National Solidarity Program

Randomized Impact Evaluation

Methodology & Baseline Survey

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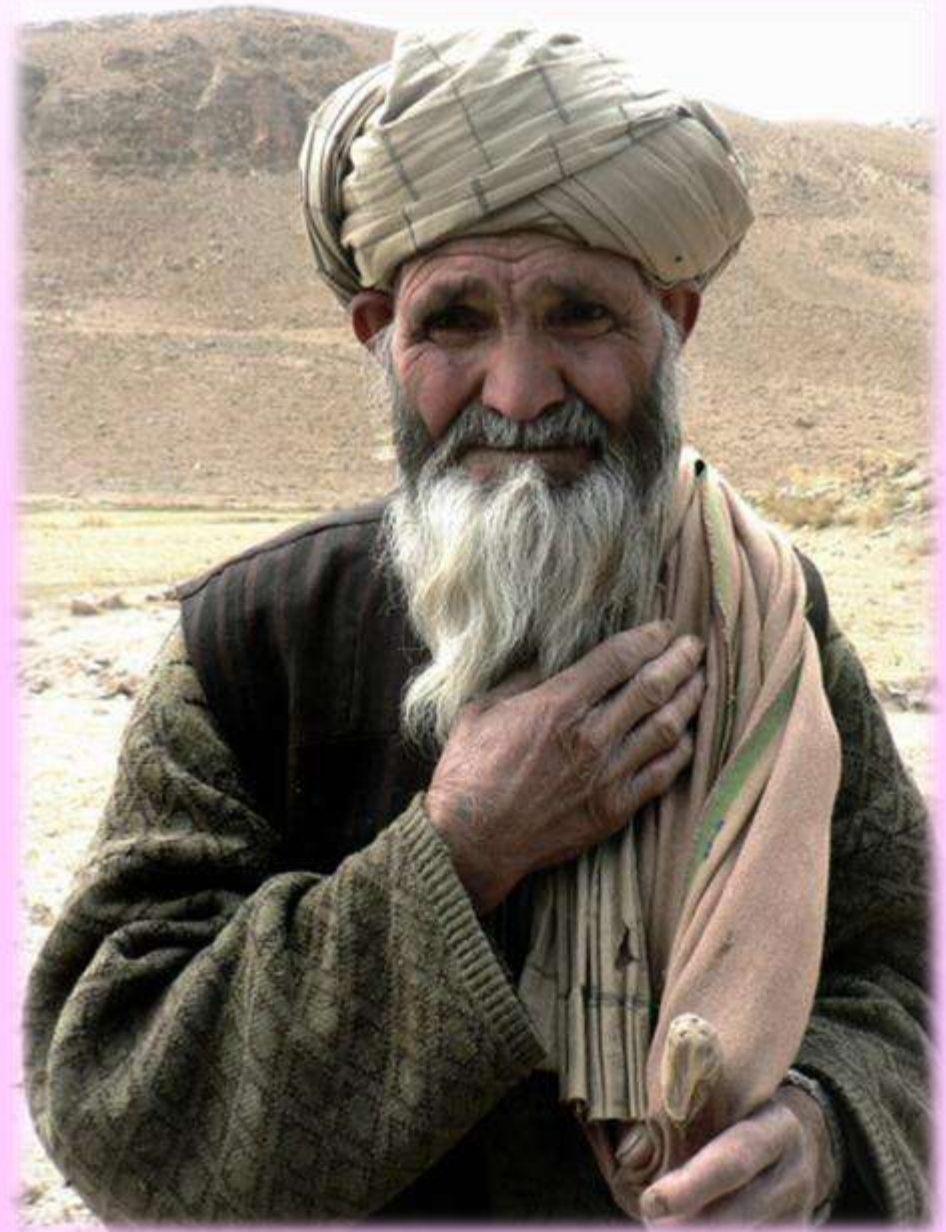
Evaluation Overview



Goals

Assess **impact of NSP** for donors, gov't

- Does NSP change governance structures, gender roles etc.?
- Does NSP improve livelihoods, access to essential services etc.?

Create knowledge to make aid more effective

- Efficacy of externally-imposed institutional change
- Efficacy of CDD as service delivery mechanism in post-conflict, low-capacity environment

Test **potential refinements** in NSP implementation strategies

- Can a change in the way CDC is elected improve outcomes of interest?
- Is one way of selecting sub-projects better than another?

Historical Timeline

March 2006:	Initial discussions with World Bank & NSP
Sept. 2006:	Initial discussions with NSP FPs
Nov. 2006:	Meeting with H. E. Ehsan Zia
Dec. 2006:	Agreement with VAU for participation in baseline survey
Jan. – Mar. '07:	Consultations with FPs & NSP on evaluation structure
Jun – July. '07:	Selection of 10 "evaluation districts" & participating FPs
	Consultations with FPs & NSP on survey instruments and STI design
Apr. 2007:	Initial round of pilot testing of Baseline Survey instruments
May 2007:	Preliminary date for baseline survey launch (postponed)
July 2007:	Final round of pilot testing of Baseline Survey instruments
August 2007:	Launch of Baseline Survey
September 2007:	Conclusion of Baseline Survey
October 2007:	Commencement of CDC Election Monitoring
November 2007:	Commencement of processing of Baseline Survey data
December 2007:	Commencement of Sub-Project Selection Monitoring
February 2008:	Receipt of normalized Baseline Survey database / Coding of normalized Baseline Survey database
February 2008:	Commencement of processing of Election Monitoring data for 5 districts

Two Parts

1. **Assess Impact of NSP**

   (Baseline and Follow-Up Surveys)

2. **Test Alternative Strategies of Program Implementation**

   (Sub-Treatment Interventions [STIs])

Part 1: Impact of NSP

Goal: Rigorously assess impact of NSP

Methodology: Over 2-3 years, repeatedly survey 250 "treatment communities" and 250 "control communities"; Compare changes in outcomes of interest (measured from surveys) between treatment and control groups

Data: 3 rounds of household & focus group surveys of ≈13,000 male and female villagers in 500 "evaluation communities":

1. "Before-NSP" (Baseline) Survey [August / September 2007]
2. "During-NSP" (1st Follow-Up) Survey [> Autumn 2008]
3. "After-NSP" (2nd Follow-Up) Survey [> Summer]

Progress-to-Date: Baseline Survey completed and processed; Under verification at VAU

Part 2: Alt. Strategies (STIs)

Goal: Test alternative strategies of implementing NSP

Methodology: 250 "treatment" communities assigned 1 of 2 different CDC election methods and 1 of 2 different sub-project selection procedures; Effect of different strategies assessed through CDC election results, selected sub-projects, sub-project quality, and general outcomes

Data: 3 Surveys; CDC Election Monitoring, Sub-Project Selection Monitoring, and Sub-Project Implementation Monitoring, Sub-Project Completion Assessment; CDC Election Results and Sub-Project Selections

Progress-to-Date: CDC elections held in 90% of treatment communities; Sub-project selection completed in half of treatment communities

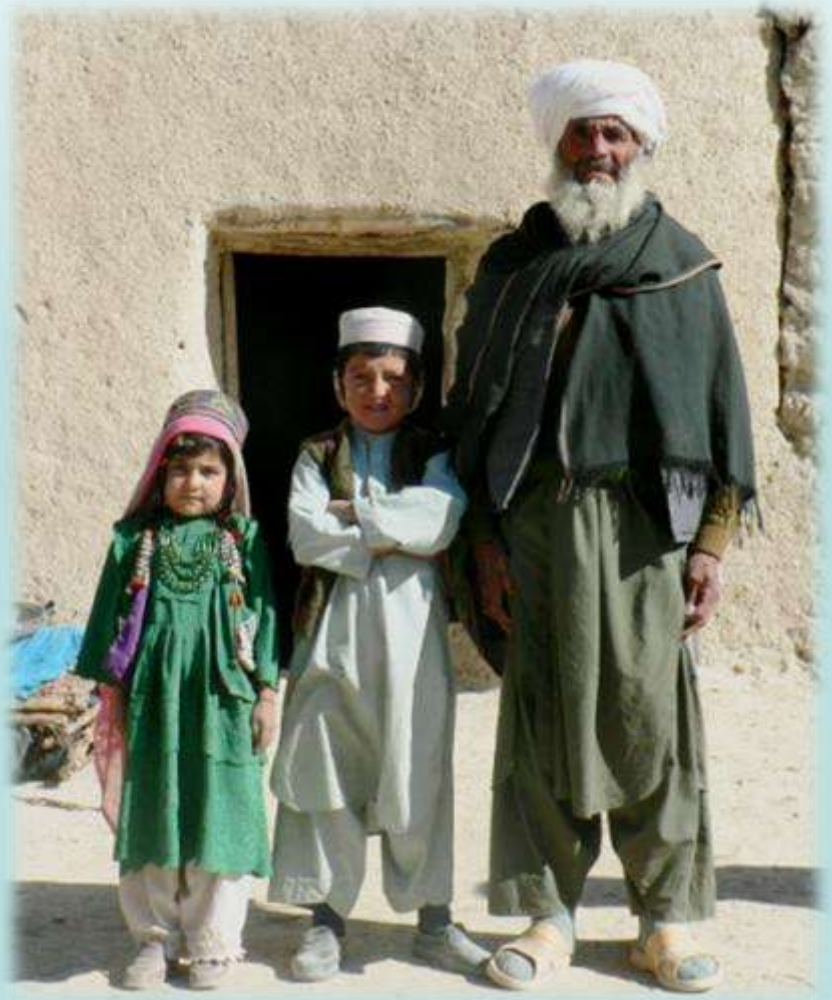
Part I

Impact of NSP

Roadmap: Part I (Impact)

1. **Hypotheses**
   - Assess impact of program on: (1) economic and social welfare; (2) institutions and governance
2. **Sample**
   - 500 villages in 10 districts in 6 provinces in W, N, C, & E Afghanistan
3. **Methodology**
   - NSP randomly assigned to 250 of 500 evaluation communities
4. **Baseline Survey Data**

Hypotheses (Impact)



Purpose of Hypotheses

- Ex-ante "*loose predictions*" of what we expect to happen
- Informed by on past research, existing theory, previous experience, and intuition
- Informs on data that will be necessary to collect to answer questions of interest
- Quantitatively 'tested' by study and either 'accepted' or 'rejected'

Three Sets of Hypotheses

1. Impact of NSP on: **Social & Economic Welfare**

2. Impact of NSP on: **Governance & Institutions**

3. Interaction of NSP with **Pre-Existing Conditions**

Hypotheses: Social & Econ. Welfare

1. NSP will improve access to services
2. NSP will increase levels of consumption & assets
3. NSP will reduce within-village income inequality
4. NSP will increase levels of production (agricultural yields)
5. NSP will result in a diversification of production (crops grown)
6. NSP will reduce borrowing for consumption and increase borrowing for investment

Hypotheses: Institutions & Governance

1. NSP will change structure of village governance
2. NSP will improve perceptions of local governance
3. NSP will increase participation of women in governance
4. NSP will increase levels of interpersonal trust
5. NSP will increase participation of villagers in local governance
6. NSP will improve perceptions of central government

Hypotheses: Interaction Effects

1. NSP will work less effectively in 'divided villages' and may increase incidence of disputes in villages with pre-existing feuds
2. 'Elite-capture' of CDC and sub-projects will occur more in unequal communities than in equal communities
3. NSP will have the largest impact of female participation in governance where female participation is neither low nor high
4. NSP will have greatest impact on village institutions where pre-existing structures of governance are weak

Outcomes of Interest

Social & Economic Welfare

- Consumption
- Production
- Assets
- Incidence and Purporse of Borrowing
- Infrastructure
- Access to Services

Governance & Institutions

- Governance Structures
- Activities of Elites
- Dispute Incidence & Resolution
- Community Trust
- Political Participation
- Attitudes towards Authority, Tax etc.

Evaluation Sample

Sample Overview

- 10 Evaluation Districts
- 50 Evaluation Communities / Evaluation District
- How were Evaluation Districts and Communities selected?

10 Evaluation Districts

Criteria for Selection:

- **'New' NSP-II Districts** (40 NSP communities for NSP-II)
- **Number of Villages**
  - Minimum of 65 villages: 25 villages for control group + 40 villages to receive NSP
- **Consent of FP**
- **Security**
  - Enumerator teams to spend 1 month in district; NSS/VAU advised

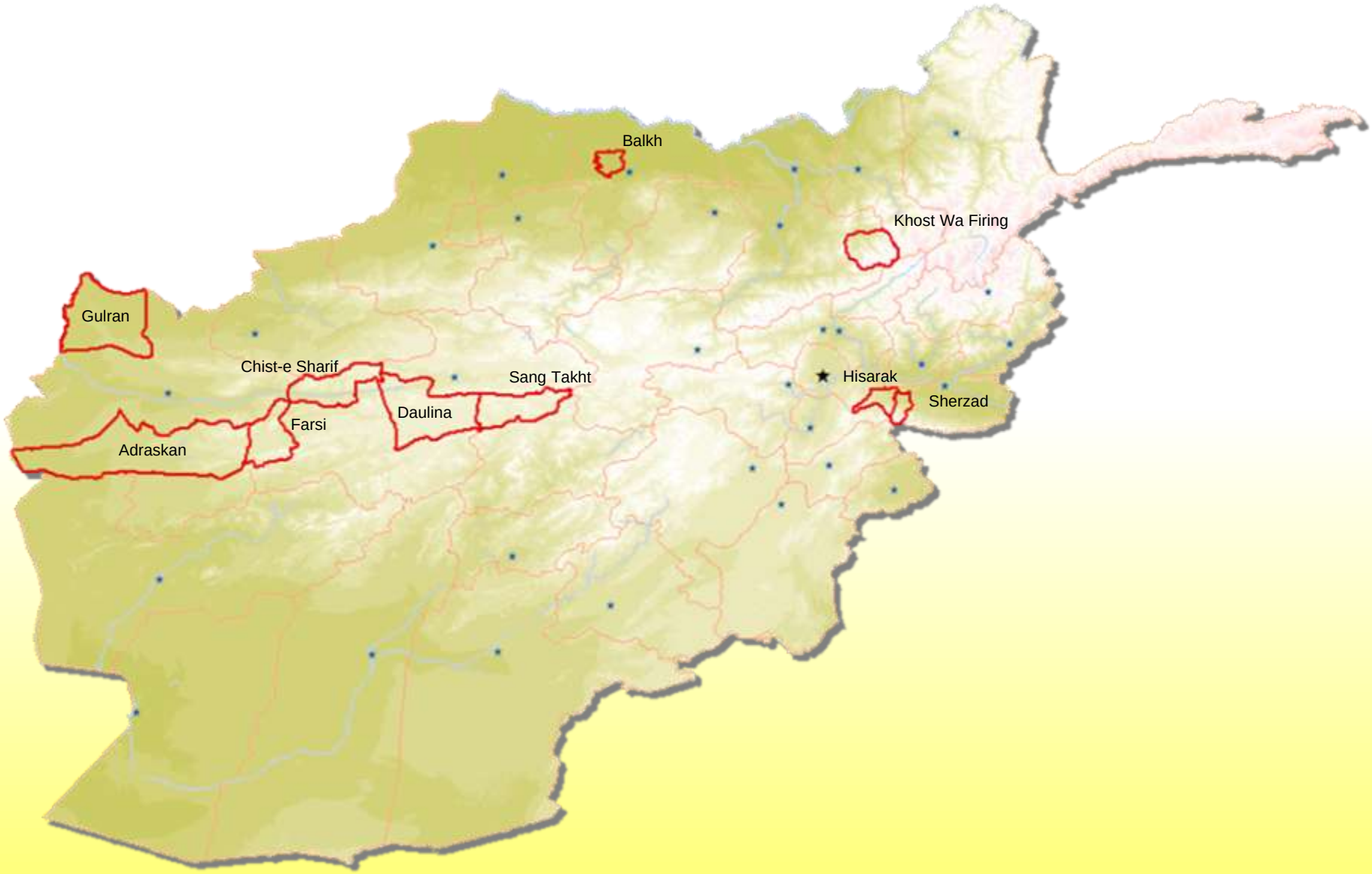
10 Evaluation Districts:

- **Balkh**: Balkh; **Baghlan**: Khost Wa Firing; **Daykundi**: Sang Takht; **Ghor**: Daulina; **Herat**: Adraskan, Chisht-e Sharif, Farsi, Gulran; **Nangarhar**: Hisarak, Sherzad

Participating FPs:

- **AfghanAid**; **CHA**; **InterCooperation**; **IRC**; **NPO/RRAA**; **Oxfam**; **People In Need**

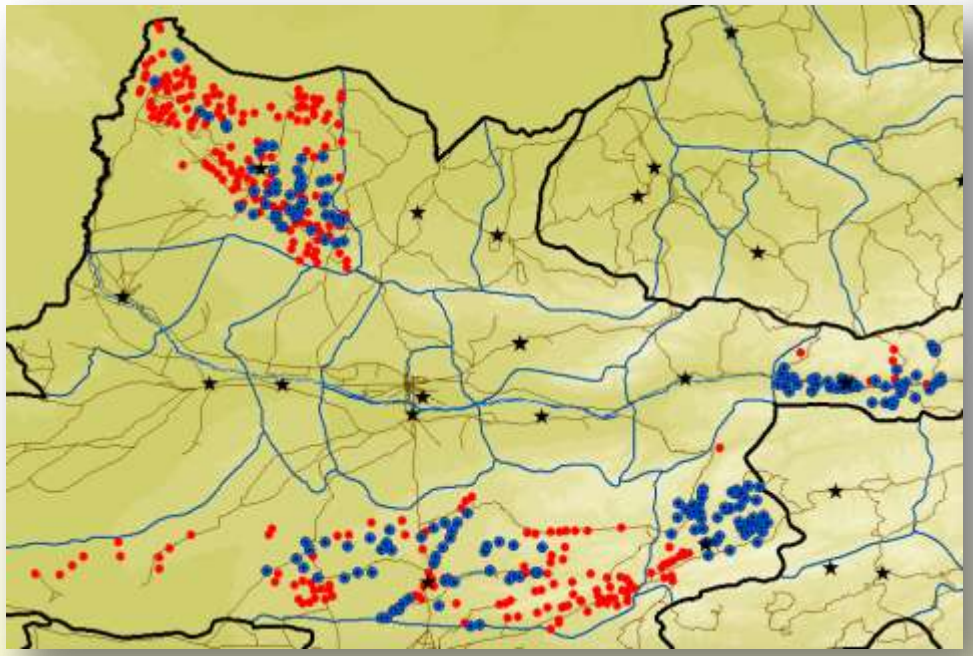
10 Evaluation Districts

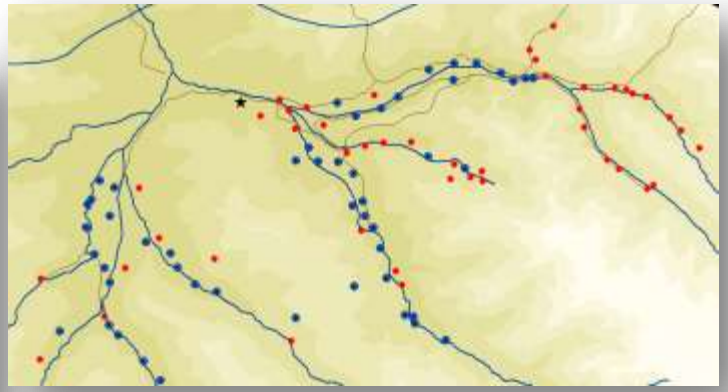


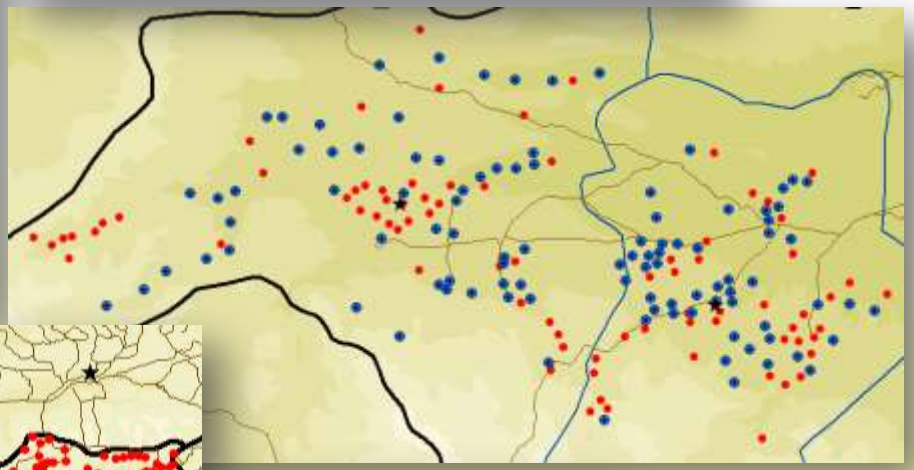
500 Eval. Communities

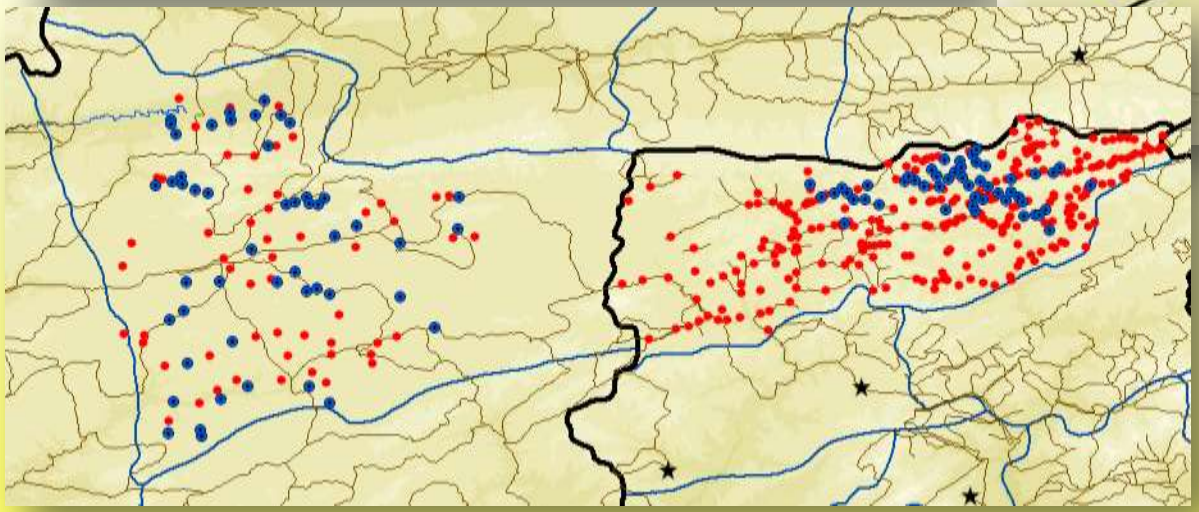
- Participating FPs issued CSO **listing of villages** in district (w/ data on population and infrastructure)
- FPs and local authorities asked to **select 50 evaluation communities** from list
  - 50 evaluation villages to be included in baseline and follow-up surveys
  - 25 of 50 selected to receive NSP via matched-pair randomization procedure
  - Necessary to ensure evaluation did not create logistical difficulties for participating FPs
- FPs and local authorities **select 15 priority villages** to receive NSP, but to be excluded from evaluation
  - Necessary to ensure preferences for targeting could be met in the 10 sample districts
  - Evaluation team vetted lists of 15 priority villages to ensure no overlap with 50 evaluation villages

