



“The environmental impact of settling refugees in refugee hosting areas in Uganda”

September 20th, 2018
Kampala, Uganda

Study Objectives

- To assess the impact of settling refugees and their energy use on the environment with emphasis on forests and vegetation cover in the surrounding;
- To assess the impact of environmental changes and their energy use on the livelihoods and well-being of refugees and host communities (men, women & children);
- To prospectively examine existing and potential mitigation measures against the misuses of energy conservation and the continued deforestation and vegetation loss.



Overview of Study Area

Study Demographics

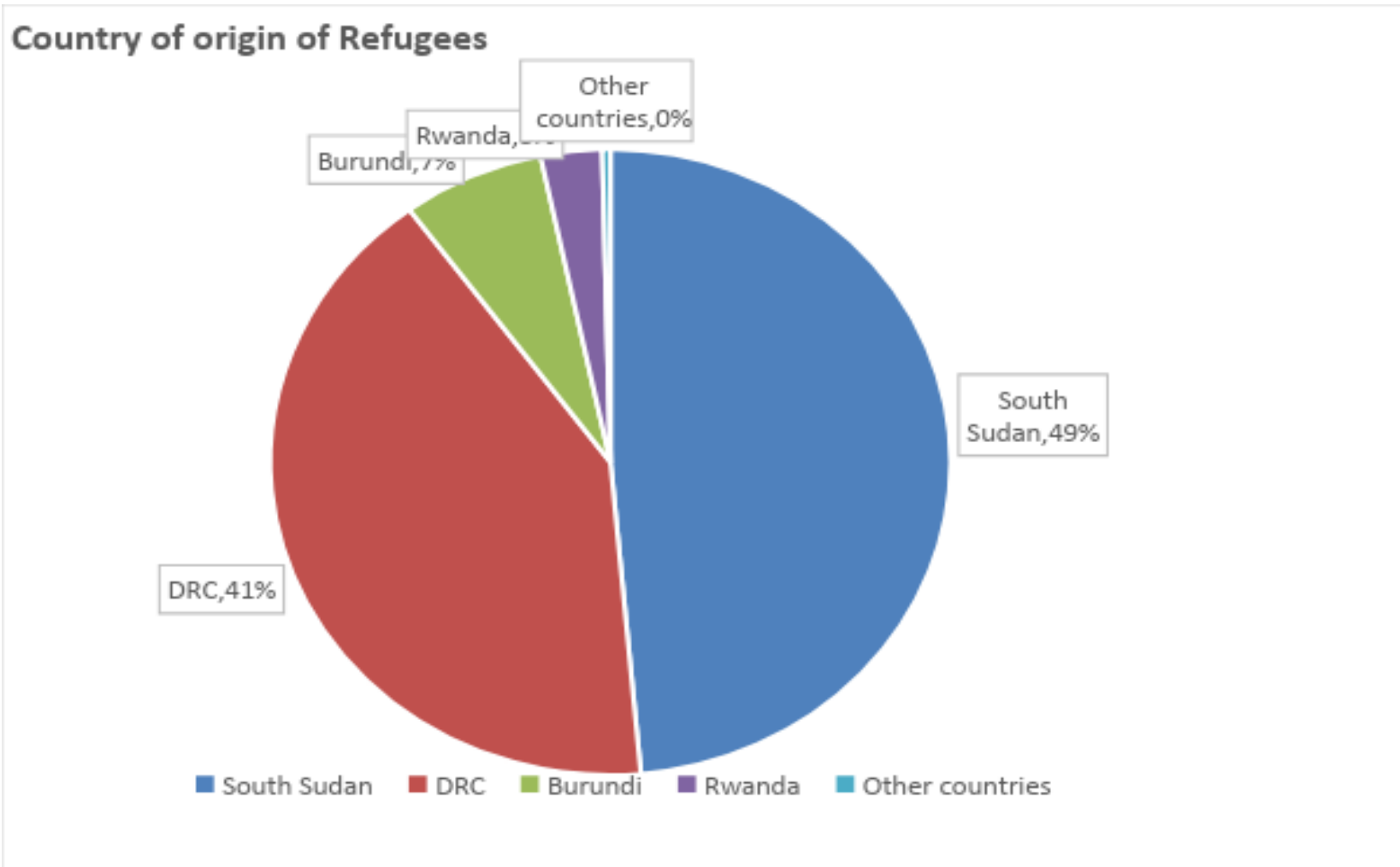
5,392 study respondents

13 settlements

67% refugees : 33% host

49% male : 51% female

Study Demographics



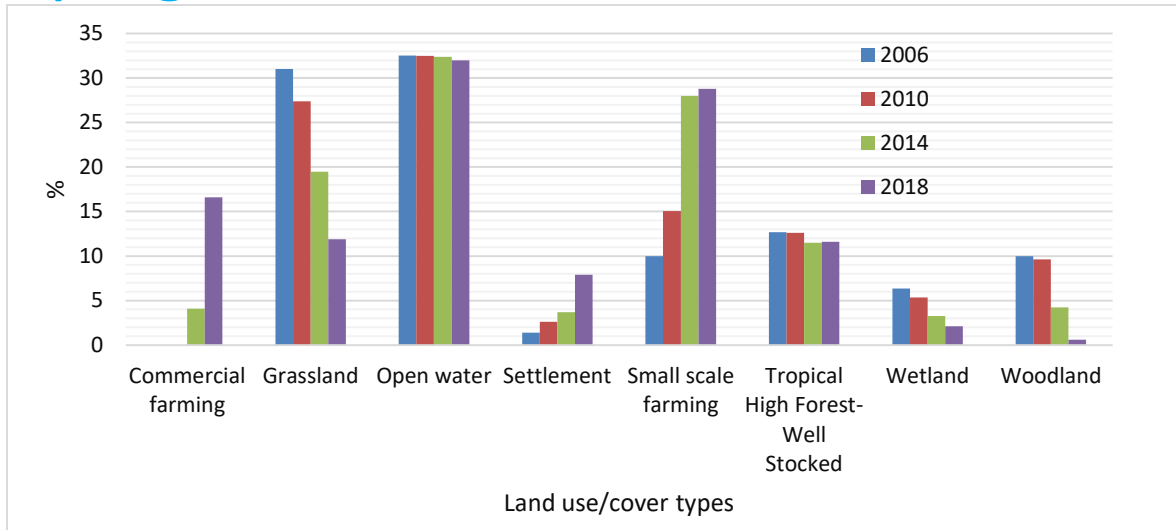
Majority, 46.9% female headed households



