Vulnerability Assessment Framework
IATF Meeting - 14 Jan 2015
A visual walkthrough of the VAF so far...
VAF Scope defined

- 12 VAF steering committee members define scope of the VAF
- Elements include
  - Cross-sectoral data collection
  - Unified definitions of vulnerability
  - User interface to access data
  - Appeals system
World Bank analysis and modelling

- World bank uses Home Visit data to develop an econometric model to predict expenditure
- Model can be applied to ProGres data and define Welfare/Vulnerability across all registered refugees
Data collection form developed

- Cross-sectoral questionnaire developed during inter-agency workshop and incorporated into home visit form
- VAF data collection deployed to field via tablet devices
- 15,000 cases surveyed to date
Econometric modelling on data collected

- Statistical model developed to predict household expenditure
- 8 variables from the survey can predict expenditure
- Methodology and results ratified by World Bank

\[
\min \sum_{i=1}^{n} (Y_i - \hat{Y}_i)^2 \\
= \min: e_i^2 + \cdots + e_n^2 \\
\frac{\partial \text{RSS}}{\partial \beta_1} = -2 \left( Y_i - \beta_0 - \beta_1 x_i \right) = 0 \\
\Pr(Y_i = 1|x_i) = \int_{-\infty}^{\infty} \frac{1}{\sqrt{2\pi}\sigma^2} e^{-\frac{(y_i - x_i \beta)^2}{2\sigma^2}} \, dx = \Phi(x_i \beta) \\
\text{RSS} = \sum_{i=1}^{n} (e_i)^2 = (Y_1 - \beta_0 - \beta_1 x_1)^2 + \cdots + (Y_n - \beta_0 - \beta_1 x_n)^2 = \sum_{i=1}^{n} (Y_i - \beta_0 - \beta_1 x_i)^2
\]
Appeals interface built to assist with WFP cuts

- VAF Appeals database version 1 developed
- VAF Appeals portal piloted to support WFP appeals
- 6,400 appeals logged within in the database
- Over 850 appeals reviewed
- UNOPS team joined (Jan 2015)
Multidimensional sector scores defined

- Sector level scoring calculations drafted
- Many data points identified to assess vulnerability levels
- Analysis of frequency of data points recorded
- Sectors currently revising sector trees
VAF survey portal draft

- Portal developed to visualise data collected
- Interactive graphical filters allow data analysis
2015: Timeline for development

Jan
- Baseline survey
- Scoring validation home visits
- Sector level scores developed in database
- MOUs drafted for VAF partners
- VAF soft launch
- VAF products customised for sectors
- Develop coordination module

Feb
- VAF partners use VAF data collection form

Mar
- Scoring validation home visits
- VAF products customised for sectors
- Develop coordination module