500 Eval. Communities









Methodology

Methodology

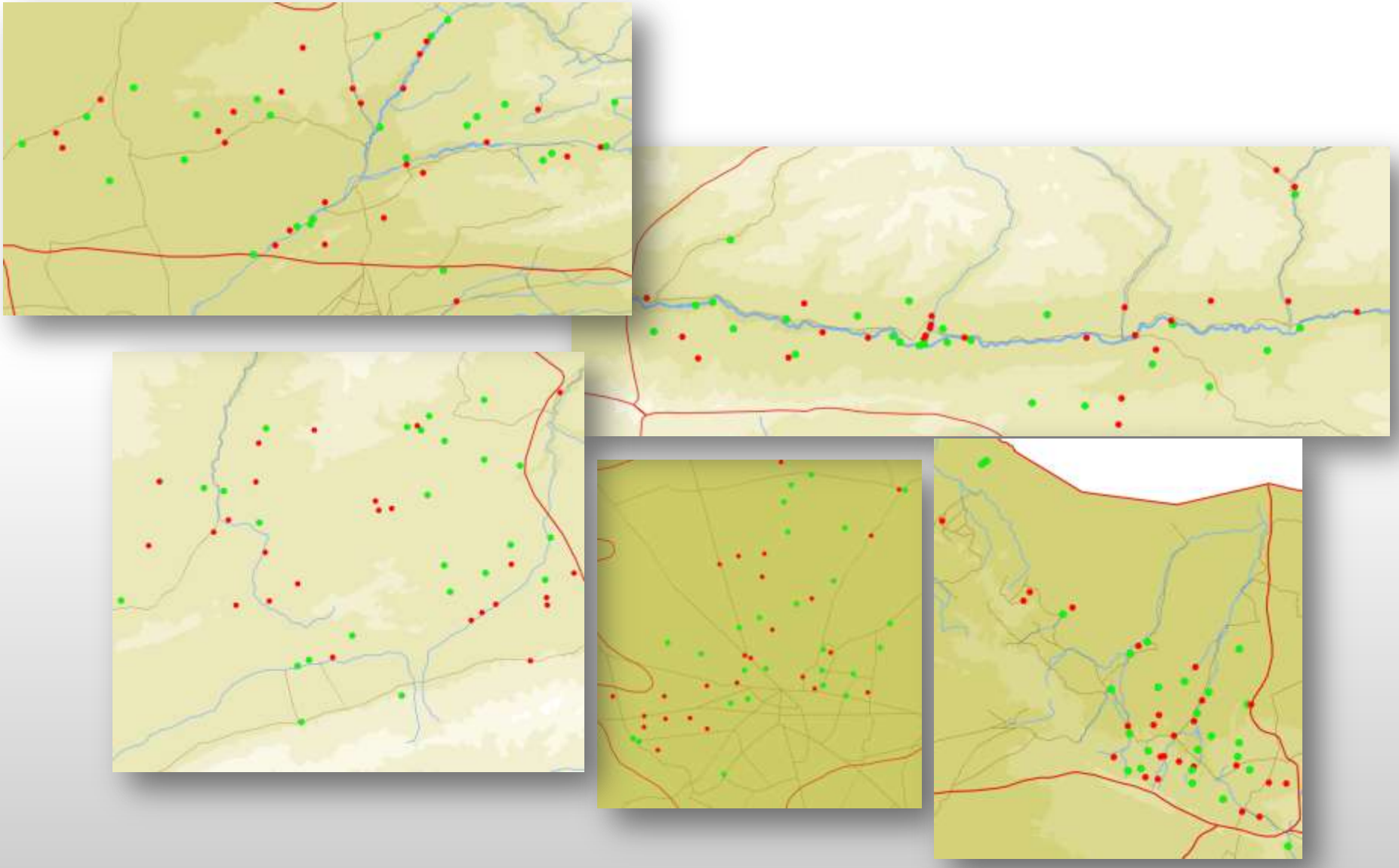
Fundamental Question: What would've happened to units that received the program absent the program?

- Impacts assessed using **before-and-after** comparisons are flawed
  - Many things change during implementation which affect outcomes of interest
  - Generally impossible to separate impact of changes in 'everything else' from the impact of the program
- Impacts assessed using a **control group** are better, but . . .
  - Must be sure that control group outcomes would have been the same as the treatment group had the program never been implemented
- Problem is that **programs are usually targeted** to units with specific characteristics
  - Analysis with control groups usually doomed by 'selection bias'
- Solution is to **randomize allocation of program** across the sample over which outcomes are analyzed

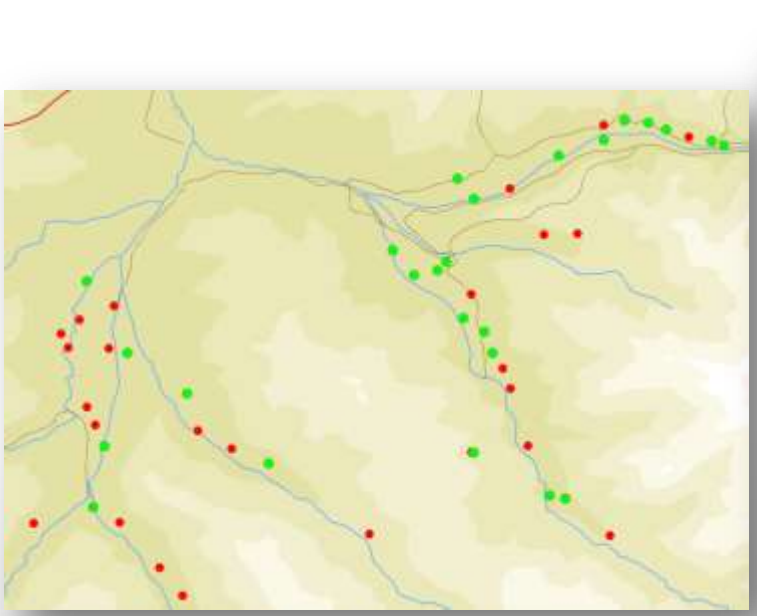
Treatment Assignment

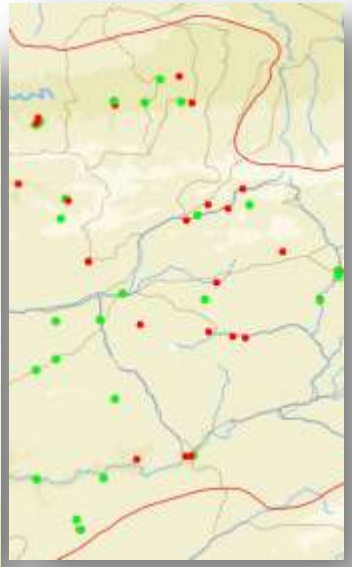
- 25 **matched-pairs** of villages formed in each district using multivariate matching
  - Protects integrity of inferences from attrition in sample
  - Enables inferences over interaction of program effects with underlying conditions (e.g. poorer vs. richer communities)
- Treated assigned to one unit in matched-pair using **random number generator**
  - Minimal and arbitrary differences between units selected to receive program and those not selected to receive program
  - Identification of program effects is a simple, transparent exercise of comparing outcomes in 250 NSP treatment communities to 250 non-NSP control communities
- "**The data will speak for itself**"
  - Very few ways through which preconceptions of researchers can affect the outcome of the study

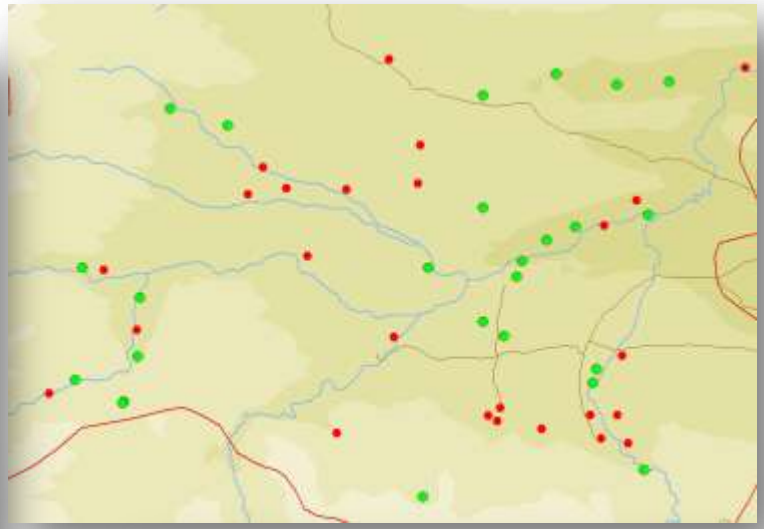
Treatment Assignment

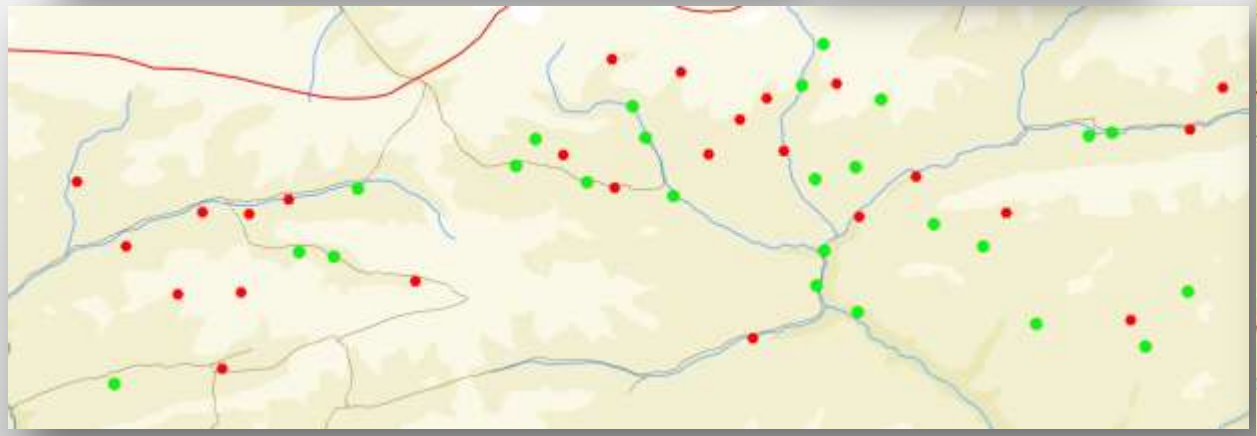


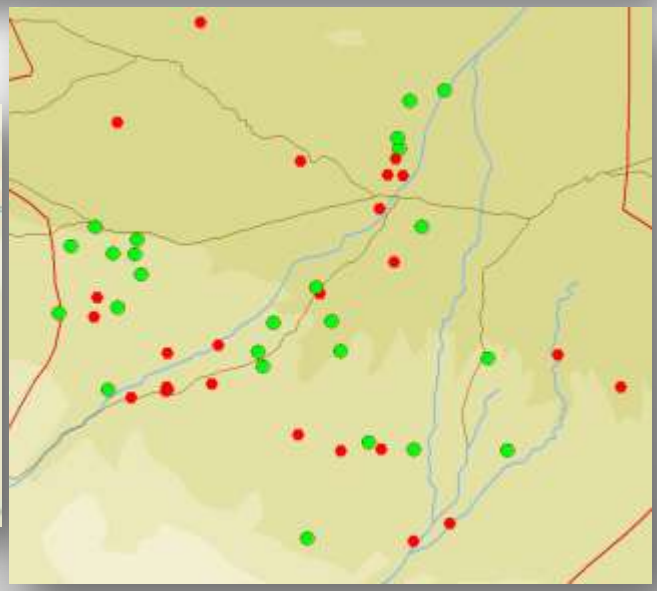
Treatment Assignment











Treatment /Control Balance

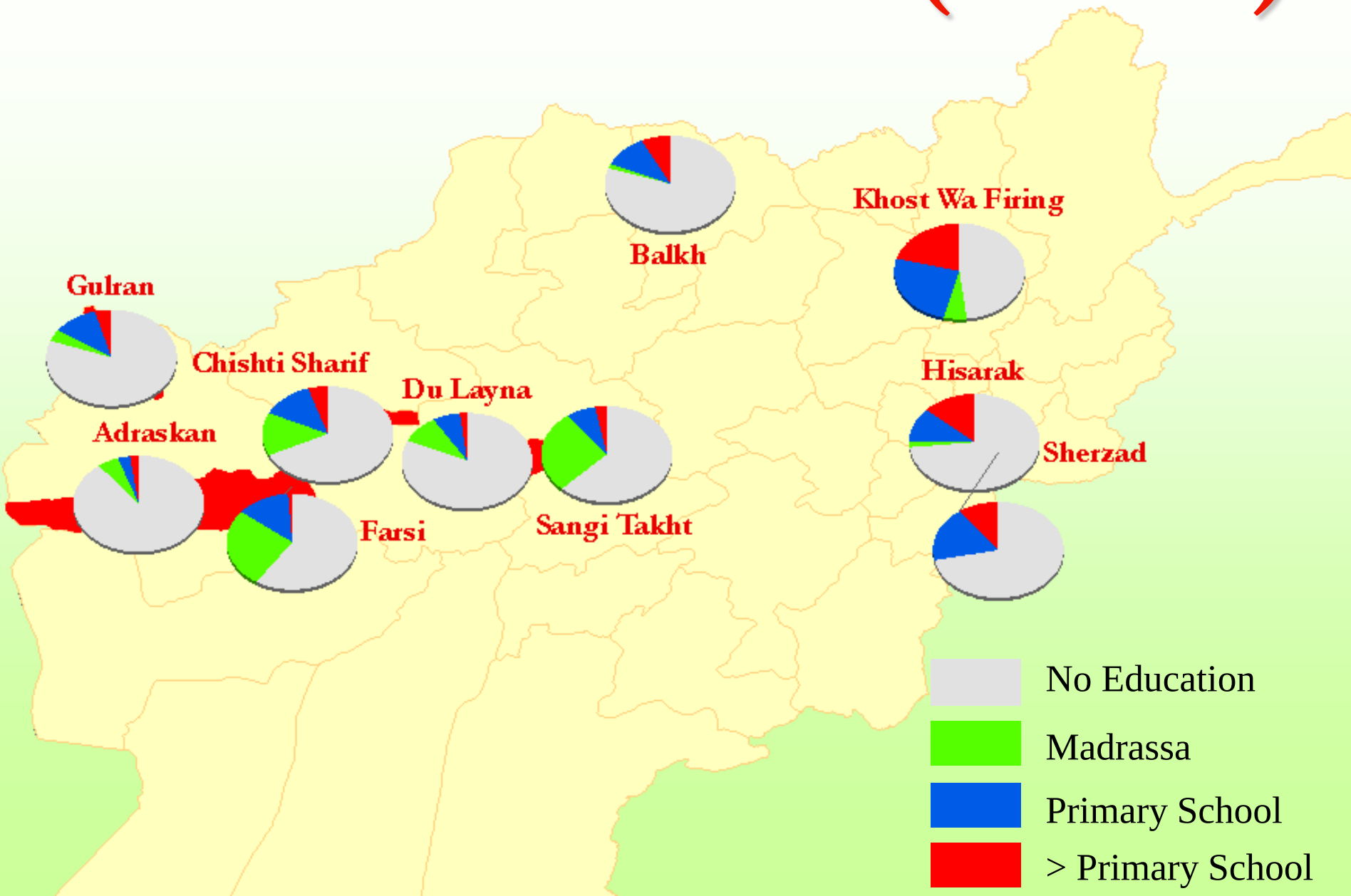
Variable	Mean for Treatment Group	Mean for Control Group	Normalized Difference
Number of Households	136.30	148.15	**-0.030**
Dari-speaking	0.678	0.665	**0.027**
No Education	0.690	0.688	**0.005**
Access to Electricity	0.141	0.130	**0.033**
Dispute in Village	0.343	0.359	**-0.034**
Borrowed Money Last Year	0.461	0.475	**-0.029**
No Access to Medical Services	0.120	0.120	**0.001**
Attended Meeting of Village Services	0.309	0.295	**0.030**
Expenditures on wedding (AFA)	184,60.60	17,167.27	**0.007**
Women should be Members of Shura	0.428	0.403	**0.051**

Summary Statistics - Baseline Survey

Survey Instruments

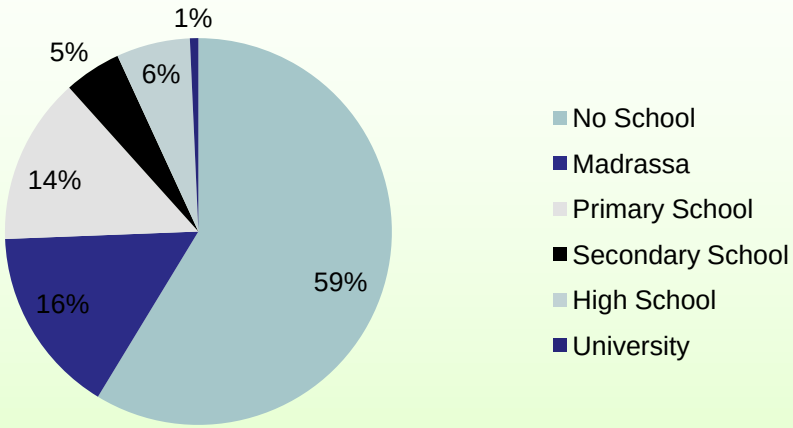
- **Male Head-of-Household** Questionnaire
  - 10 randomly sampled men individually interviewed in each village
  - 5,007 total interviewees
- **Male Focus Group** (*Shura*) Questionnaire
  - 6 – 9 members of village *shura* or village leaders (*malik*, *arbab*, *qariyadar*, *khan*, *whitebeards*, *qumandan* etc.) interviewed together
  - 3,962 total interviewees
- **Female Focus Group** Questionnaire
  - 6 – 9 females interviewed together
  - 3,407 total interviewees
- **Female Individual** Questionnaire
  - Participants of Female Focus Group interviewed individually
  - 3,515 total interviewees

Education Levels (MHH)

