10: The municipality's perspective	17
Table 11: The NGO's perspective	18
Table 12: The drivers' perspective	19
Table 13: The collectors' perspective	20
Table 14: The users' perspective	26
Table 15: The municipality's perspective	27
Table 16: The NGO's perspective	28
Table 17: The CBO's perspective	30
Table 18: The local politician's perspective	30
Table 19: The worker's perspective	31
Table 20: The small contractor's perspective	32
Table 21: The sweeper's perspective	32

Figure

Figure 1: Map showing Khulna, Bangladesh

11

Acronyms

NGO Non-Governmental Organisation

CBO Community Based Organisation

KCC Khulna City Corporation

Tk Taka, currency of Bangladesh (1 US\$ \approx Tk50 in 2000)

Glossary

Demountable containers	Moveable containers used to collect waste
Eid	Islamic festival
Sweepers	Street cleaners employed by the municipality
Ward	Administrative section of the city
Ward commissioner	Elected representative of the Ward