Ghana LEAP 1000 Impact Evaluation: Overview of Study Design

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The programme

This brief documents the impact evaluation design of the Ghana Livelihood Empowerment Against Poverty (LEAP) 1000 programme. LEAP 1000 is an extension of LEAP, the Government of Ghana’s flagship poverty alleviation programme which, as of early 2016, reaches more than 150,000 households in all ten regions and has an expansion planned for an additional 50,000 households in 2016. LEAP 1000 is implemented by the Department of Social Welfare of the Ministry of Gender, Children and Social Protection (MoGCSP) and is being piloted in ten districts in two regions, Northern and Upper East, targeting about 6,000 households initially.

LEAP 1000 is targeted to pregnant women and mothers with infants under 15 months. Beneficiary selection is done through a demand-driven targeting approach. Mobile units are deployed to selected communities and invite women meeting the targeting criteria to apply at a central location in the community. Women who apply are subjected to a short proxy means test which is used to calculate a poverty score for each household. The MoGCSP has set a poverty threshold and households with a poverty score below the threshold are enrolled into the programme, while those with a score above the threshold are not enrolled. Households enrolled into LEAP 1000 receive a bimonthly transfer of 64, 76, 88 or 106 cedi (Ghanaian currency), based on the number of beneficiaries in the household. Besides pregnant women, children under 15 months and mothers of children under 15 months, the LEAP programme also counts orphaned and vulnerable children, elderly poor and people with a disability amongst the beneficiaries in a household. In addition, beneficiaries are enrolled into the National Health Insurance Scheme (NHIS), providing access to free outpatient, in-patient, dental and maternal health services.

Impact evaluation overview

The impact evaluation is led by the UNICEF Office of Research-Innocenti, in collaboration with the Institute of Statistical, Social and Economic Research (ISSER) of the University of Ghana, the University of North Carolina (UNC) at Chapel Hill and the Navrongo Health Research Centre (NHRC). The impact evaluation covers a 24-month period, and consists of a longitudinal, quantitative study with an embedded qualitative component. Baseline surveys were conducted from July to September 2015, prior to the first bi-monthly disbursements of transfers. Quantitative follow-up surveys will occur from July to September 2017, and two rounds of qualitative follow-up surveys will occur in September/October 2016 and September/October 2017. Ethical approval for the quantitative study was granted by the Ethics Committee for the Humanities (ECH) at the University of Ghana, while approval for the qualitative study was granted by the NHRC Institutional Review Board (IRB) and UNC IRB.

The overarching research question of the impact evaluation is to what extent cash transfers reduce child poverty and vulnerability and improve child nutritional status. Furthermore, the evaluation explores the mechanisms and processes that impact (or impede impact) on child health and nutrition as a result of cash transfers. The specific research questions are:

1. How does the LEAP 1000 affect chronic malnutrition (height for age)?
2. How does LEAP 1000 affect health inputs such as use of preventive and curative care services, infant and young child feeding, and diet diversity?
3. How does LEAP 1000 affect child health outcomes such as diarrhoea, fever, and upper respiratory illness?
4. What factors, including recipient characteristics (age, education), gender of household head, among others, moderate programme impacts on child nutritional status?
5. How does LEAP 1000 affect household poverty?
6. How does LEAP 1000 affect the well-being of the primary caregiver (e.g. stress, mental health, life satisfaction)?
Quantitative Impact evaluation design

The impact evaluation employs a longitudinal regression discontinuity design (RDD; see methodological brief Quasi-Experimental Design and Methods for details regarding RDD). The RDD exploits the use of a threshold applied to a continuous programme eligibility index (a proxy means test). This entails comparing households who are just below the proxy means test cut-off score (and thus eligible for LEAP) to those just above the cut-off score (and thus not eligible for LEAP). These households are likely to be very similar since they have virtually identical proxy means test scores. The group of households above the cut-off can thus serve as a valid comparison group for households below the cut-off who receive the programme. Two conditions are required for validity of the RDD methodology: 1) a continuous eligibility index and 2) a clearly defined and exogenously determined threshold. Both of these conditions hold in case of the LEAP 1000 programme. The poverty score calculated from the proxy means test during application constitutes the continuous eligibility index, and the MoGCSP set the threshold based on the number of households for which funding was available during the pilot. This is considered an exogenous reason.

LEAP 1000 is implemented in ten districts in two regions. Five districts were selected for the impact evaluation: Yendi, Karaga and East Mamprusi in the Northern Region and Bongo and Garu Tempane in the Upper East Region. A total of 8,058 households applied for LEAP 1000 in these districts, of which 3,619 (45%) had a poverty score below the threshold and 4,439 (55%) households had a score above. The impact evaluation selected the 1,250 households closest to the threshold on each side of the line (see Figure 1) for a total sample size of 2,500 households, of which 2,497 were successfully interviewed during the baseline survey. As the sample consists of households close to either side of the threshold, the impact evaluation will estimate the local average treatment effect. This means that the impacts will be relevant to households close to the threshold, but not necessarily for those households that are further away from the threshold.

The impact evaluation survey instrument is multi-topical, covering items such as household food security, consumption, child health and nutrition and characteristics of the main caregiver. More than 3,000 children under five were measured for their height and weight. In addition, health facility and community price questionnaires were administered at baseline.

Qualitative impact evaluation design

For the embedded qualitative component of the evaluation, 20 treatment households were selected to participate in three rounds of in-depth, semi-structured interviews with the LEAP 1000 beneficiary scheduled to occur at baseline, 12 months, and 24 months (see Brief 2 in this series, Utilizing Qualitative Methods in the Ghana LEAP 1000 Impact Evaluation). In addition, the qualitative study employs an observational component to document the context of the household and larger community during the visit for the qualitative interview. Baseline qualitative interviews focused on the composition and dynamics of the households and a description of the household situation in terms of the key outcomes targeted by LEAP 1000, including food security, child nutrition, economic well-being, access to health care, and gender dynamics. In addition, an inventory of sources of social support and social capital, as well as stresses on the household is elicited. The two follow-up interviews will focus on monitoring changes in these outcomes and eliciting stories, experiences, and explanations for how and why changes do or do not occur.