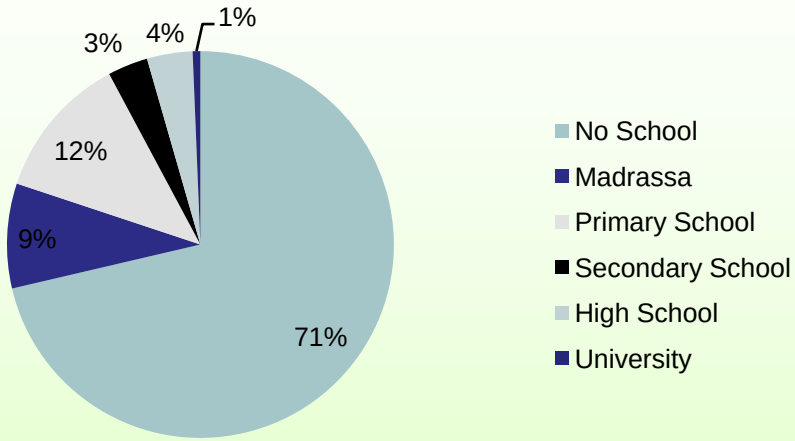


Education Levels

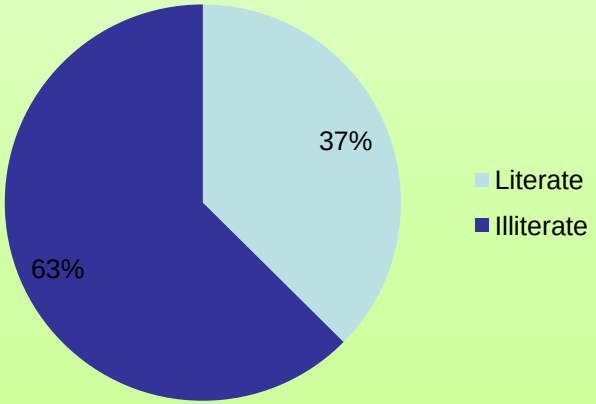
Male Focus Group



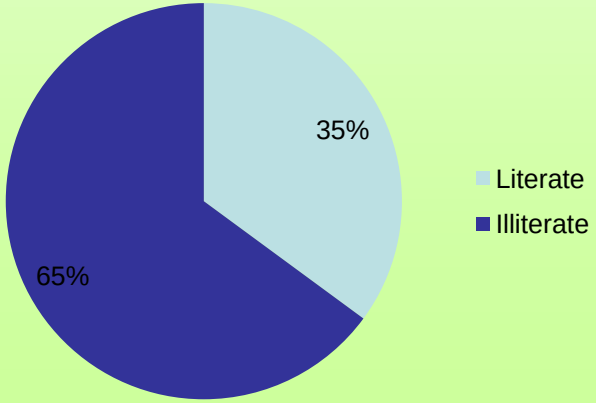
Male Head-of-Household



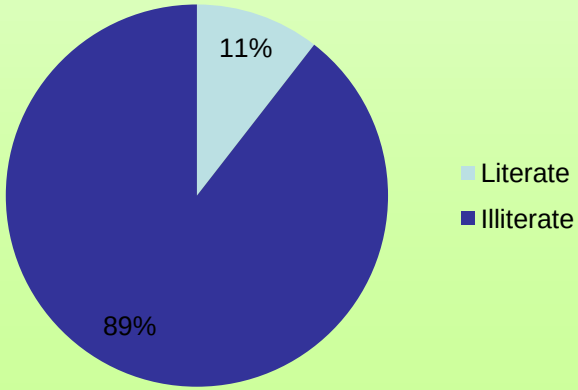
Male Focus Group



Male Head of Household

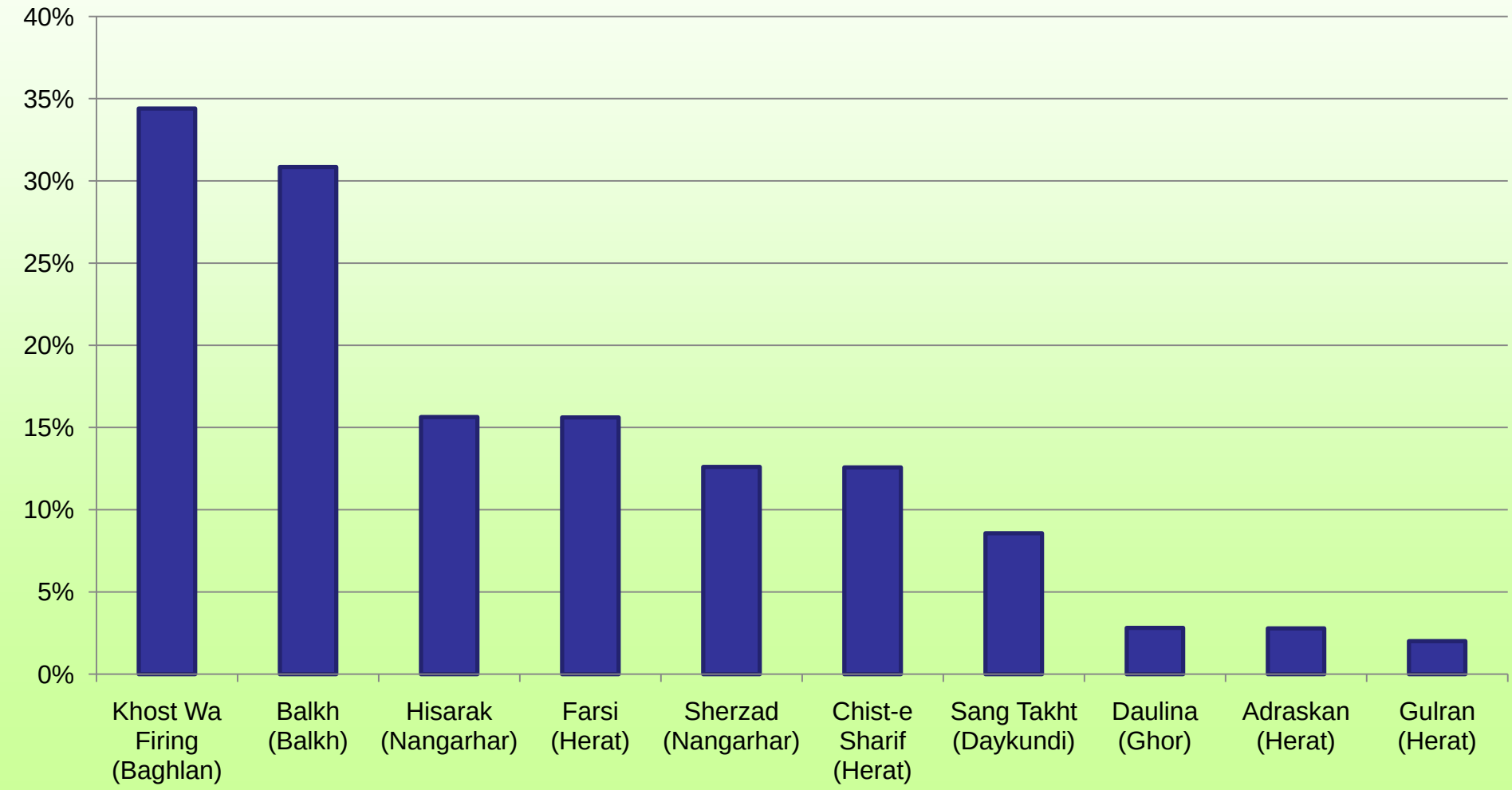


Female

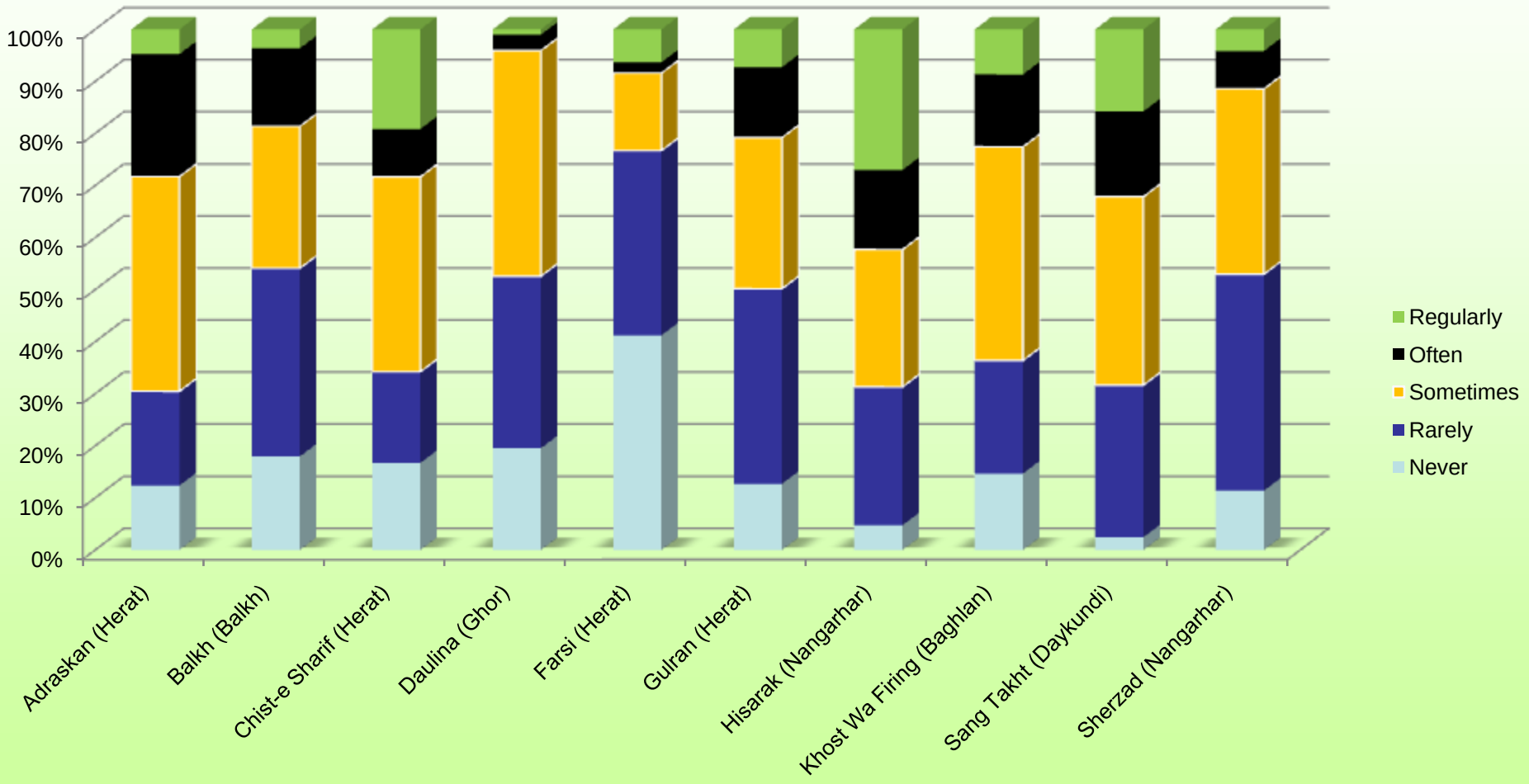


Service Access (MHH)

Access to electricity by district . . .

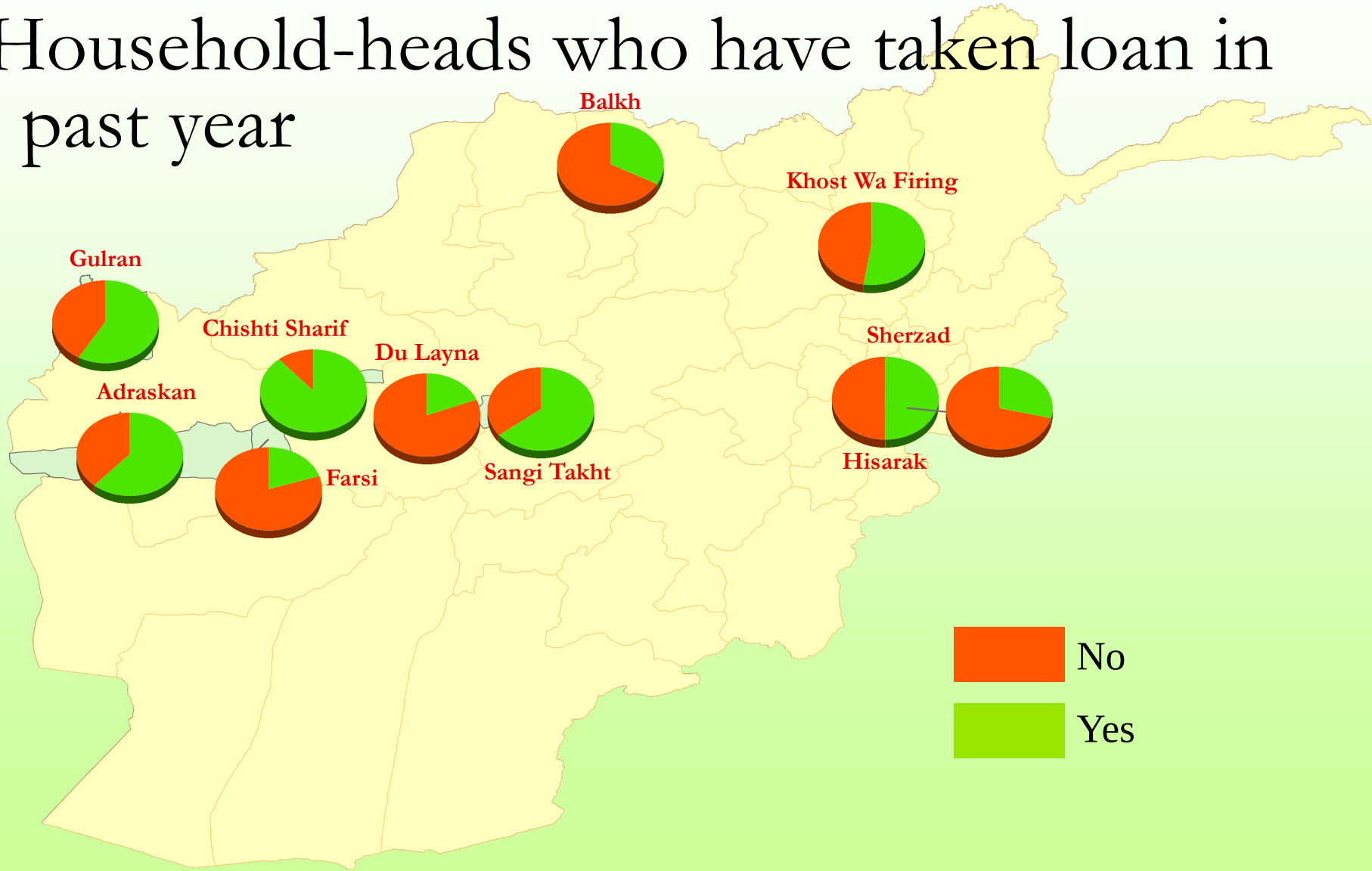


Food Security (MHH)



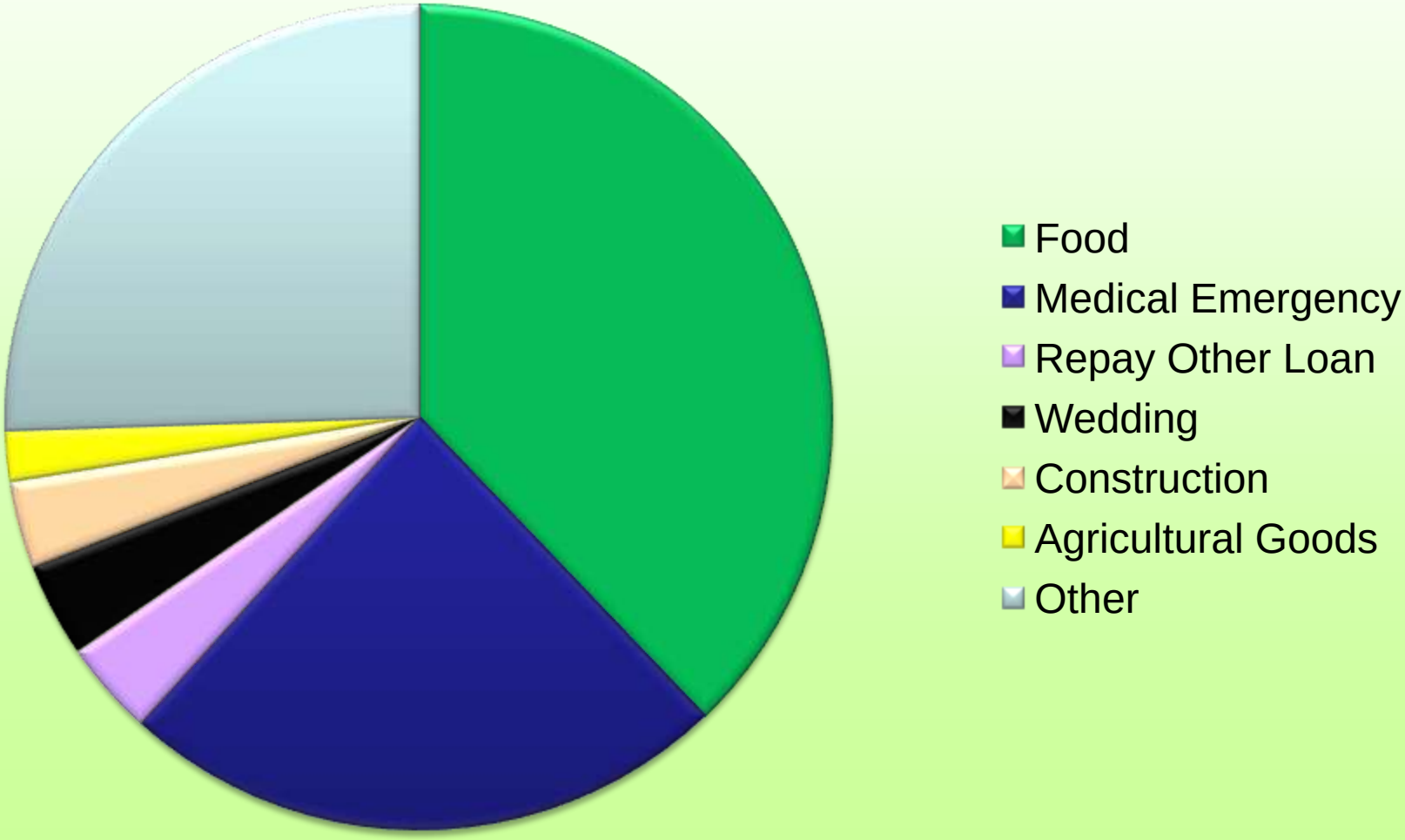
Access to Finance (MHH)

Household-heads who have taken loan in past year

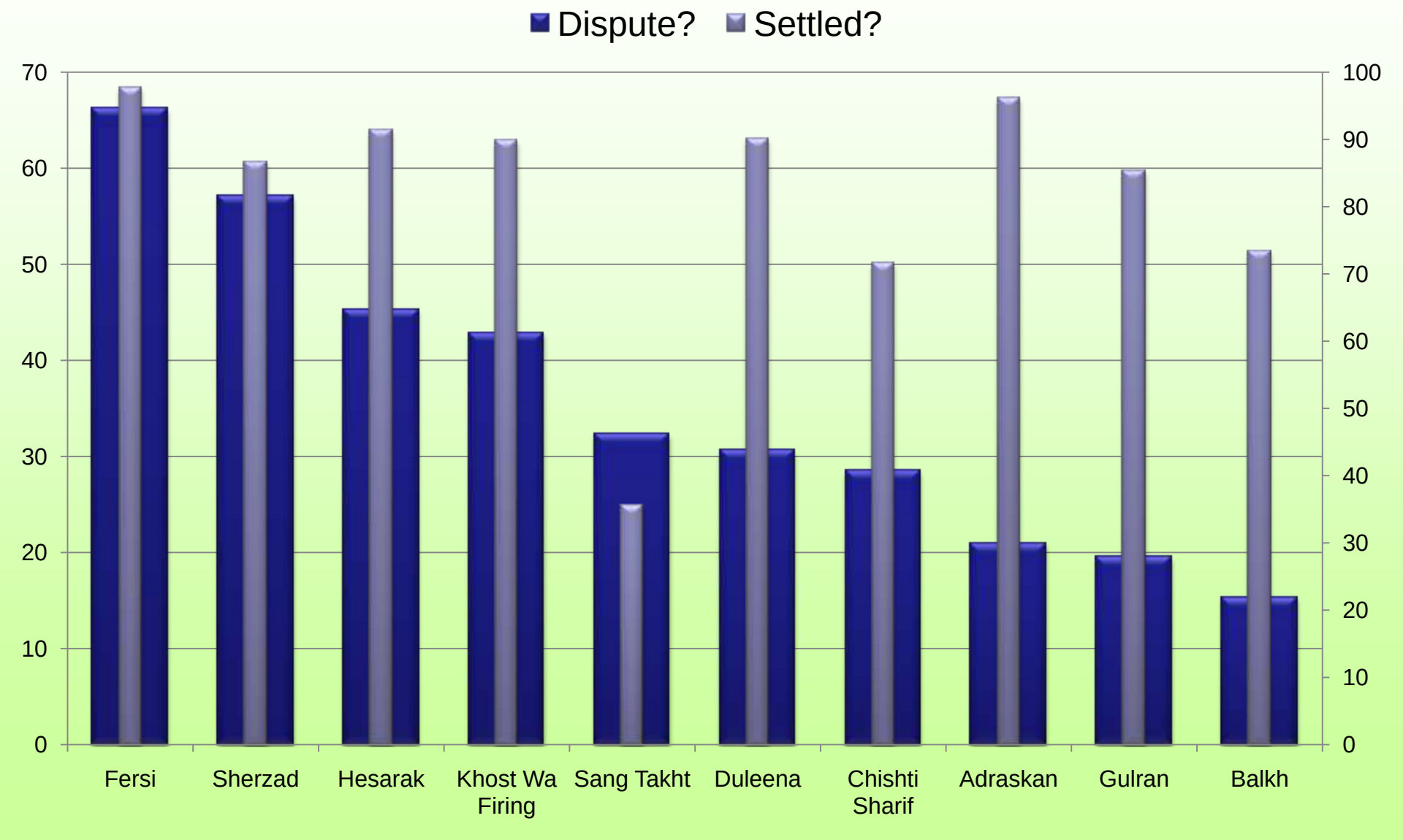


Need for Finance (MHH)

Reason for taking loan . . .