Satellite mapping

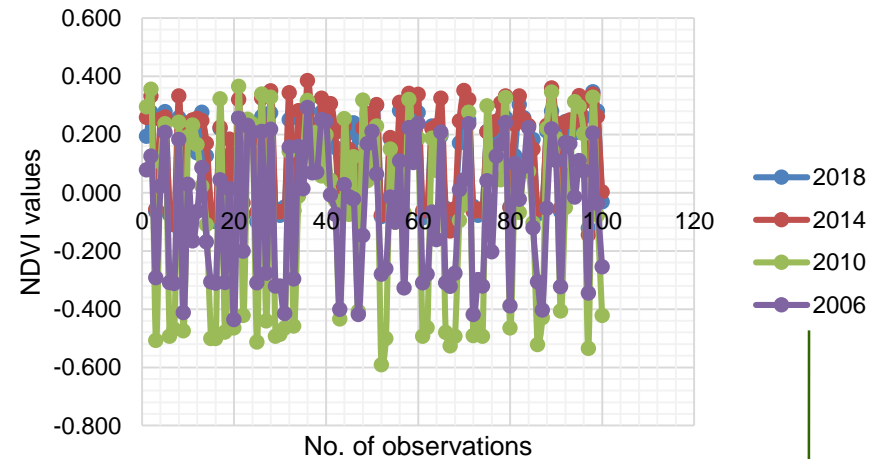
Findings

Kyangwali



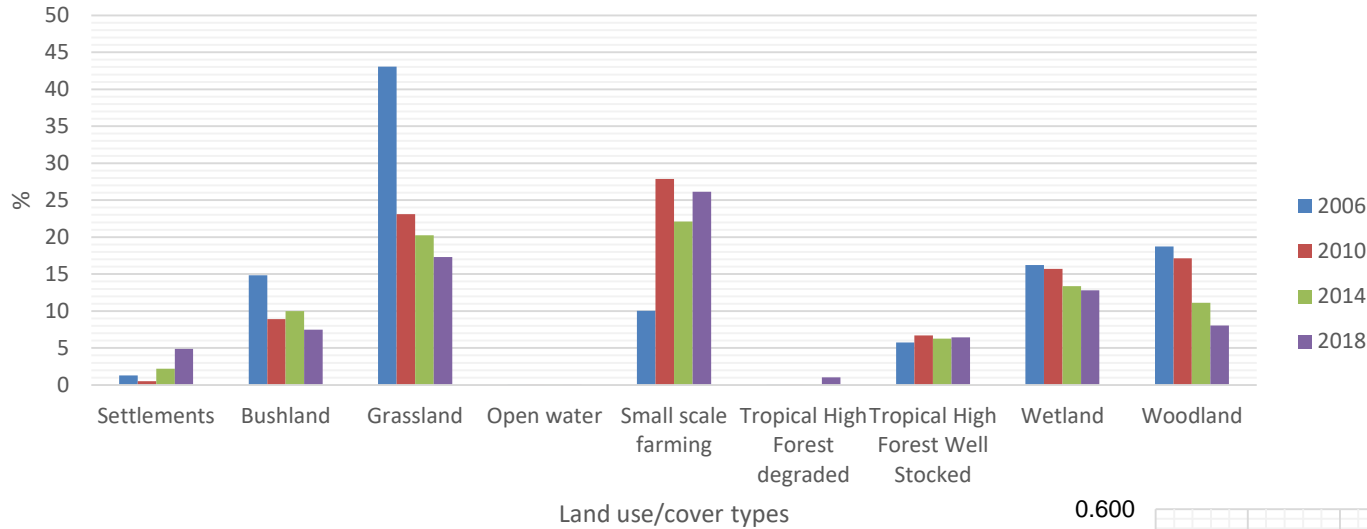
Key issues and implications

- Reductions in natural cover 2006, 2010, 2014
- Increase in land use activities (settlements, hunting and farming activities)
- Influx of refugees (Burundi, DRC, Rwanda etc)
- Increased pressure on land resources
- Loss and degradation of natural cover
- Increase on the districts food security
- Development (social, economic) – Win-win situation



