## EEP/Shiree

## CMS 3 Methodology

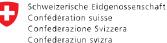
Brief



June 2016









## CMS3 uses evidence-based research to show the impact of the programme on over 1 million EEP/Shiree beneficiaries

CMS3 is a longitudinal panel survey designed by EEP/Shiree to track changes over time within and between a sample of extreme poor households surveyed annually in March between 2010 and 2016. CMS3 examined change in a range of factors in these same households: demographic, employment, health, land ownership, housing, water and sanitation, loan and savings, household assets, income and expenditure, food security, food diversity, empowerment, and nutritional status.

Whilst all households completed their programmes with EEP/Shiree after two years, they continued to receive follow up visits, supplementary support (where required), and savings and group support until 2016. The inclusion of "completed" households in subsequent CMS3 surveys reflects post-EEP/Shiree follow-ups which helps to monitor the impact of savings interventions, community support structures, and the sustainability of gains.

Through its annual CMS3 surveys EEP/Shiree aims to determine:

- Household annual change in socio-economic and empowerment status as a result of the EEP/Shiree programme;
- Intra-individual (primarily mother and under 5 year old children) annual change in nutritional status;
- Differences in nutritional, socio-economic status, and empowerment between new and old recruits within the same NGO, and in the longer term;
- Differences in nutrition, socio-economic status, and empowerment between participants from different NGOs;
- Differences between rural and urban cohorts.

Thus, part of the purpose is to monitor how different indicators of extreme poverty vary over time, by sex, and by location (rural/urban). By design, it does not show whether one NGO's approach is deemed better than another.

The current survey sample (excluding attrition) consists of six cohorts that were recruited at different times during the programme. All households in each cohort were randomly selected either before or just after, interventions commenced with those households. Thus each new cohort could act as a "rolling baseline".

Cohort 1 (2010)	384 households (64 households from each of the 6 NGOs which comprised Scale Fund Round 1 Phase 1).
Cohort 2	A further 128 households from Scale Fund Round 1 (64 urban households from DSK and 64 rural households from NETZ)
(March 2011)	households from DSK and 64 rural households from NETZ).
Cohort 3	192 households (64 households from each of Caritas, Concern and
(March 2012)	Oxfam, the Scale Fund Round 2 NGOs).
Cohort 4	384 households (64 from each of the Cohort 1 NGOs, but recruited
(2013)	under Scale Fund Round I Phase 2).
Cohort 5	320 households (64 from each of Green Hill, HKI, HSI, MJSKS and
(2014)	Shushilan which formed the "Scale Up" Fund).
Cohort 6	448 households (64 from each of the 7 Scale Funds Rounds 1 and 2
(2014)	NGOs (CARE, NETZ, UTTARAN, SCF, DSK, Oxfam, and Caritas)
	that formed the "Scale Out" Fund).

Panel/longitudinal surveys require much smaller sample sizes than cross-sectional surveys to show a significant effect. The CMS3 sample size (64 households from each NGO which made up each cohort) was based upon calculations which are sufficient to show significant changes in key socio-economic variables, whilst taking account of annual attrition. The sample size used is the smallest required to indicate a high probability of result accuracy (as measured by a power test). Accordingly, there is a high degree of confidence that CMS3 results are reflective of the EEP/Shiree "population" of households as a whole. The robust CMS3 methodology and planning means that attrition in the sample size is mainly due to temporary absence on the day of the survey, and that those not present do not represent a biased group. To date, observed attrition has been very close to that expected, which again supports the robustness of the methodology.

Initially, in 2010 and 2011, three surveys were carried out each year. However, as these did not vary much, only annual surveys have been undertaken at the same time each year since 2012, which has also served to significantly reduce survey costs. Households recruited in Cohort 1 have been visited eleven times up to 2016, of which seven have for been annual surveys. As of 2016, the dataset has information on over 1,856 households (approximately 7,000 individuals) and over 20,000 variables.

The CMS3 information is collected by trained staff working through a standardised, structured questionnaire. Additionally, the study is augmented by anthropometric measurements (height and weight of all children under 5 years of age, their parents, and adolescents) to help measure nutritional status, such as Body Mass Index for adults, and, for children under 5 years, stunting, underweight, and wasting. A finger prick of blood is also taken in order to determine haemoglobin concentration and the extent of anaemia in target groups<sup>1</sup>. Ethical permission for these studies is obtained from the Bangladesh Medical Research Council under the Ministry of Health and Family Welfare (MoH&FW).

The University of Cambridge analyses the data and produces the annual CMS3 reports and, for the last two years, the annual graduation reports. It takes about three months from receipt of the cleaned dataset to completion of all the analyses as well as generation of the reports. The statistical analyses are sophisticated and use a mixture of univariate and multivariate analyses (e.g. Repeated Measures Analysis of Variance) to examine changes within households.

**EEP/Shiree** 

June 2016

 $<sup>^{\</sup>mathrm{I}}$  Individuals found to be severely anaemic are taken to hospital for treatment on the same day by the CMS3 survey team of EEP/Shiree