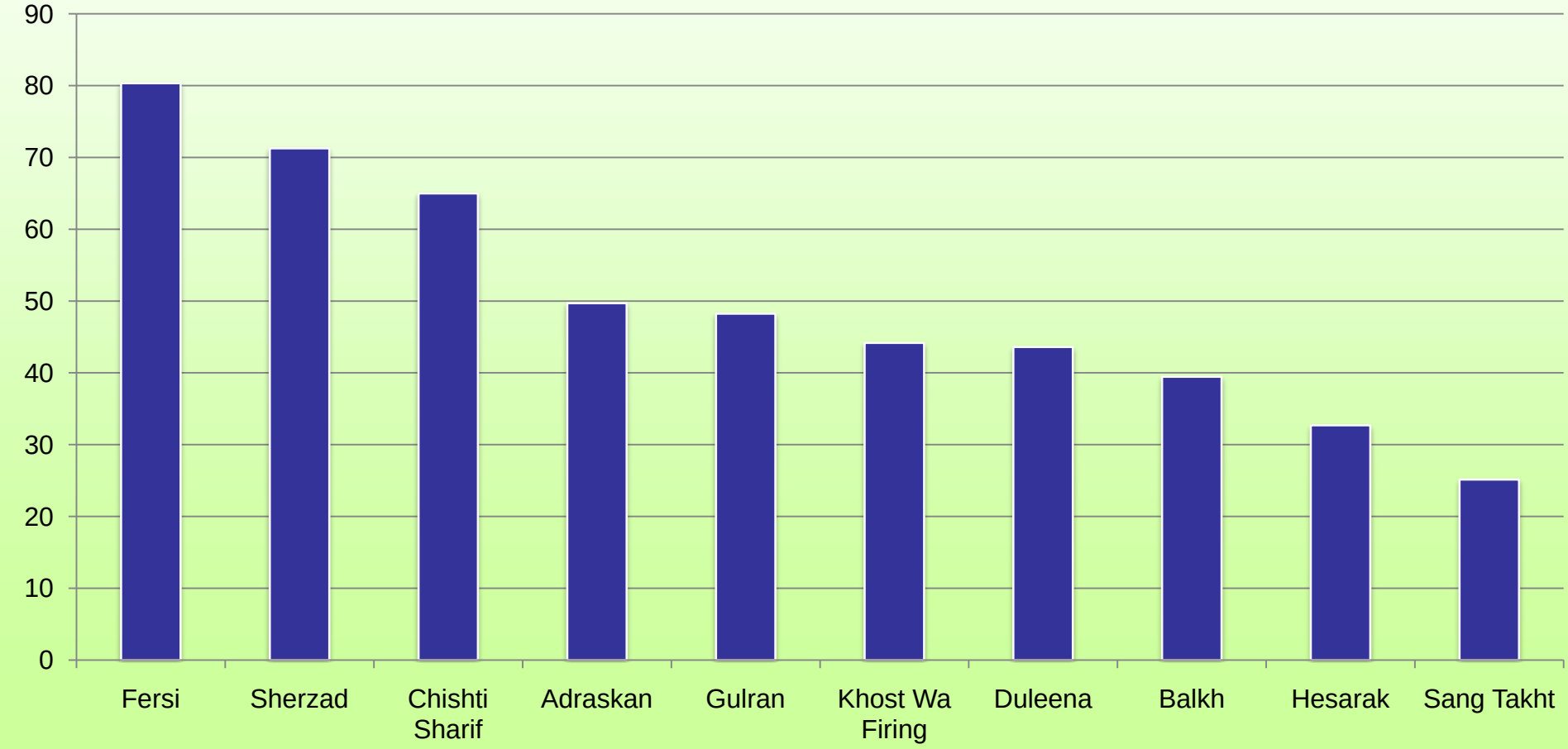


Disputes (MHH)



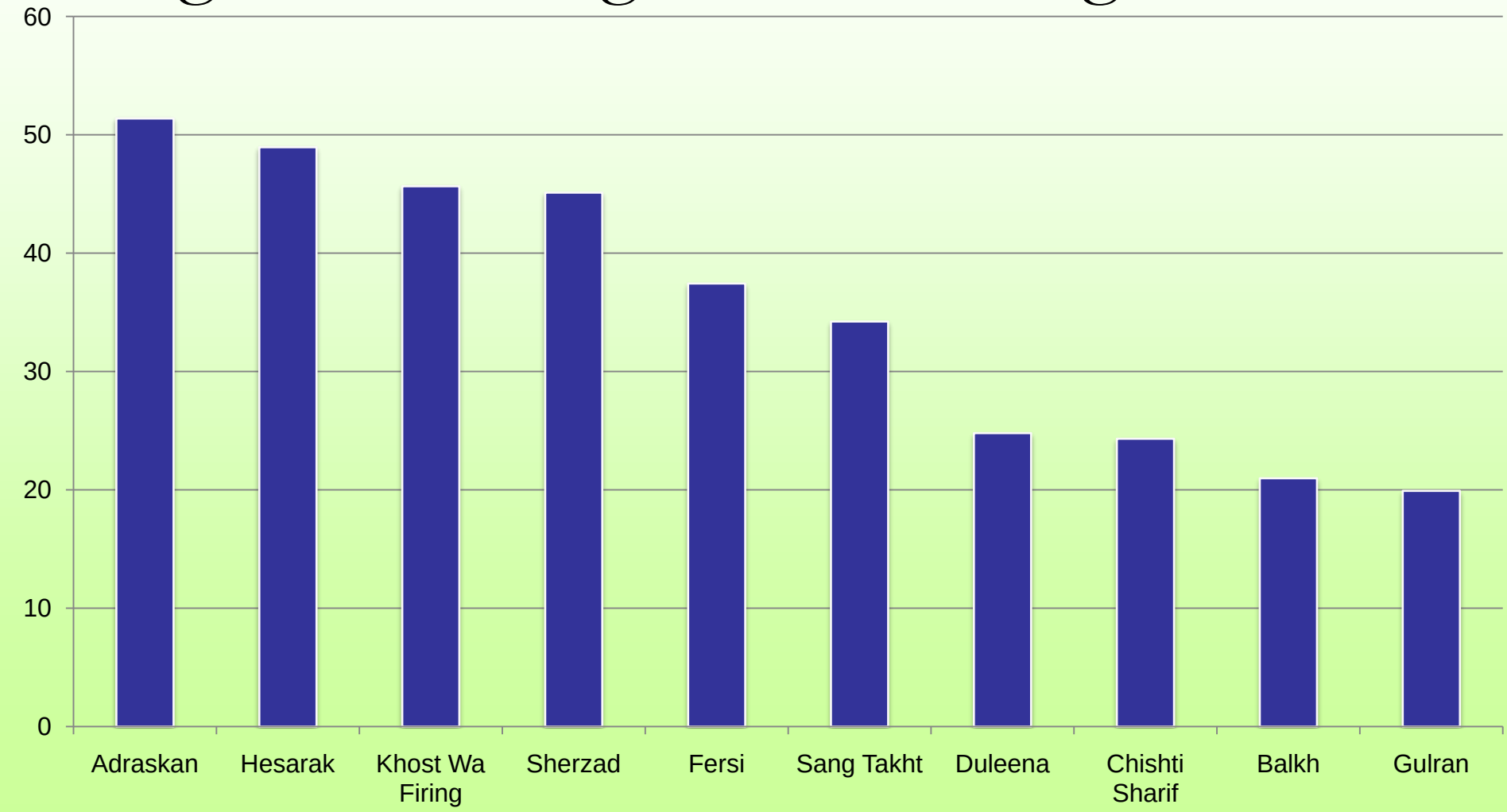
Trust (MHH)

Those who have asked someone else in village to collect money on their behalf



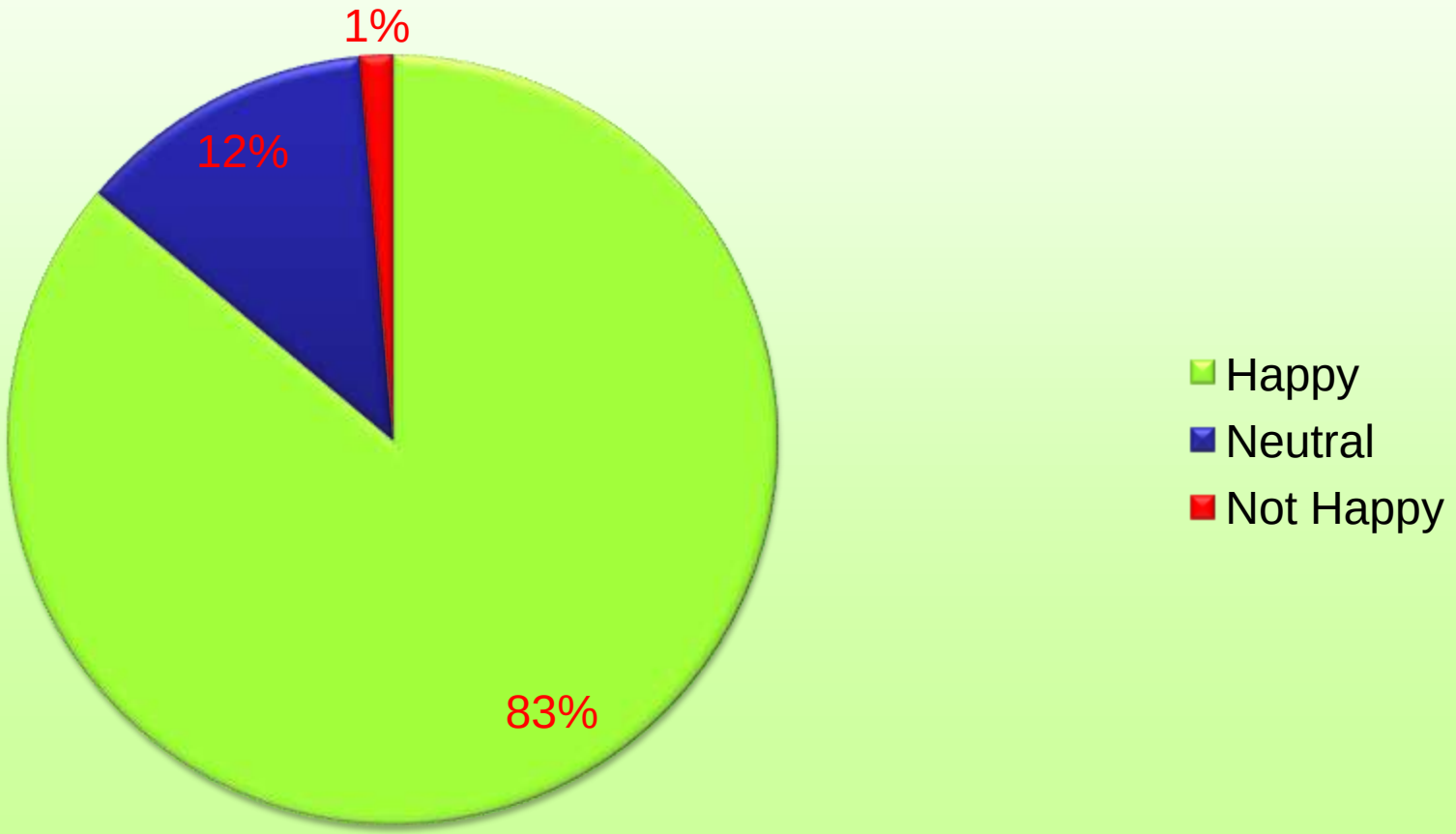
Participation (MHH)

Villagers attending shura meetings



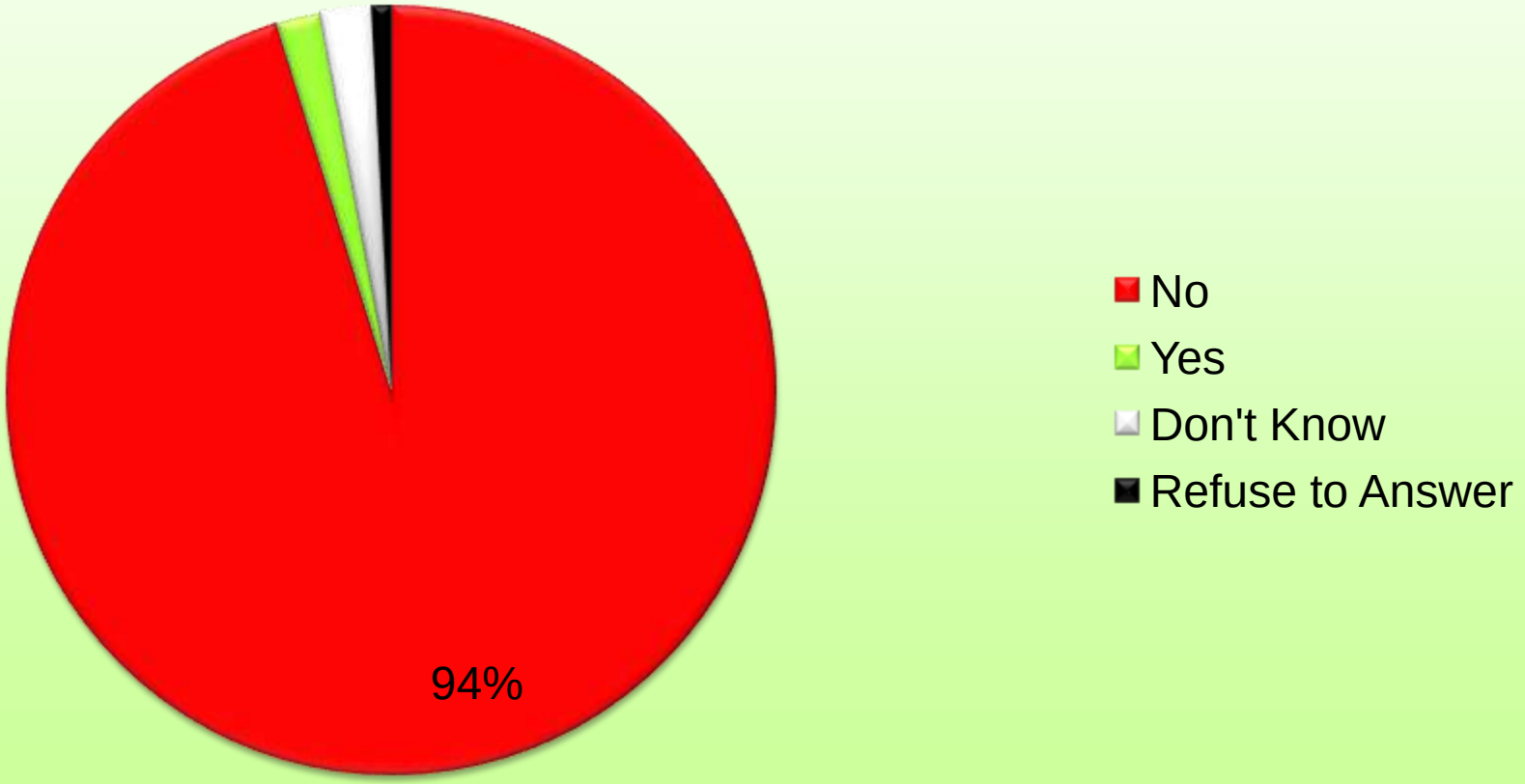
Governance (MHH)

How happy are you with the work of your village council?



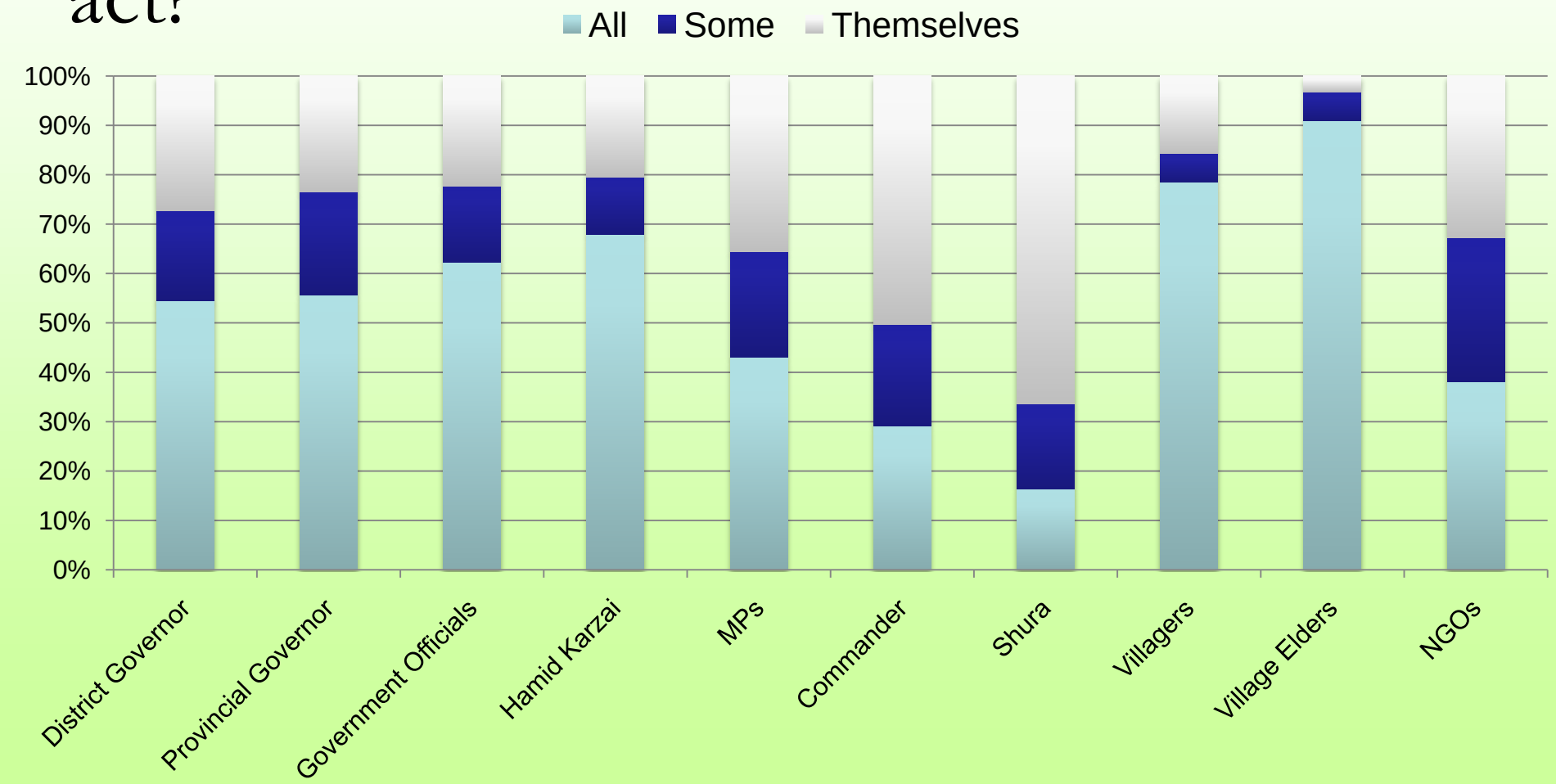
Governance (MHH)

Have your village leaders done anything you don't agree with?



Governance (MHH)

In whose interests do the following people act?



Governance (FI)

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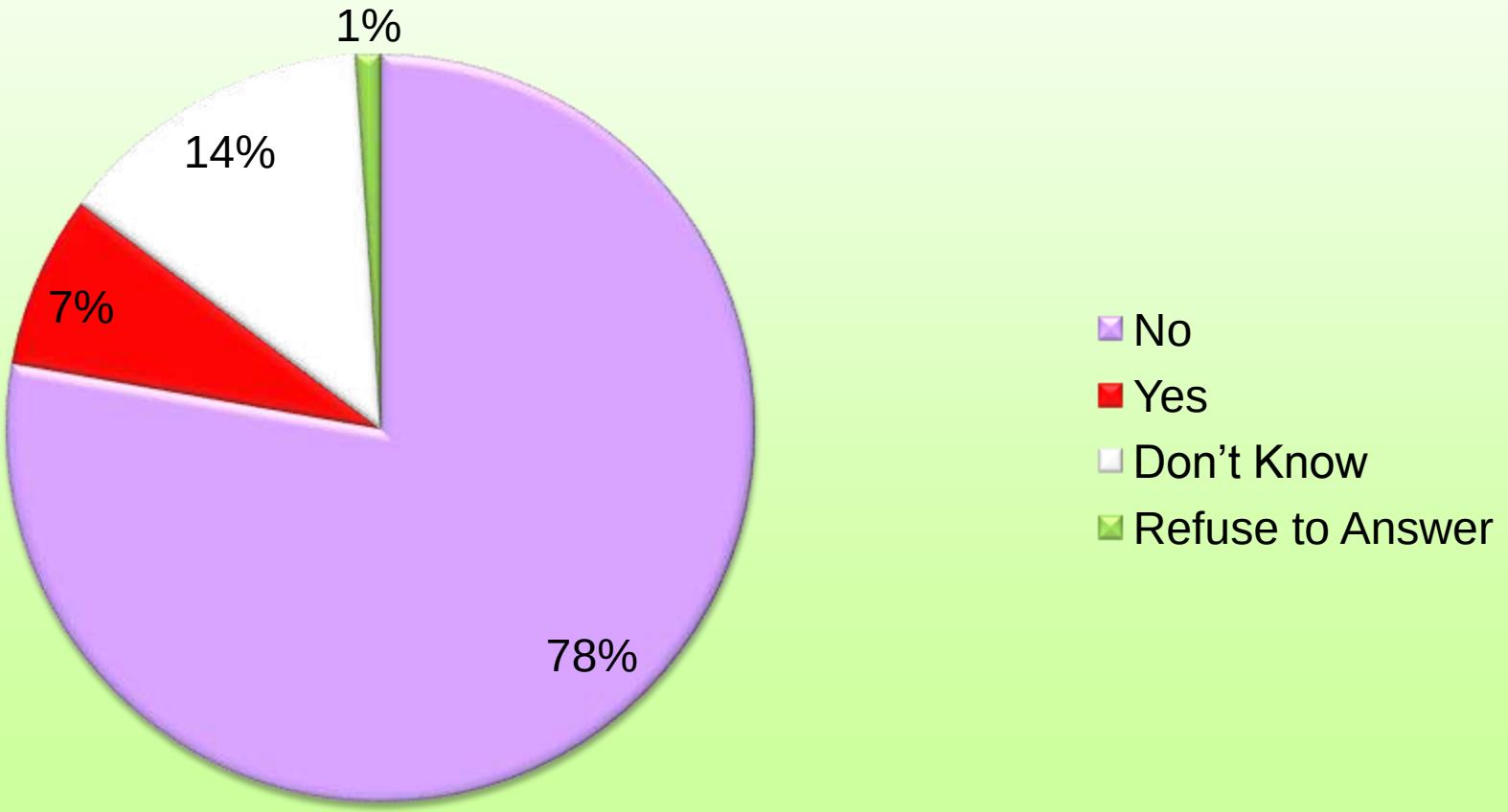
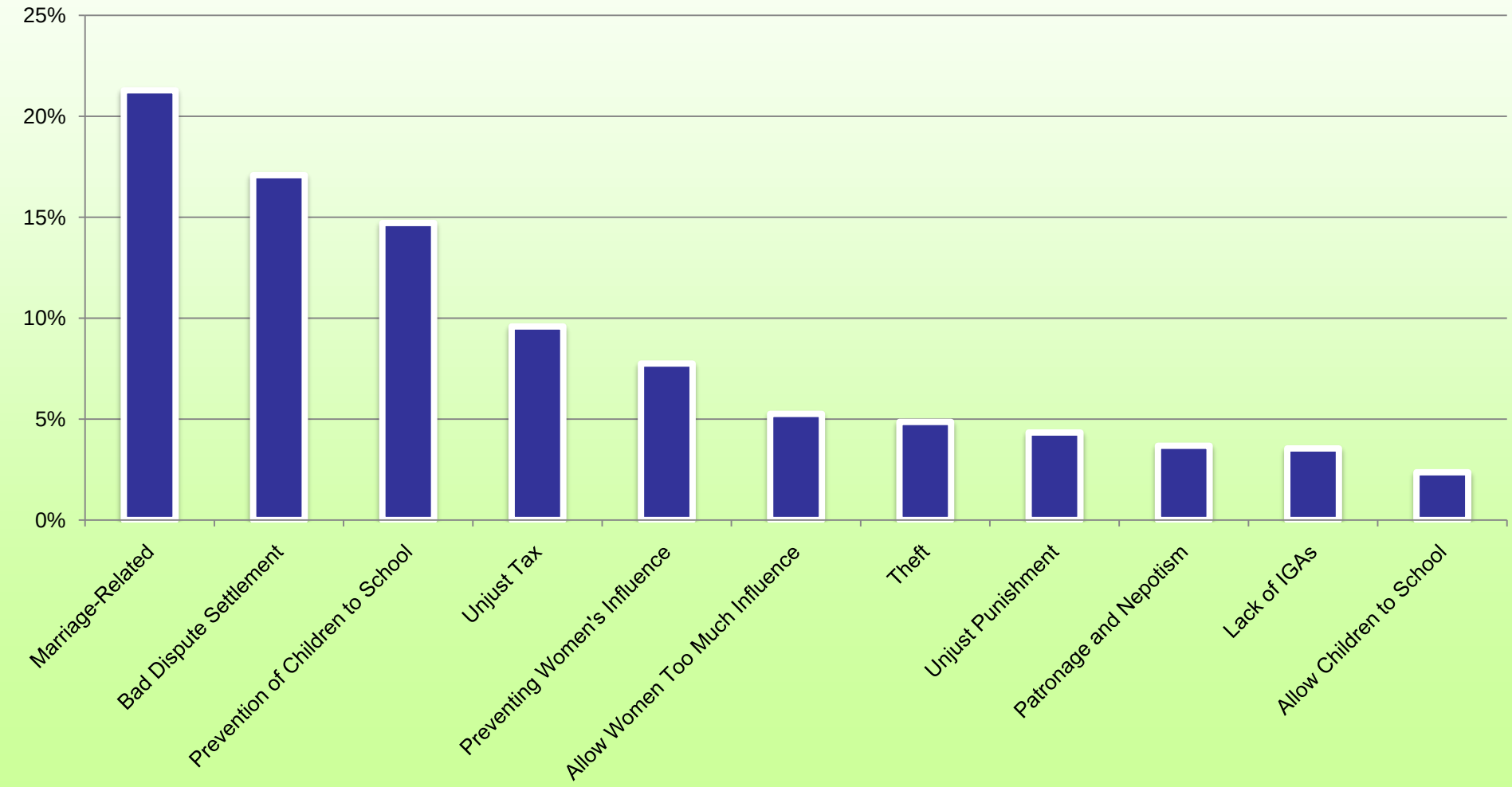


