KISEDP Article (Kalobeyei Integrated Socio-Economic Development Programme)

KIDESP: economic development plan focused on providing more opportunities for refugees and host communities, the Kalobeyei Socioeconomic Profiling study contributes to this initiative

* KIDESP Strategic objectives:
  + Create environment that is attractive to private sector investors to promote the economy
  + Invest in socio-economic infrastructure, strengthen capacity for national service delivery
  + Facilitate innovative aid delivery and increase financial inclusion to promote self reliance and reduce poverty amongst refugees and host communities
  + Increase access to higher education/specialized education to enable refugees and members of the host community to take part in the local economy
* Partners will conduct socio-economic profiling exercises which will be used in later phases to target poor populations w/ cash transfers and inclusive social safety nets
* “…using cash based transfers as a vehicle for including refugees in development processes, national structures and safety nets.”
* KISEDP phases
  + Phase 1: Development of five year plan to inform programming interventions – socio-economic profiling, continuing to fund basic social services but scaling up aid delivery modalities (2018-2022)
  + Phase 2: Ensuring sustainable service provision and economic opportunities for refugees. Improving self-resilience and reducing poverty (2023-2027)
  + Phase 3: Assuming some refugees will return to Sudan after crises ends. Will continue to build economic and social infrastructure to continue to provide for remaining refugees/host communities. Help Kalobeyei, Kakuma and other wards in Turkana West to become an inclusive hub of regional trade and economic collaboration w/ other countries
    - Due to locally available skilled labor, ability to produce goods to meet demand
* Contributions to KISEDP:
  + The international community plans to increase and then stabilize their contributions during phase 1
  + The government, World Bank, IFC/private sector contributions will gradually increase
* KISEDP planned goals (through government policy initiatives, sending in community health workers, diversify water resources etc.)
  + Increase quality and cost effectiveness of health services
  + Increase access and equity to formal/non-formal education/training services for community members and refugees
  + Create safe, equitable, and adequate water supply
  + Strengthen the capacity of providers to provide specialized services to refugees/host communities
  + Facilitate integrated urban development
  + Creating innovative, modern agriculture, livestock and fisheries sectors
  + Sustainable and permanent housing through cash based interventions
* A Multi-Purpose Cash Grant (MPG) approach will be rolled-out to enable refugees to meet needs according to their level of vulnerability
  + Refugees in need are identified and their economic vulnerability analyzed based on a min. level of expenditure needed to meet the costs of living as well as requirements beyond their immediate consumption needs (ex. education, livelihoods).

A POOR MEANS TEST? ECONOMETRIC TARGETING IN AFRICA

* PMT: Commonly, weights in proxy means test are identified based on regression coefficients for log(consumption)/log(expenditure) as a function of observable covariates (so consumption is the y variable in the regression)
  + The regression is applied to survey data and then used to make “out-of-sample” predictions on the relevant population
* The PMT will work less well towards the extreme ends of the consumption distribution
  + PMT tends to under-estimate those who are very poor
* Measures of targeting effectiveness: exclusion error, inclusion error, normalized targeting differential (the mean transfer made to poor should be less than the mean transfer to non-poor – usually used for uniform transfer)
  + Also type 1 and 2 errors
    - Type 1 error: the proportion of the (ineligible) non-poor who are assigned a program targeted to the poor
* Standard proxy means tests (PMTs) often helps filter out the non-poor, but excludes many poor people (diminishing the impact on poverty)
* Basic income schemes/transfers using a demographic score card seem to do similarly well, or almost as well, as PMT at reducing poverty
  + Most methods bring the poverty rate down 16%
  + Extended PMTs (PMT w/ more variables) reduce poverty more than basic PMTs
  + Quantile regression using poverty rate as the quantile: results in a reduction of exclusion errors, but higher inclusion error, high reduction of poverty in uniform budget case
    - Quantile Regression is calculating a PMT to see how a specific quantile in the distribution changes w/ the covariates
  + PLS Regression: better at covering the poor, but predicts too many households are poor
    - PLS Regression: regression placing higher weight on the squared errors of poor people, “poverty weighted least squares”
  + Basic PMT does only slightly better than universal basic income on the same budget
  + Categorically targeting households (specifically targeting households w/ children, elderly family members etc.) comes close to performing as well as basic PMT
* “There is a clear pattern in our results whereby the exclusion error rate is generally a better predictor of the poverty impact of PMT than the inclusion error rate”
* However, none of the targeting methods included bring the poverty rate below ¾ of its initial value (even w/ a budget to eliminate poverty and full information)

**Retooling Poverty Targeting Using Out-of-Sample Validation and Machine Learning**

* Goal of targeting is to minimize rates of leakage (benefits reaching those who don’t need them) and under coverage (benefits not reaching those who do need them)
* PMT tools are typically developed by assignment of weights to household characteristics.
  + Household-level income/expenditures or poverty status are regressed on these characteristics.
  + Once a PMT tool has been developed from a sample from a particular population, the development practitioner can apply the tool to the subpopulation selected for intervention to rank or classify households according to PMT score.
  + The model accurately identifies thresholds within that previously available data.
  + However, it is important that they perform well not only within the data set, but also with new data sets or samples.
* **Aim:** prioritization of the out-of-sample performance of PMT targeting tools can substantially improve their out-of-sample accuracy. 2 methods of prioritization
  + **Method 1**: Select a tool based on its cross-validation performance
  + **Method 2**: Using stochastic ensemble methods, which have cross-validation built in, to develop the tool.
* **Results:** Cross-validation improved the total accuracy, while the stochastic method did not improve total poverty accuracy for a proxy-means test.

**Our Data:**

* The objective of the survey was to reach all refugee households living in Kalobeyei.
* Data is self-weighted.
* Data was collected in 11/18-1/19 surveying about 6004 households.
* Two different surveys were administered with a vast range of socio-economic indicators.
* All households received the basic questionnaire, while only about 18.5% of the total household were given an extended questionnaire. Subset found with random sampling.