**Perceptions of Environmental Change & Leakage Data Analysis Plan**

**Research questions:**

**1 –** How do perceived forest change, theft from outsiders, and formal institutional history interact to affect peoples' support for limiting in-group harvest & monitoring protected areas.

1. Outcome variables
   * Number of patrols participated in the last month, 2.2.6
   * Support for limiting in-group harvest
     1. Latent variable from 2.4.0 – 2.4.4 & 2.2.8
2. Predictor variables:
   * Perception of resource regrowth rate
     1. Factor or principal components analysis of, 2.1.0 – 2.1.3
   * Perception of mangrove loss
     1. Percent of cover lost in the last year (from PM activity)
   * Institutional history
     1. For outcome variable 1, 2.2.1, who created the area.
     2. For outcome variable 2, 2.4.5, who enforces these rules.
     3. Actual shehia history from Monique’s interviews.
   * Perception of theft
     1. How many people from other shehia come here to cut mangroves each week, 2.3.1
     2. Have they seen theft with their own eyes, 2.2.7
   * Age, Sex, Education
     1. 1.1.7, 1.1.8, 1.1.10

**2 –** Does leakage specifically have a different effect on peoples' support for protected areas/planting compared to general theft.

1. Outcome variables
   * Number of patrols participated in the last month, 2.2.6
   * Percent of planting events attended, 2.2.12 & 2.2.13
2. Predictor variables
   * Institutional history
     1. For outcome variable 1, 2.2.1, who created the area.
     2. For outcome variable 2, 2.4.11, who hosts the planting events.
     3. Actual shehia history from Monique’s interviews.
   * Proportion of stealing shehia they perceive as having conservation areas for mangroves
     1. Number of thieving shehia 2.3.3
     2. Number with conservation areas 2.3.5
   * Age, Sex, Education
     1. 1.1.7, 1.1.8, 1.1.10