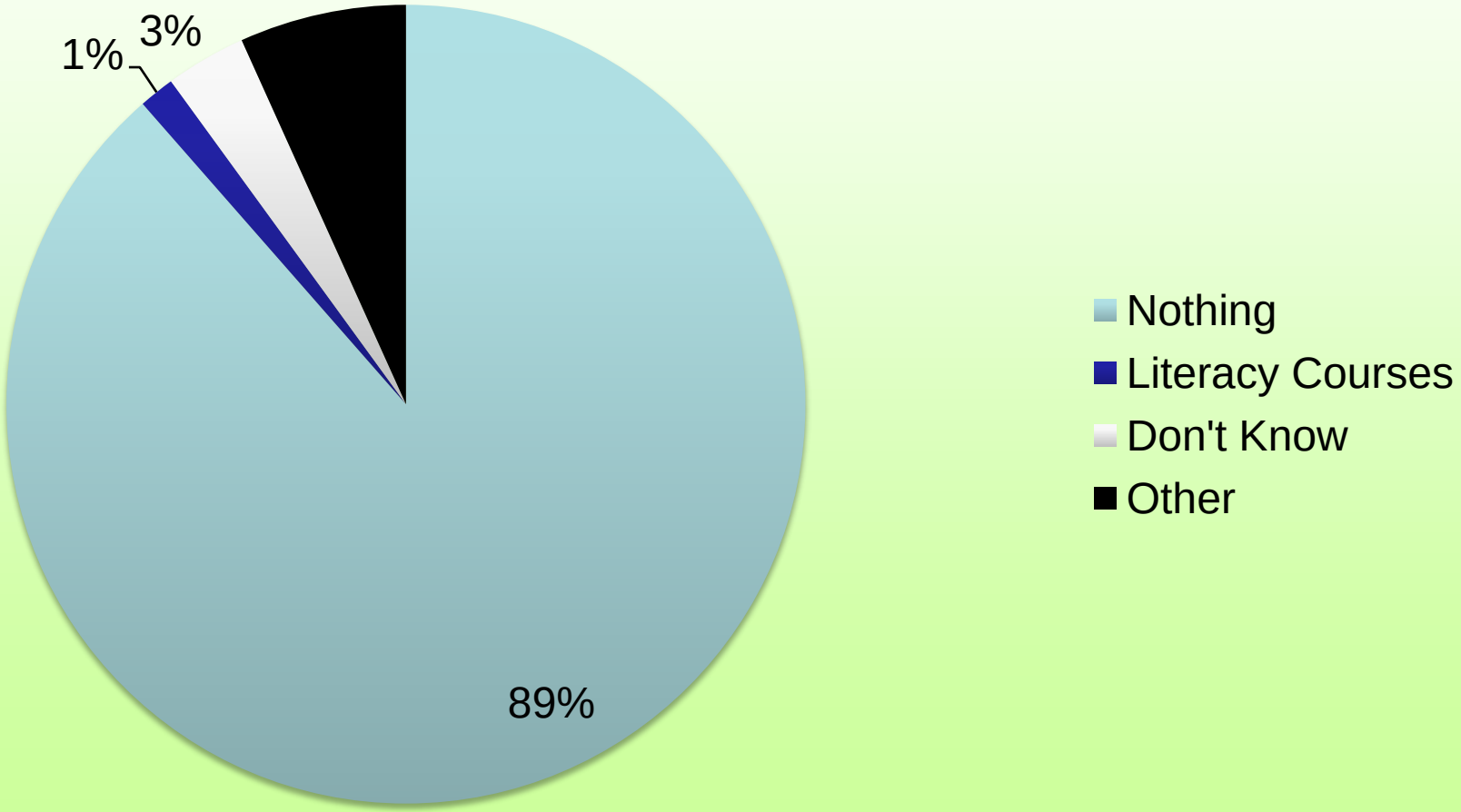
Governance (FI)

Unjust act by village leaders?



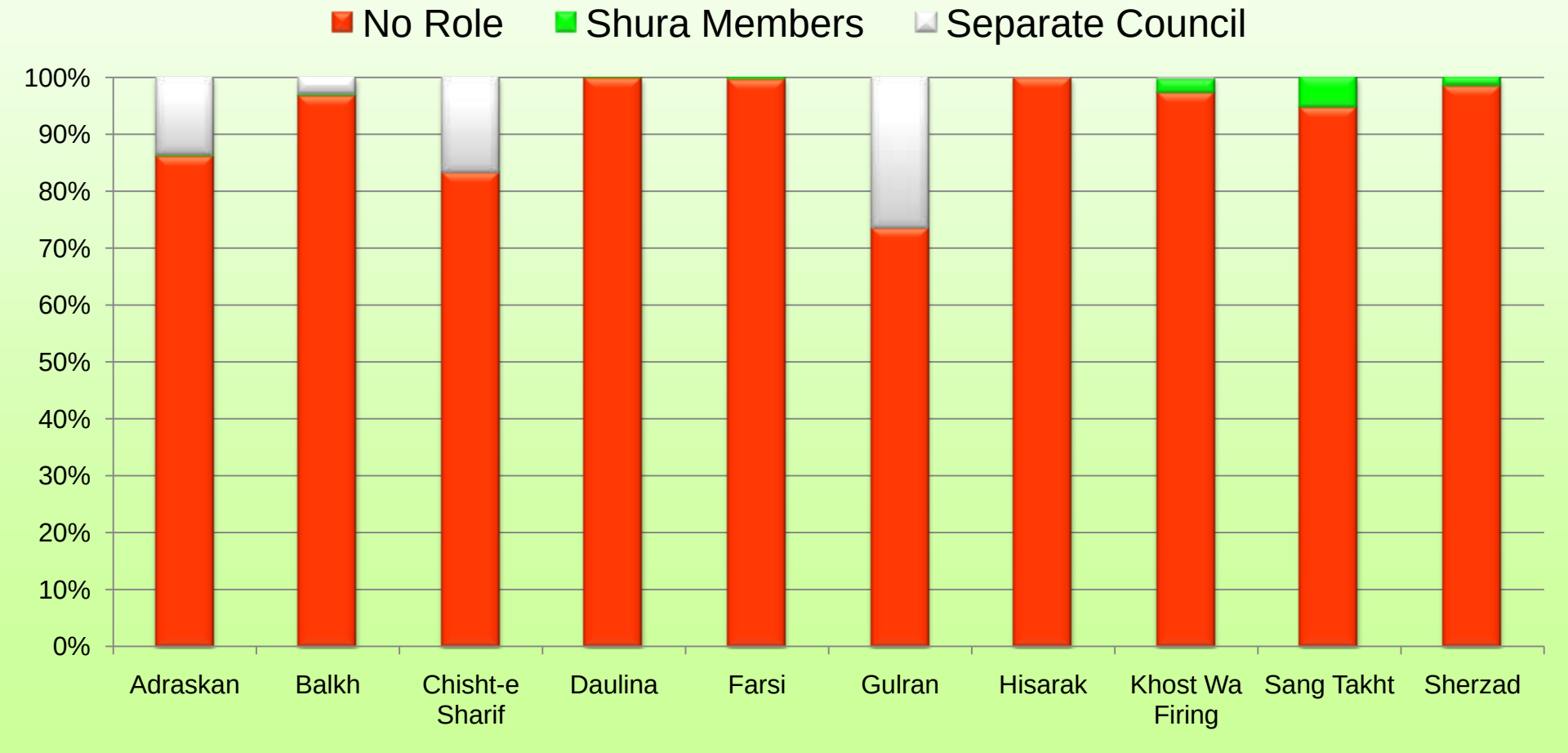
Governance (FI)

What did shura do for women last year?



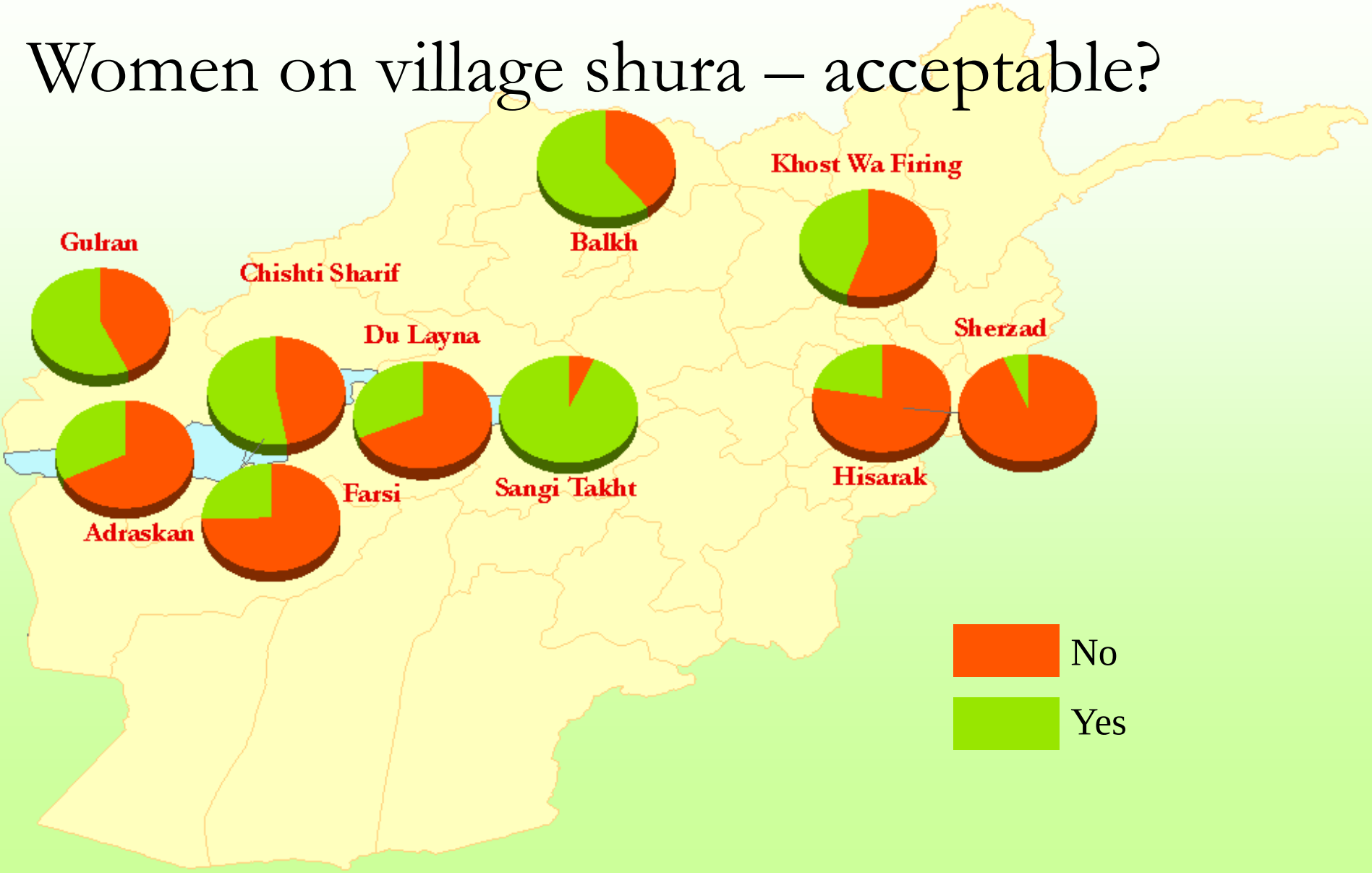
Female Governance (FI)

What is the role of women in local governance?



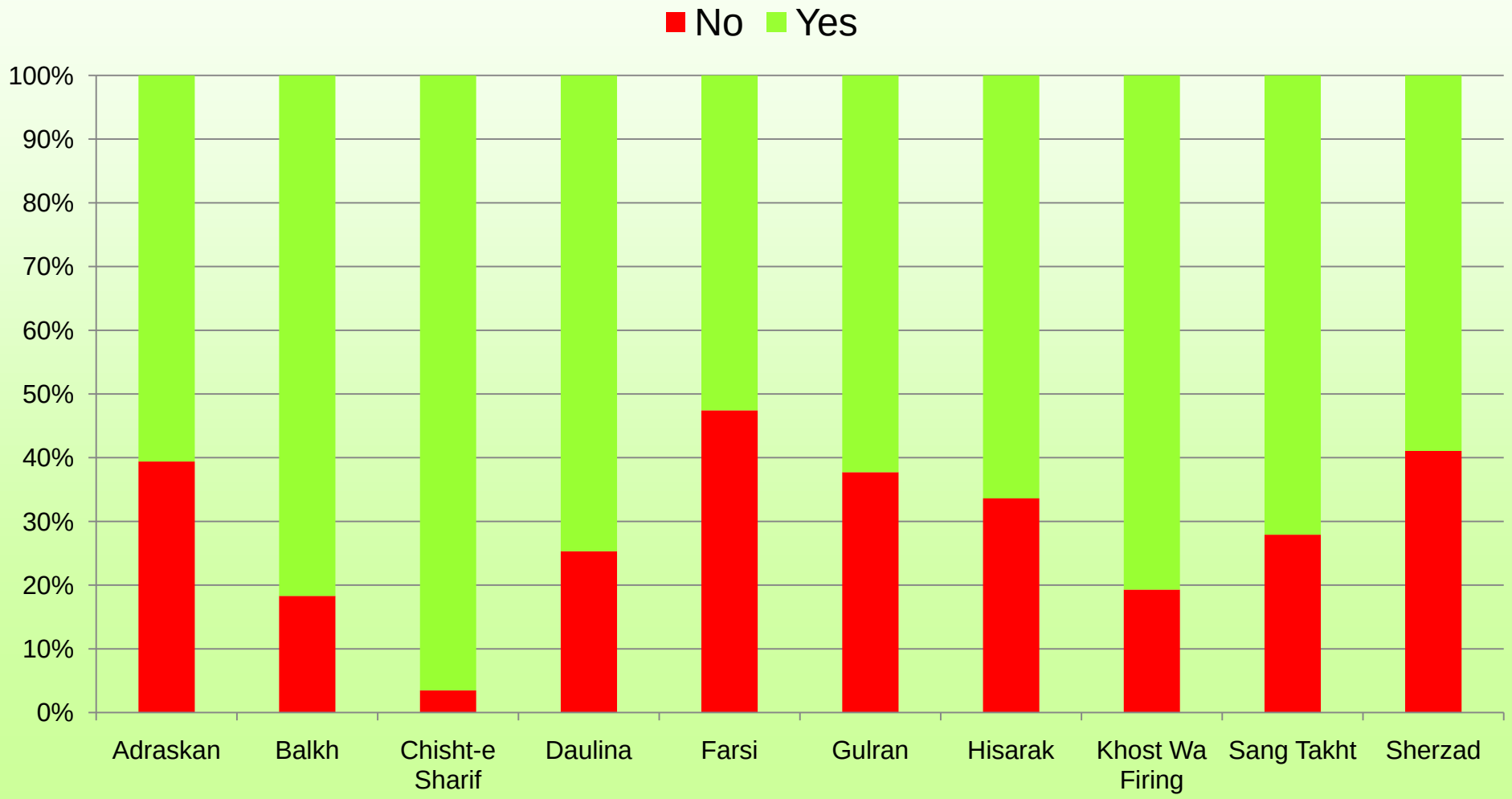
Female Governance (MHH)

Women on village shura – acceptable?



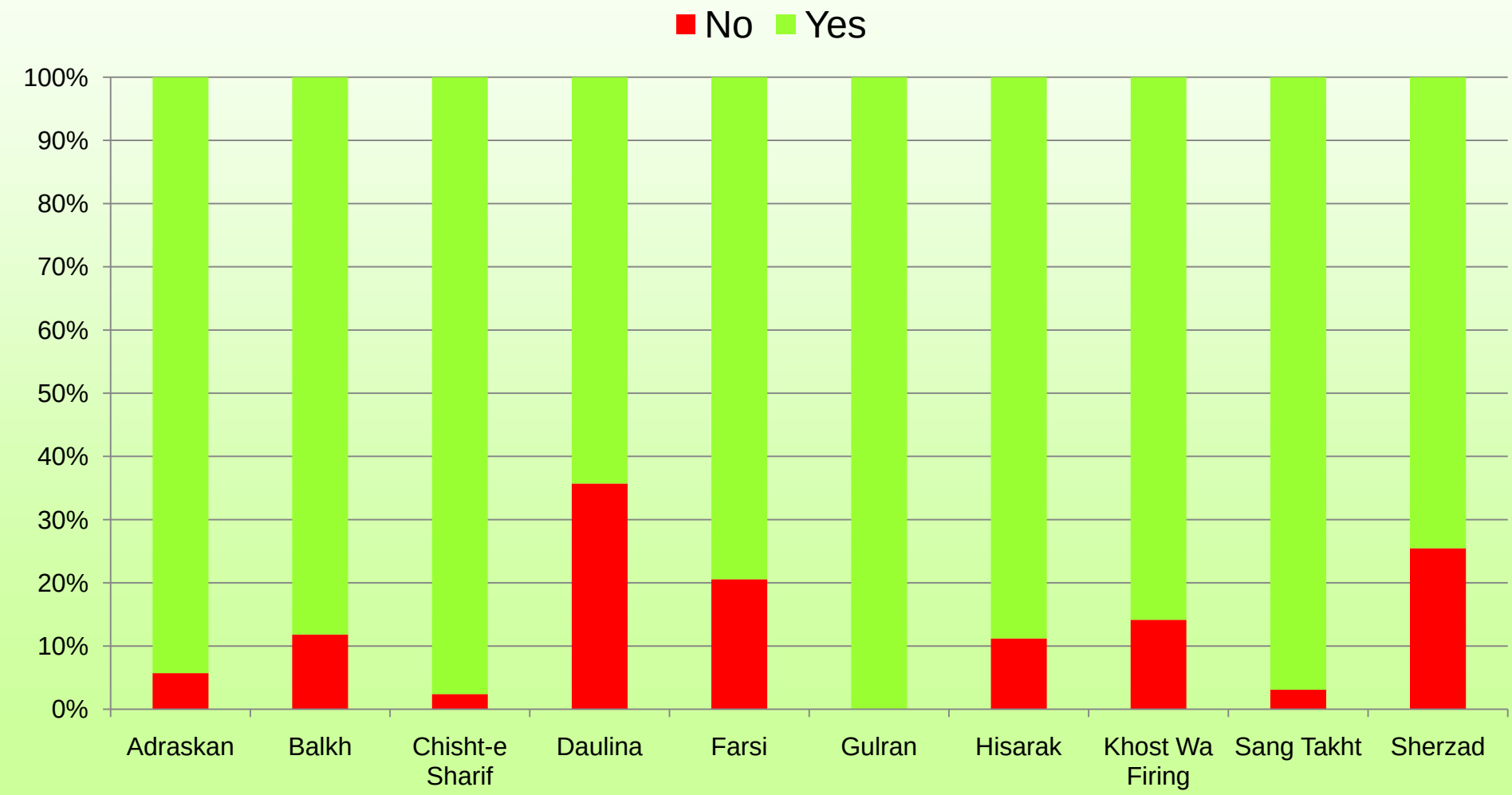
Female Governance (FI)

Should women serve on village shura?

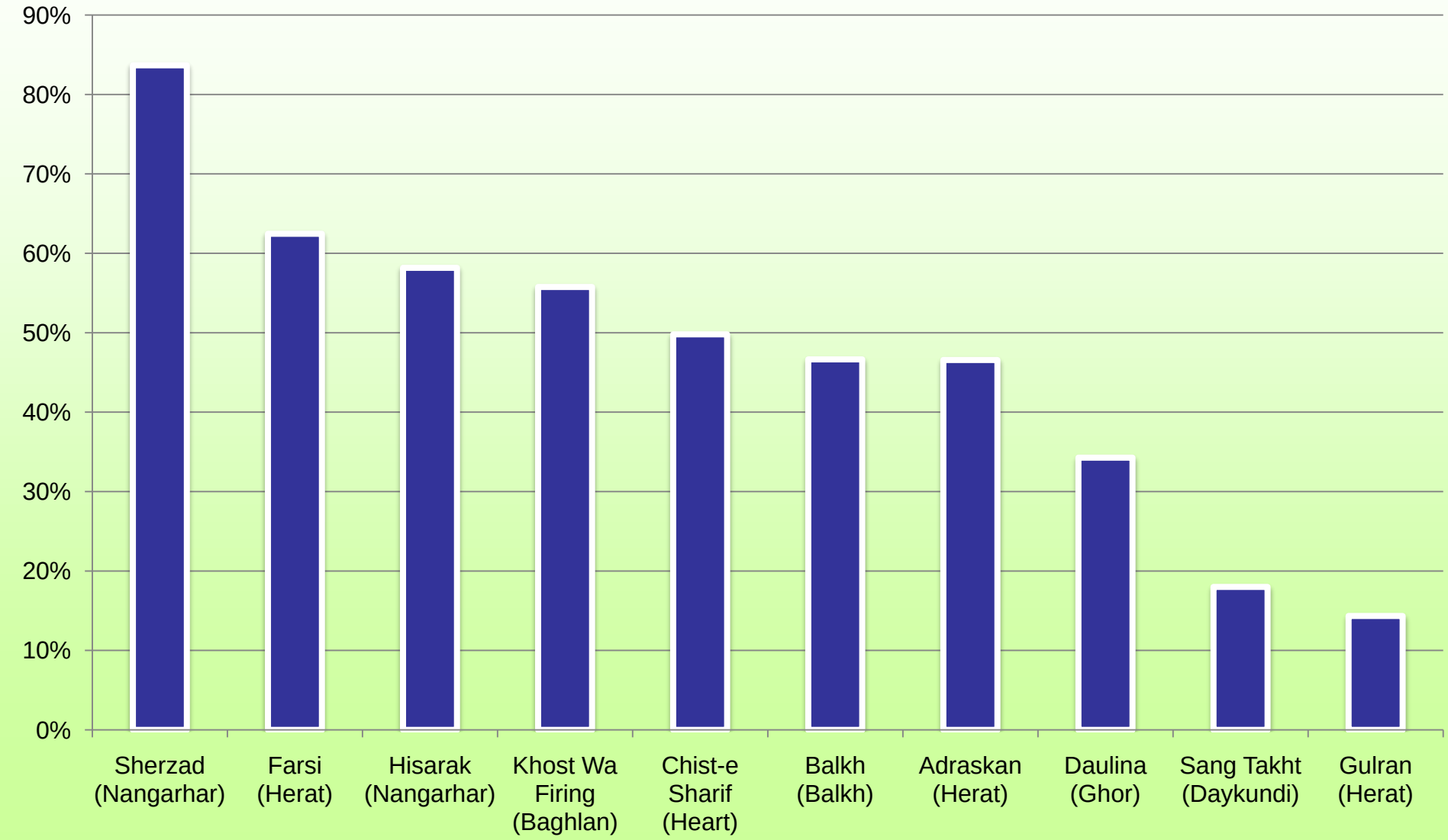


Female Governance (FI)

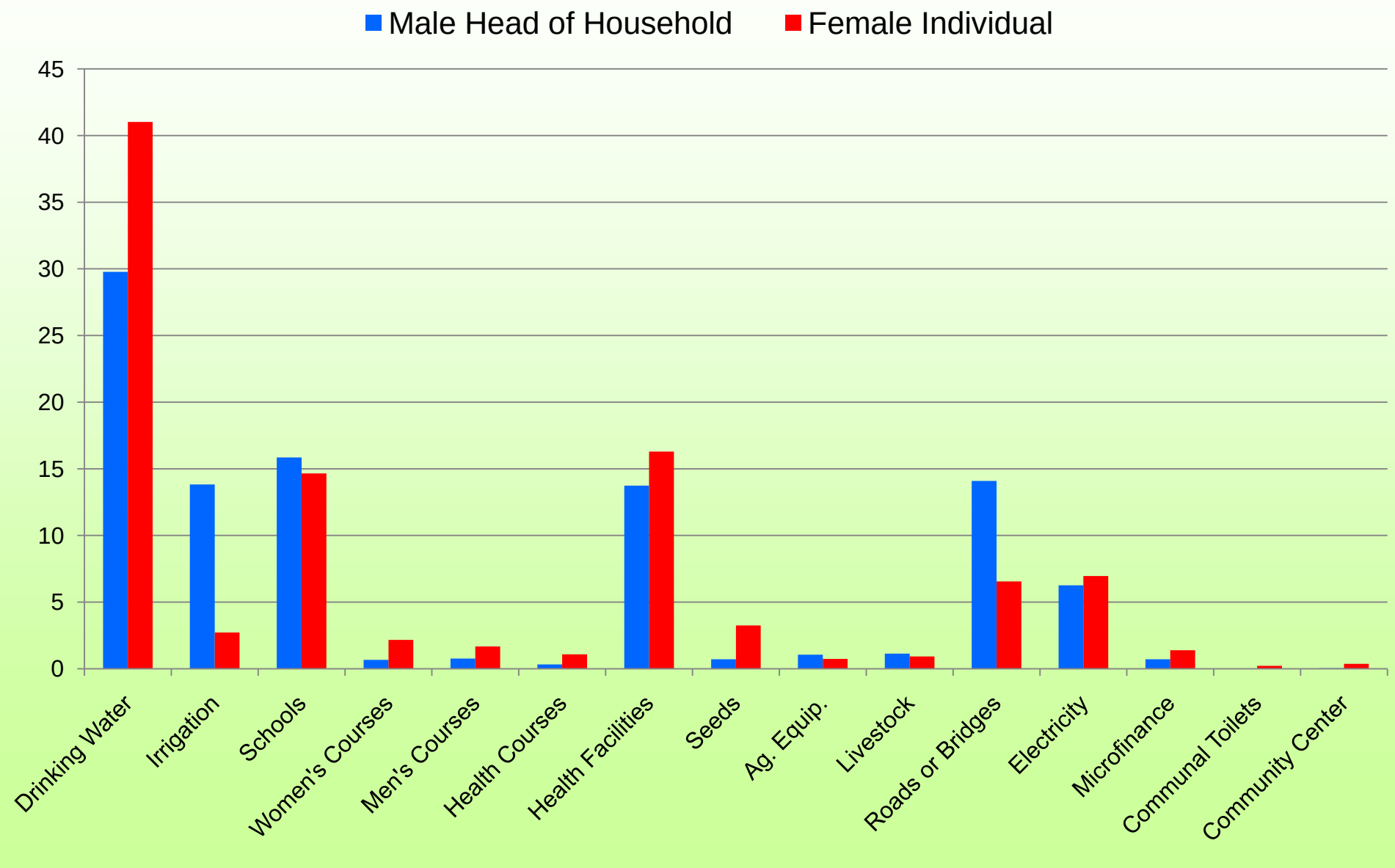
Should women have a separate shura?



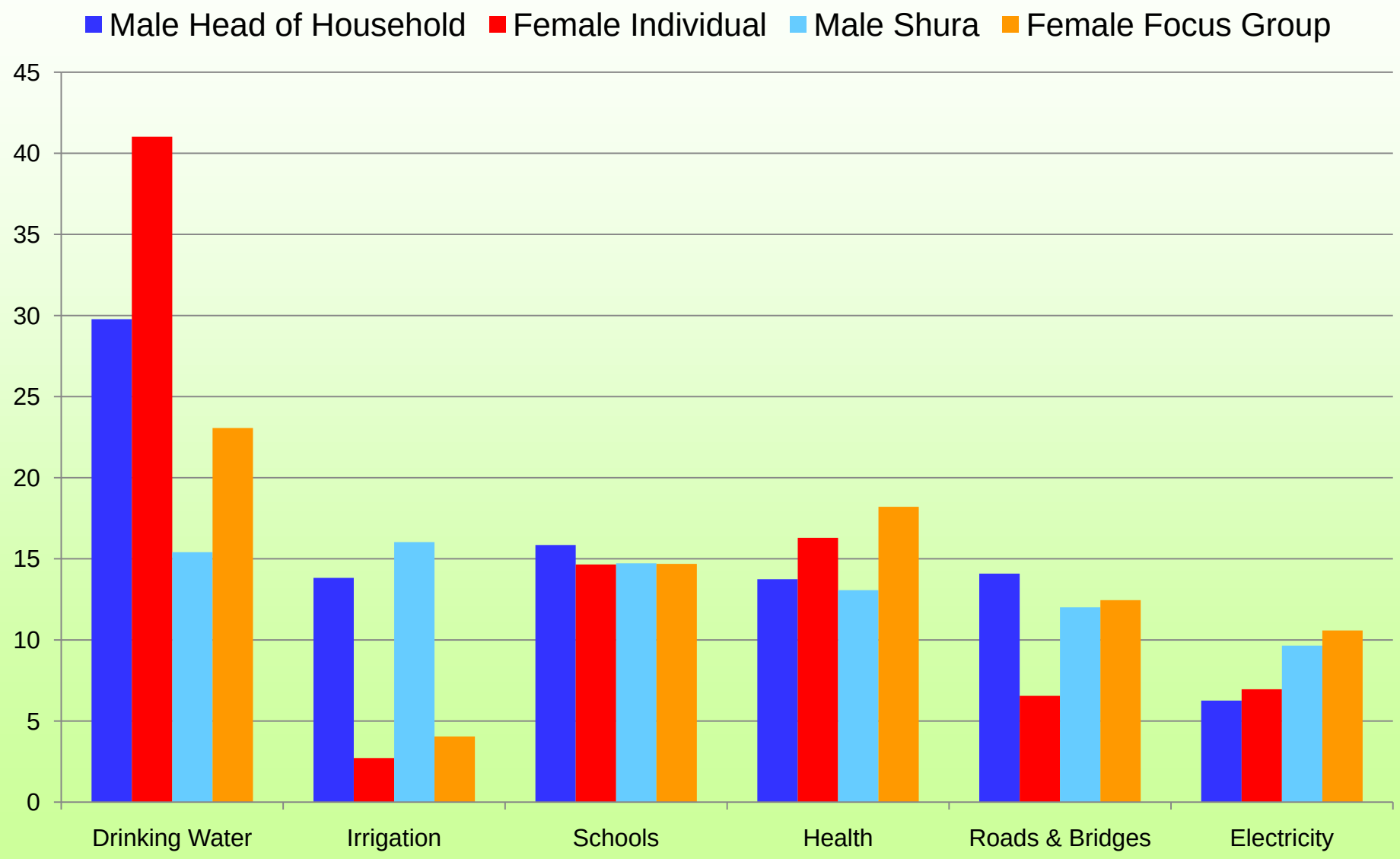
NSP Awareness (MHH)



Project Priorities

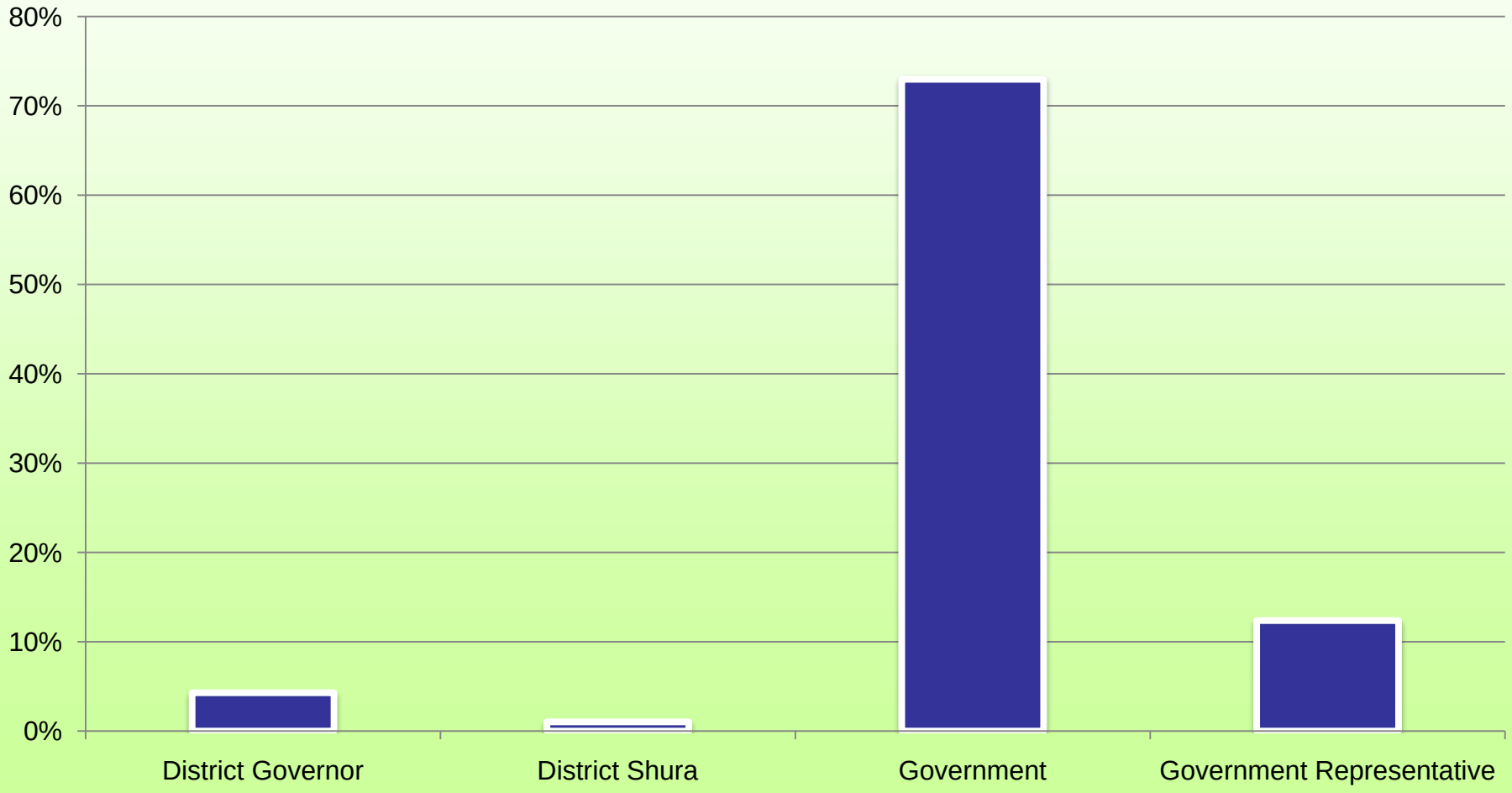


Project Priorities

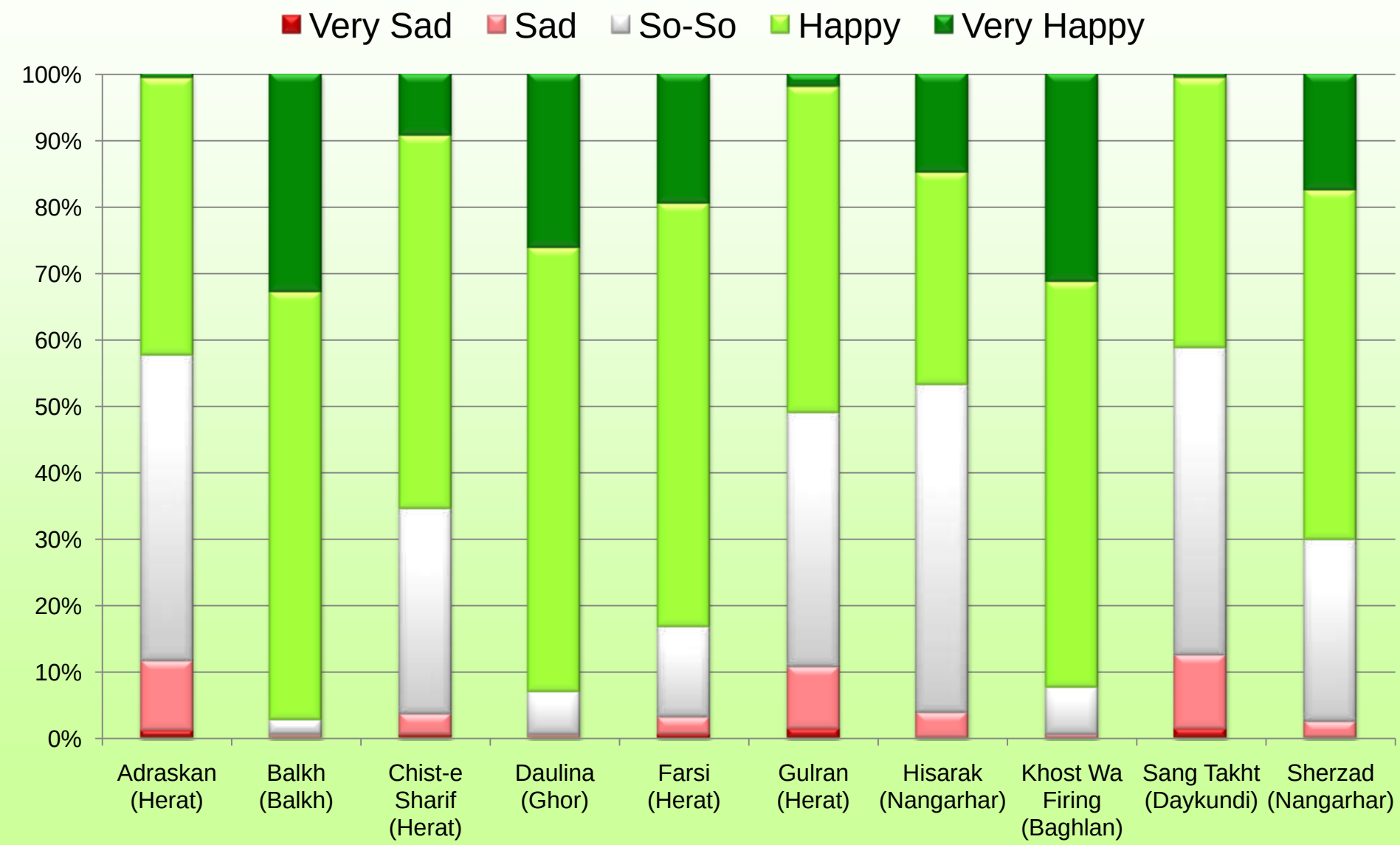


Tax (MHH)

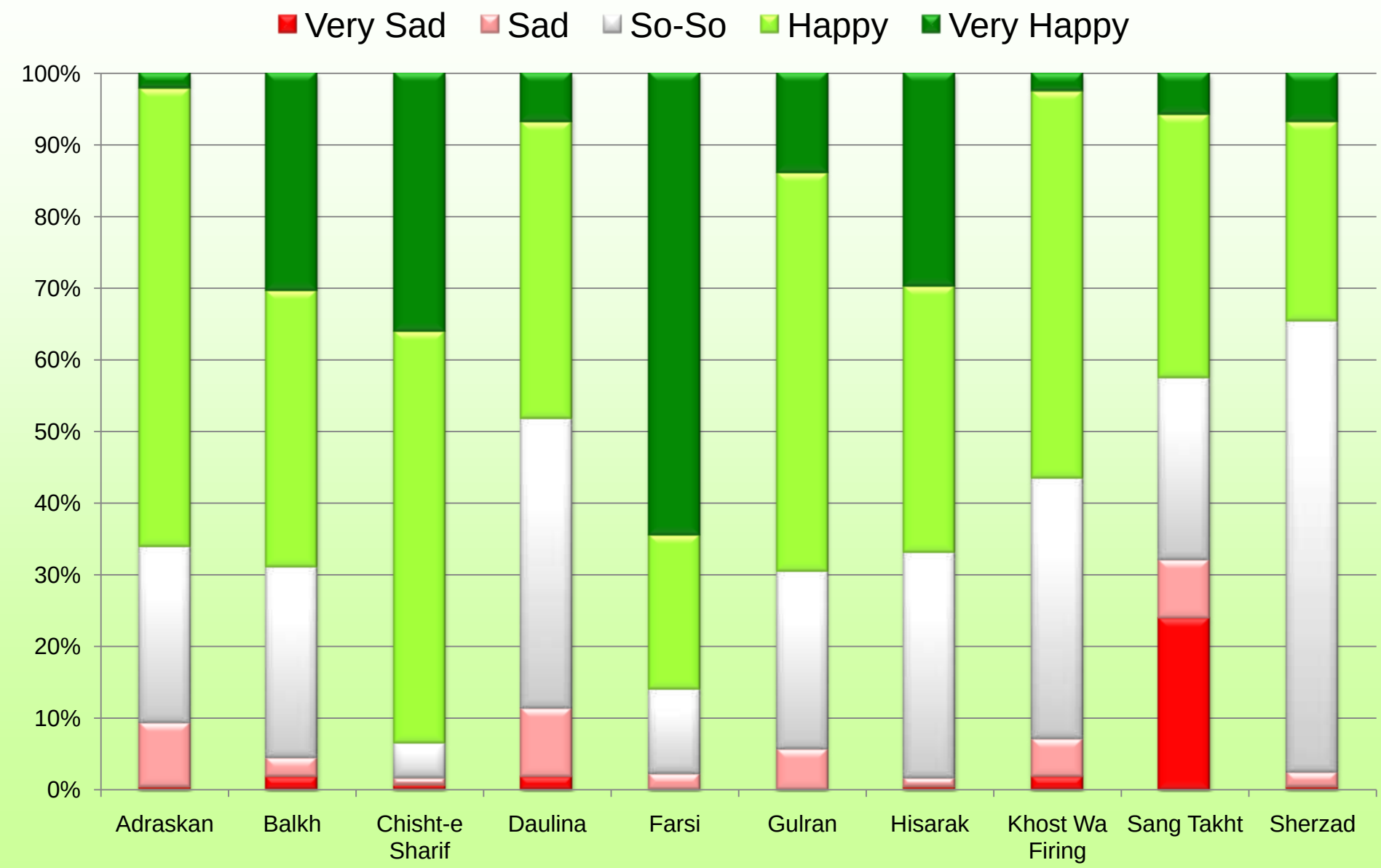
Who should people pay taxes to?



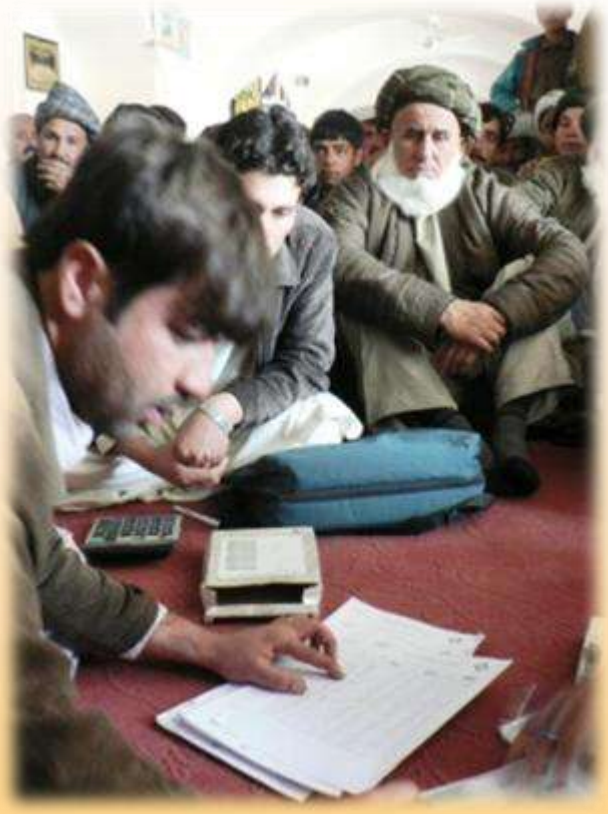
Happiness (MHH)



Happiness (FI)



Part II

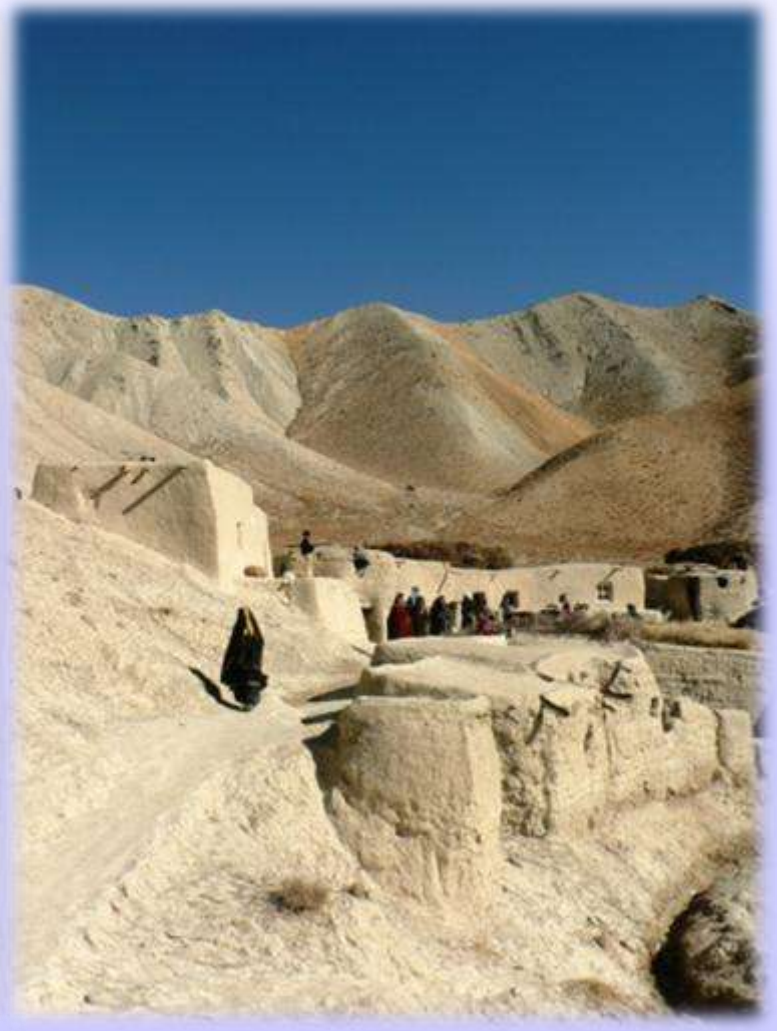


Sub-Treatment Interventions (STIs)

Roadmap: Part II (STIs)

1. **Motivation & Description**
2. **Hypotheses**
   - Assess impact of STIs on election and sub-project outcomes, project quality, program satisfaction, and general outcomes of interest
3. **Methodology**
   - Random, independent assignment of STI-1 & STI-2 to 250 NSP evaluation communities
4. **Interim Election Monitoring Data**
5. **Super-Preliminary (!) STI-2 Results**

Motivation & Description



Motivation

- Test **potential refinements** in program implementation to improve impact, program satisfaction etc.
- Inspired by **existing heterogeneity** in implementation and FP feedback
- **Developed in cooperation with FPs** to limit disruption to existing participatory approaches
- Two sub-treatment interventions (STIs) selected:
  - Election Method **(STI-1)**
  - Sub-Project Selection Procedure **(STI-2)**
- Guidelines provided to standardize implementation

Overview

STI-1: Election

- 125 / 250 evaluation communities elect CDC with **cluster election**
- 125 / 250 villages elect CDC with **at-large election**

STI-2: Sub-Project Selection

- 125 / 250 select sub-projects by **village meeting**
- 125 / 250 select sub-projects by secret-ballot **referendum**

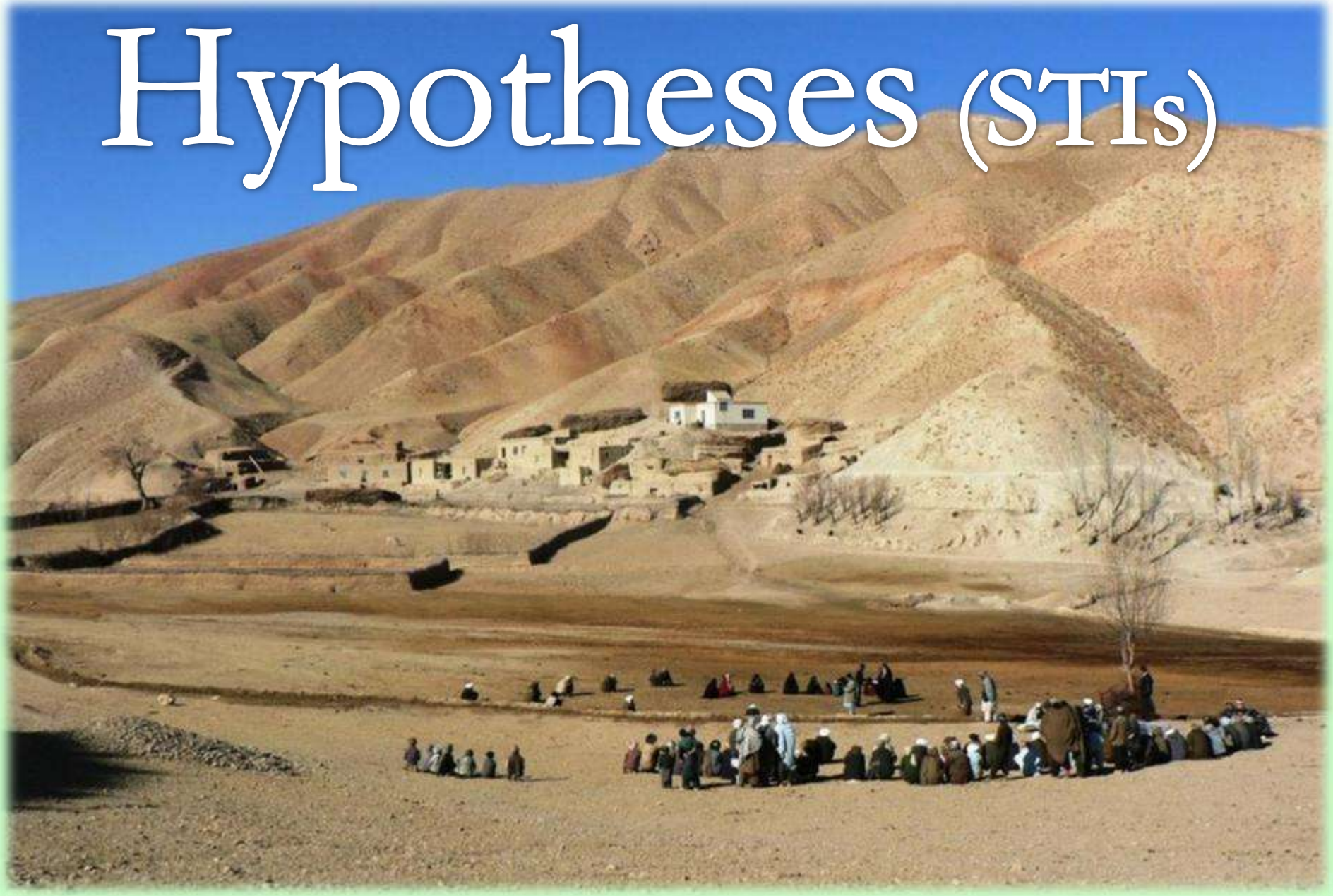
STI-1

- STI-1 mandates variation in method of CDC election
  - ½ elect CDC with *status quo* "**cluster election**"
  - ½ elect CDC with "**at-large election**"
- Cluster-Based Election
  - Emphasizes **representation**
  - **Vote choice restricted to those living in own "cluster"**
  - **Unanimous voting** by cluster appears common
- At-Large Election
  - Promotes **high-capacity CDCs**
  - **Voters can vote for anyone in village**
  - **More competition** observed

STI-2

- STI-2 mandates variation in sub-project selection procedure:
  - ½ select sub-projects through **consultation meeting**
  - ½ select sub-projects through a **referendum**
- Consultation Meeting
  - **Customary** decision-making procedure
  - Villagers & CDC **discuss** preferred sub-projects at public meeting
  - Final decision rests with CDC
- Secret-Ballot Referendum
  - Villagers select preferred project in **referendum** from list of projects proposed by CDC
  - Final **decision rests with community**
  - Results from **Indonesia** suggest ↑ satisfaction with program

Hypotheses (STIs)



Hypotheses: STI-1

1. At-large elections will reduce geographic dispersion of CDC members
2. At-large elections will increase education levels of CDC members
3. At-large elections will increase election competitiveness
4. Impact of at-large elections on 'elite-capture' of CDC and sub-projects is hard to predict
5. At-large elections will reduce awareness of community members about sub-projects
6. At-large elections will increase quality of completed sub-projects

Hypotheses: STI-2

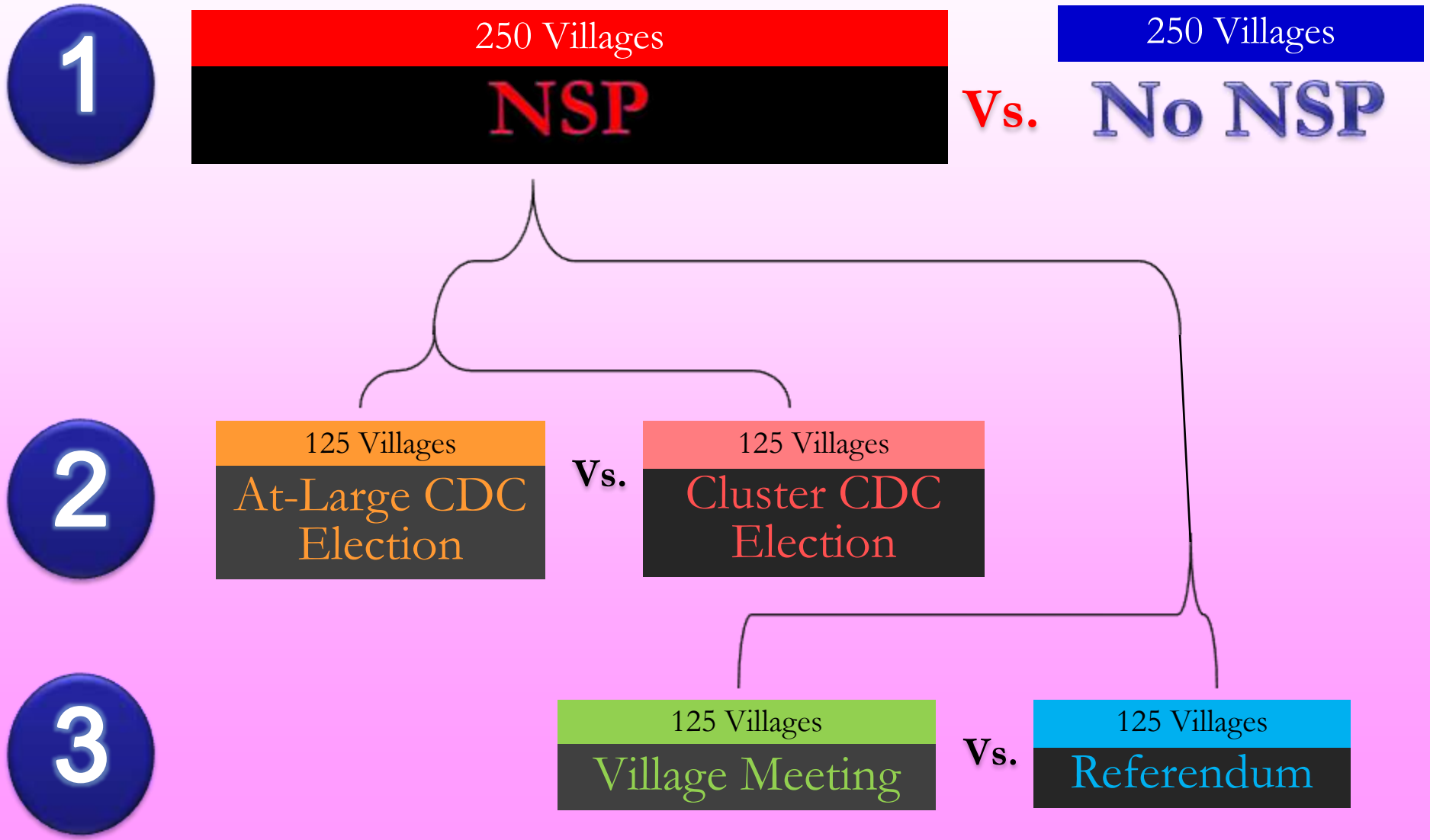
1. Referenda will limit 'elite-capture' of sub-projects
2. Referenda will improve program satisfaction
3. Referenda will increase impact of NSP on institutions for village governance
4. Referenda will increase level of community contributions
5. Referenda will increase level of community awareness of sub-projects
6. Referenda will increase quality of completed sub-projects

Methodology

STI Assignment

- 25 **matched-quadruples** of villages formed in each district using multivariate matching
- Variation in each STI assigned independently to treated pair in matched-quadruple using random number generator

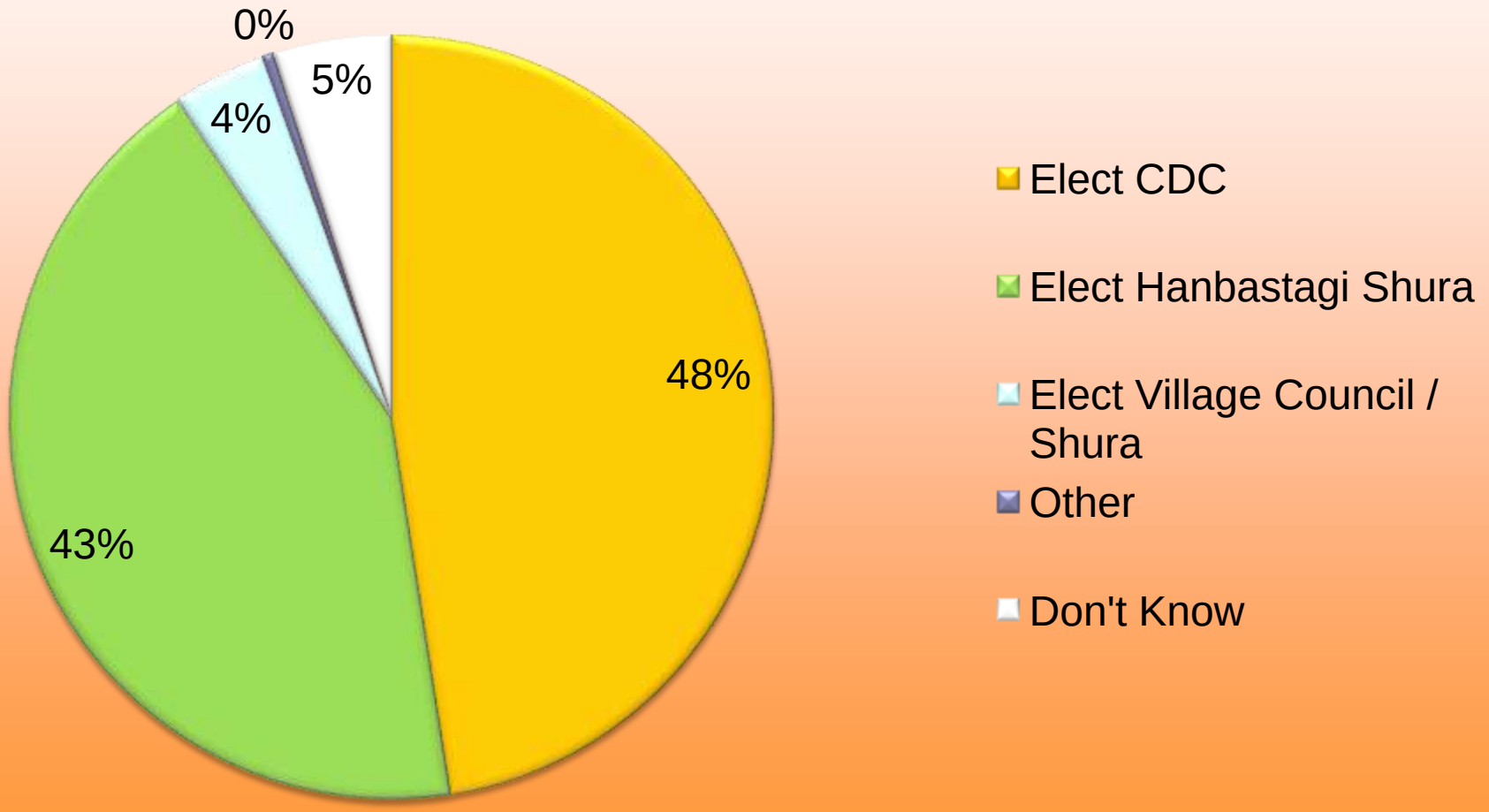
Assignment


1
250 Villages
NSP
Vs.
250 Villages
No NSP
2
125 Villages
At-Large CDC Election
Vs.
125 Villages
Cluster CDC Election
3
125 Villages
Village Meeting
Vs.
125 Villages
Referendum

Summary Statistics – Election Monitoring

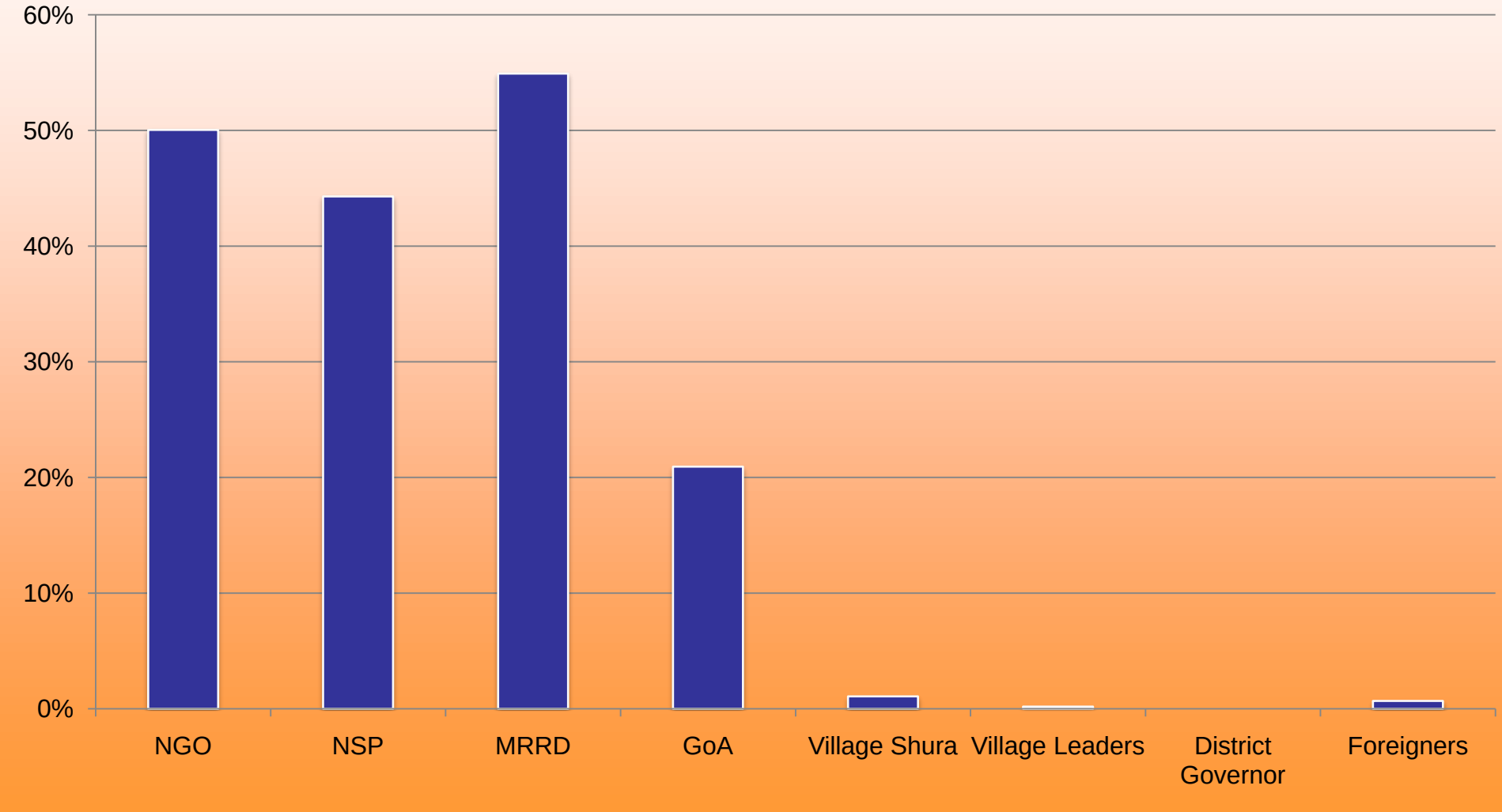
Purpose of Election

What is the purpose of the election?



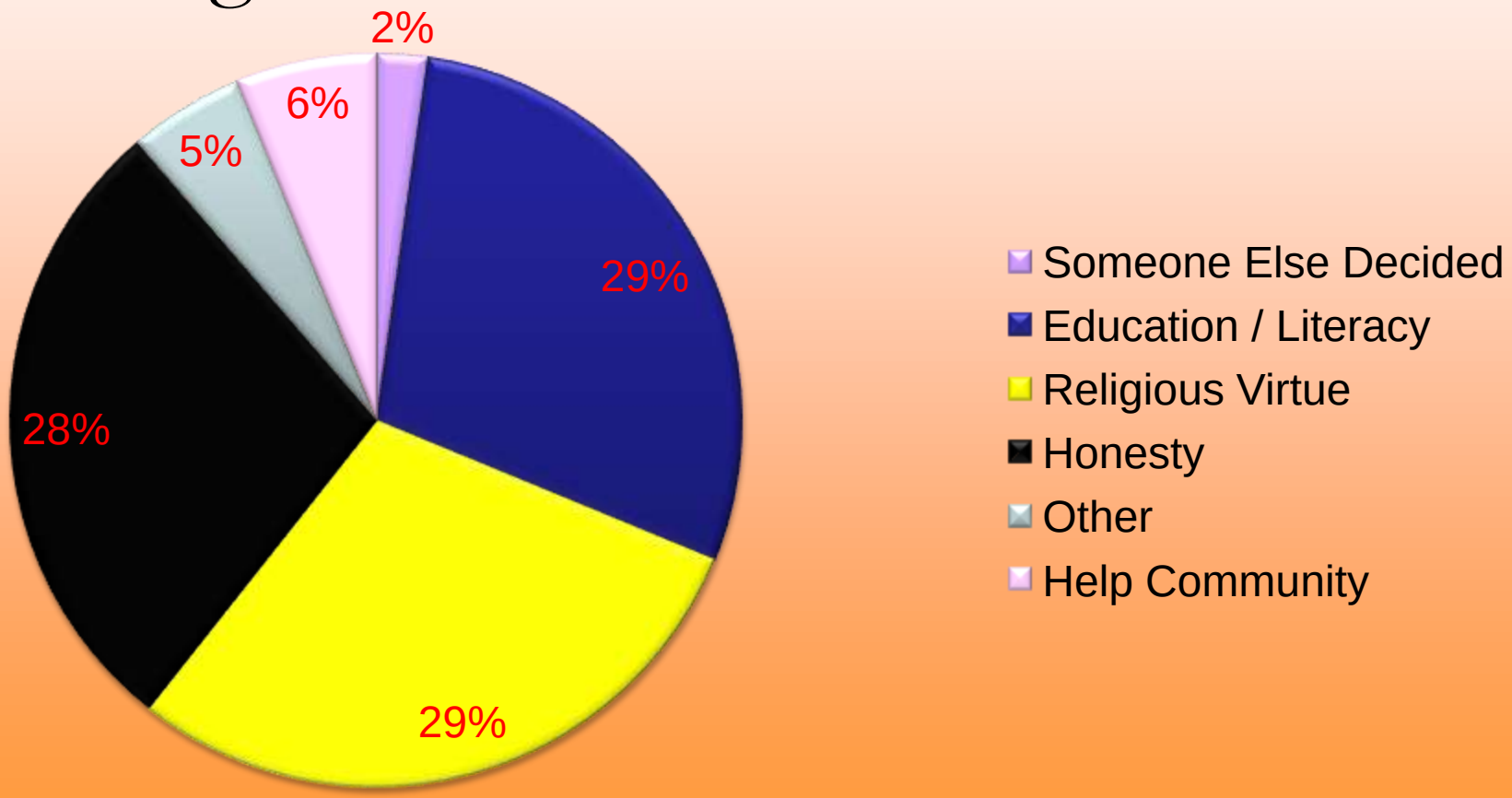
Election Sponsor

Who organized the election?



Who to Vote For?

What was the most important consideration in deciding who to vote for?



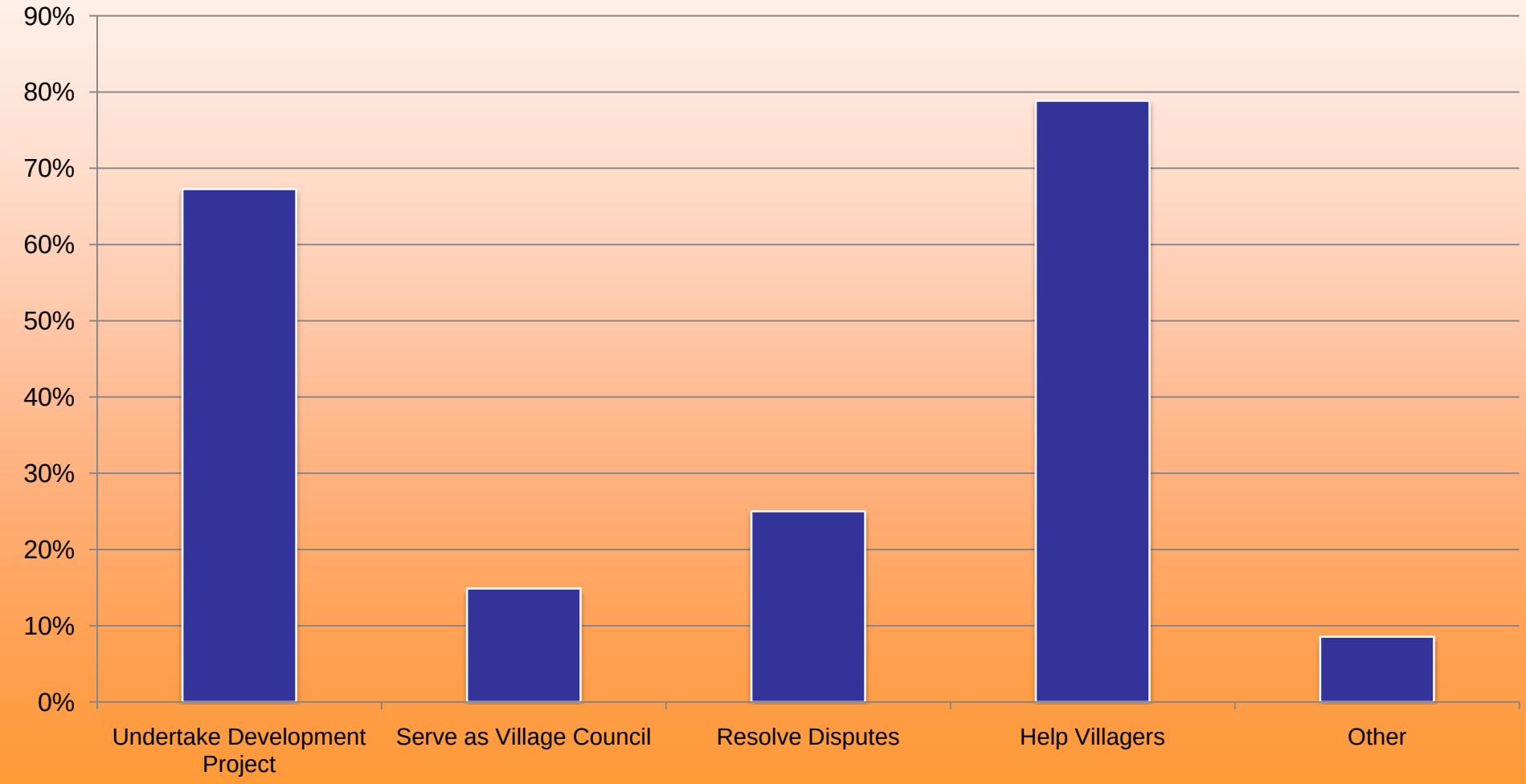
Effectiveness of STI-1

Can you vote for anyone in the village or just people who live in your ward?

	Ward Election	At-Large Election
Only in Ward	91%	35%
Anyone in Village	9%	65%

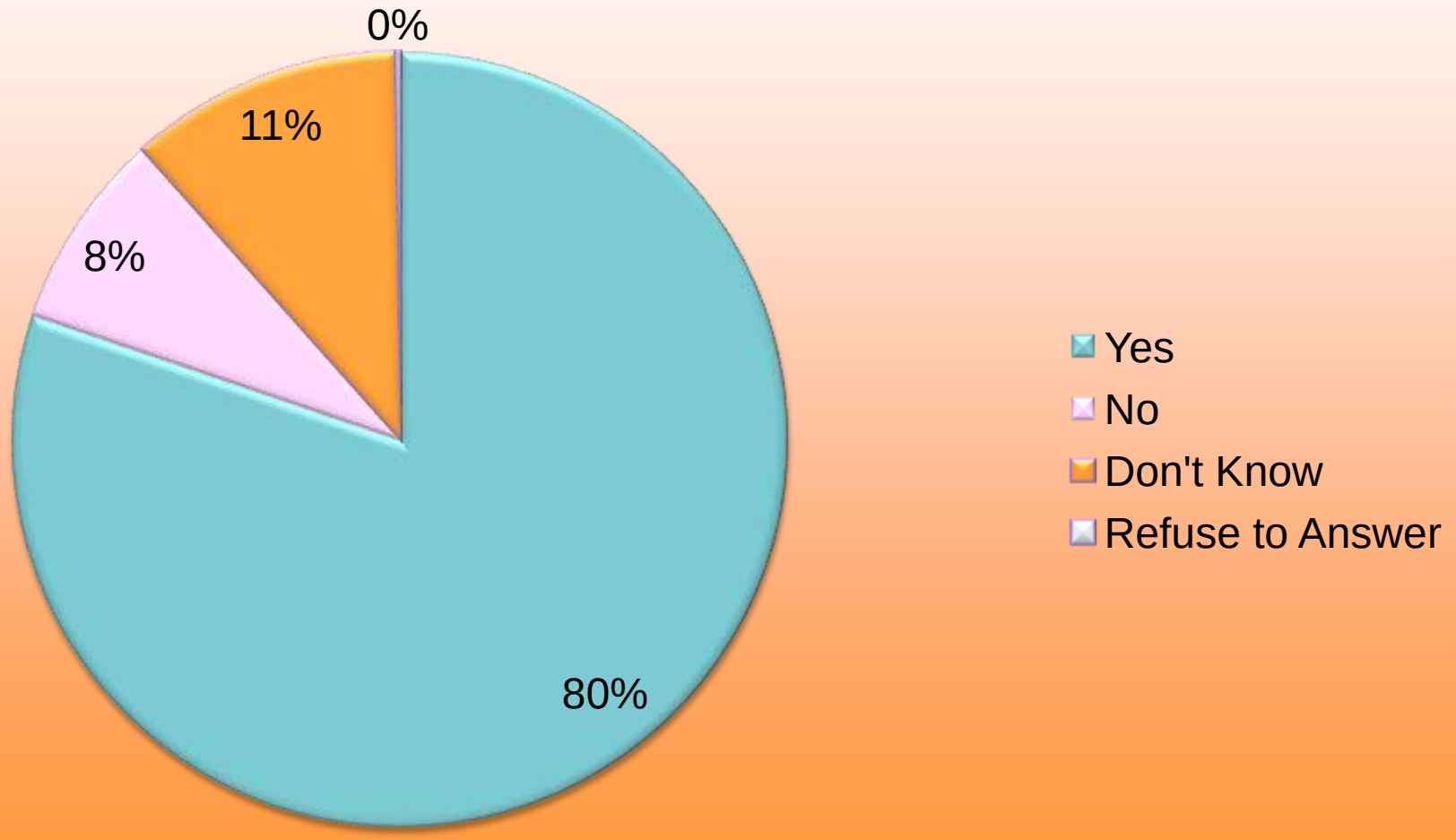
Purpose of CDC

What is the purpose of the CDC?



CDC & Government

Is the CDC a part of the government?



Preliminary STI-2 Findings

Preferences & Selections

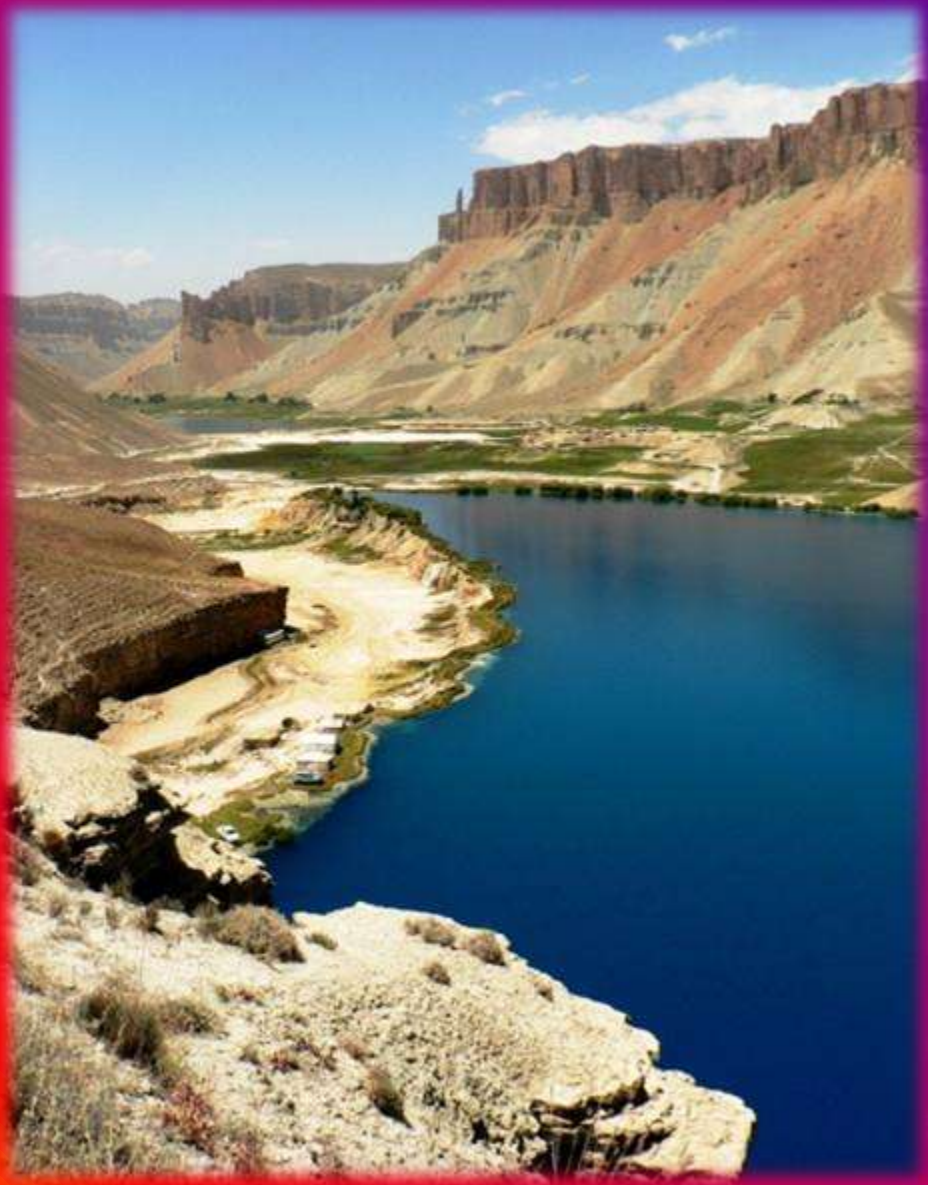
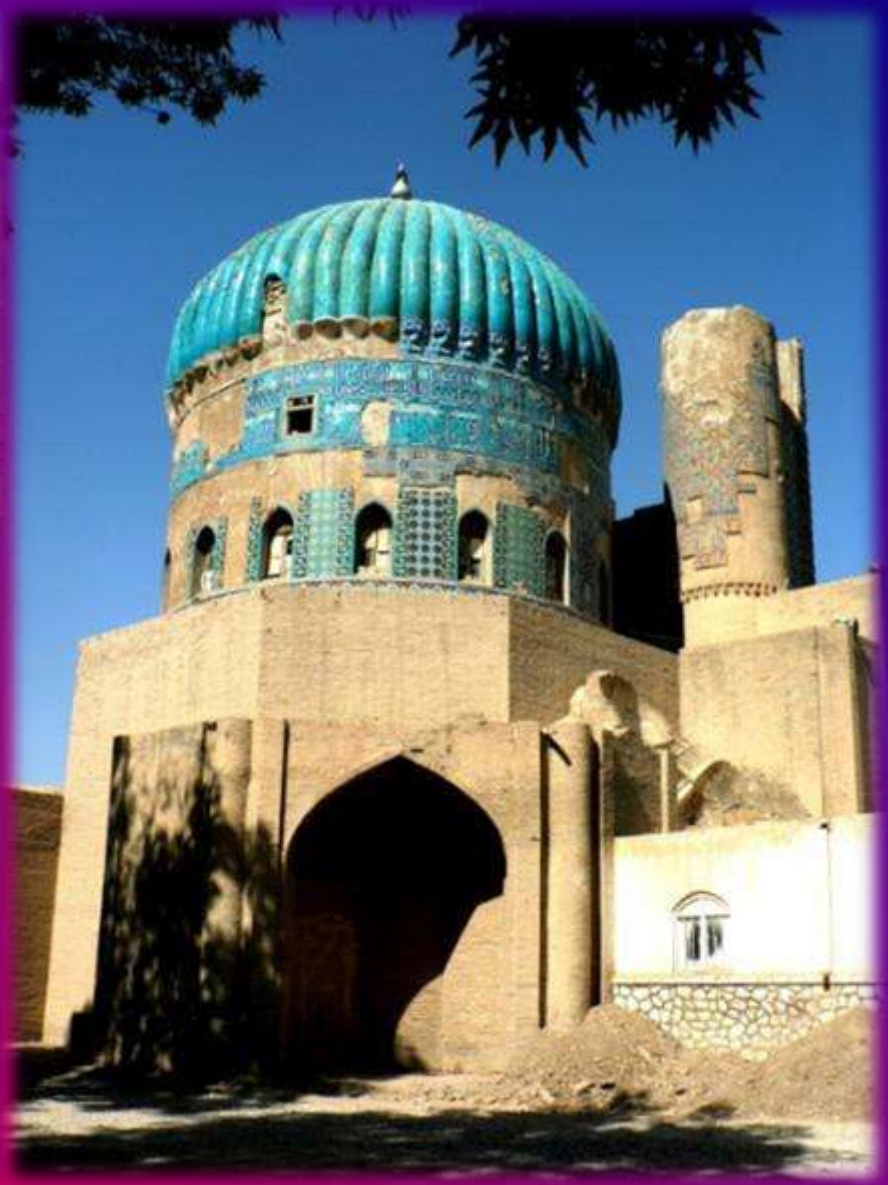
- **Interim** results only (could change as more data comes in):

	Project's rank in community plan
Project rank in housholds survey	0.39172
	[4.48]***
Project rank in male shura focus goup	0.15432
	[2.83]***
Project rank in female individual survey	-0.08175
	[0.96]
Project rank in female shura focus goup	0.02291
	[0.31]
Number of villages	55

- Results of ordered probit regression indicate that female preferences do not have any effect on projects' selection.
- Effect of male head-of-household preferences is more than twice more important than preferences of male shura – suggest a lack of elite capture

Impact of STI-2

- Referenda appears to increase likelihood of selecting electricity-related projects:
  - 13 / 29 assigned referenda chose electricity as first project, compared to 6 / 27 villages assigned consultation meetings
- In this limited sample, there is no evidence that different methods of projects selection change the way preferences are translated into the choice of projects

For More Info:

http://beath.org/NSP-IE