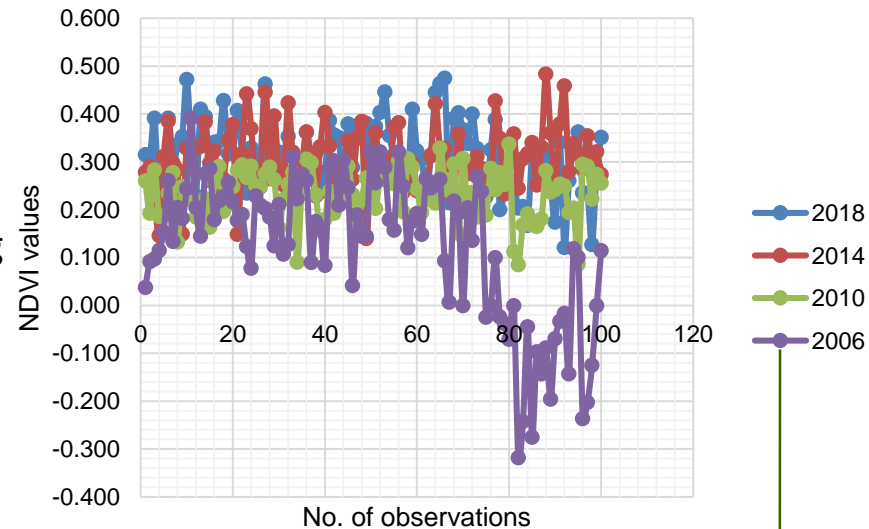
Findings

Rwamwanja and Kyaka II

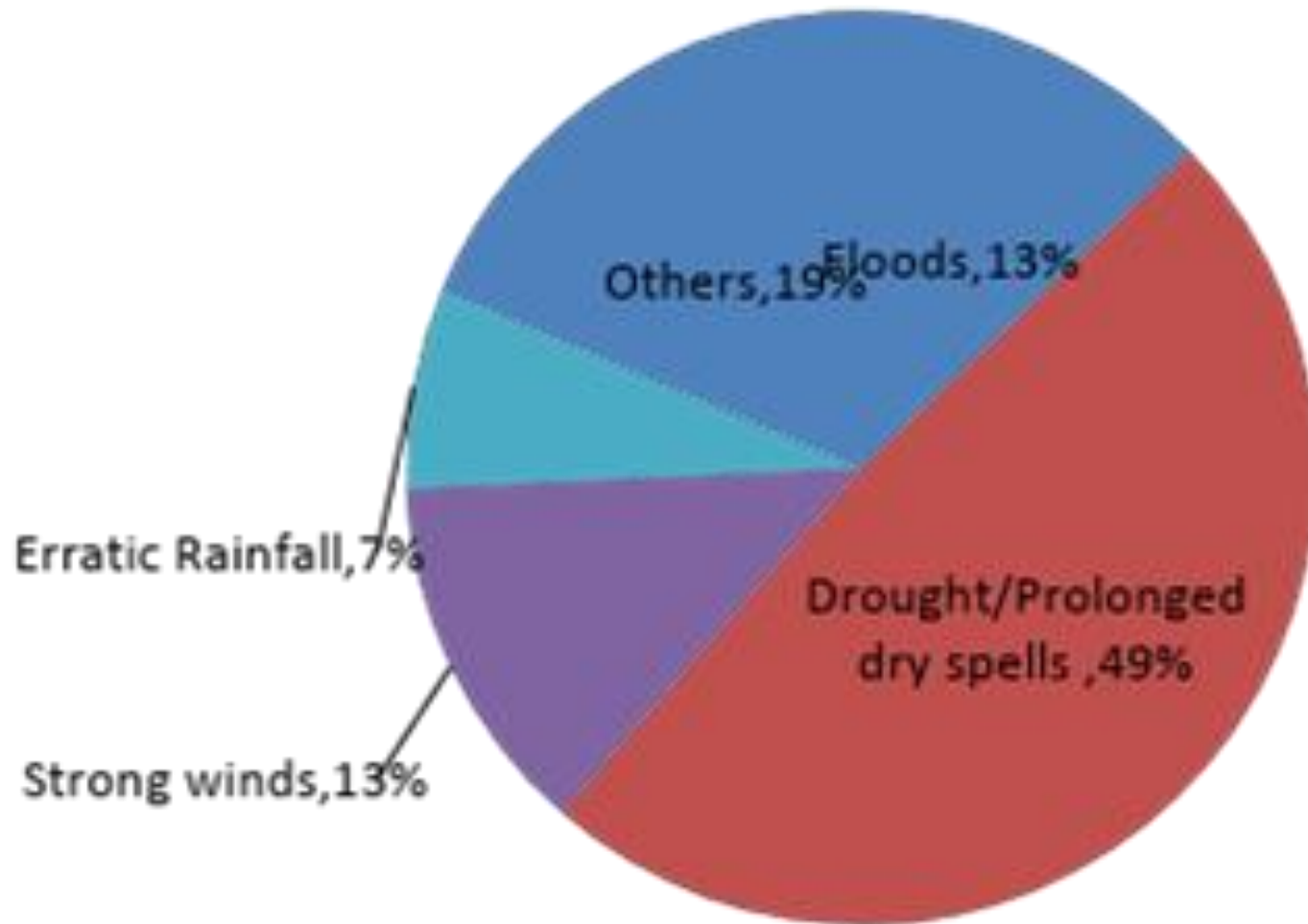


Key issues and implications

- Reductions in natural cover (bushlands, wetland, grasslands)
- Increase in land use activities (settlements, farming activities)
- Influx of refugees, demand for firewood, land
- Increased pressure on land resources



Climate Change Shocks in last 5 years



Conclusion on Perceptions

The dwellers of the refugee Settlement areas do confirm experiencing climate change

They experience climate changes in various ways among which include, prolonged dry spells, droughts, erratic rains, strong winds, increased air temperatures

The dwellers experience scarcity of wood fuel

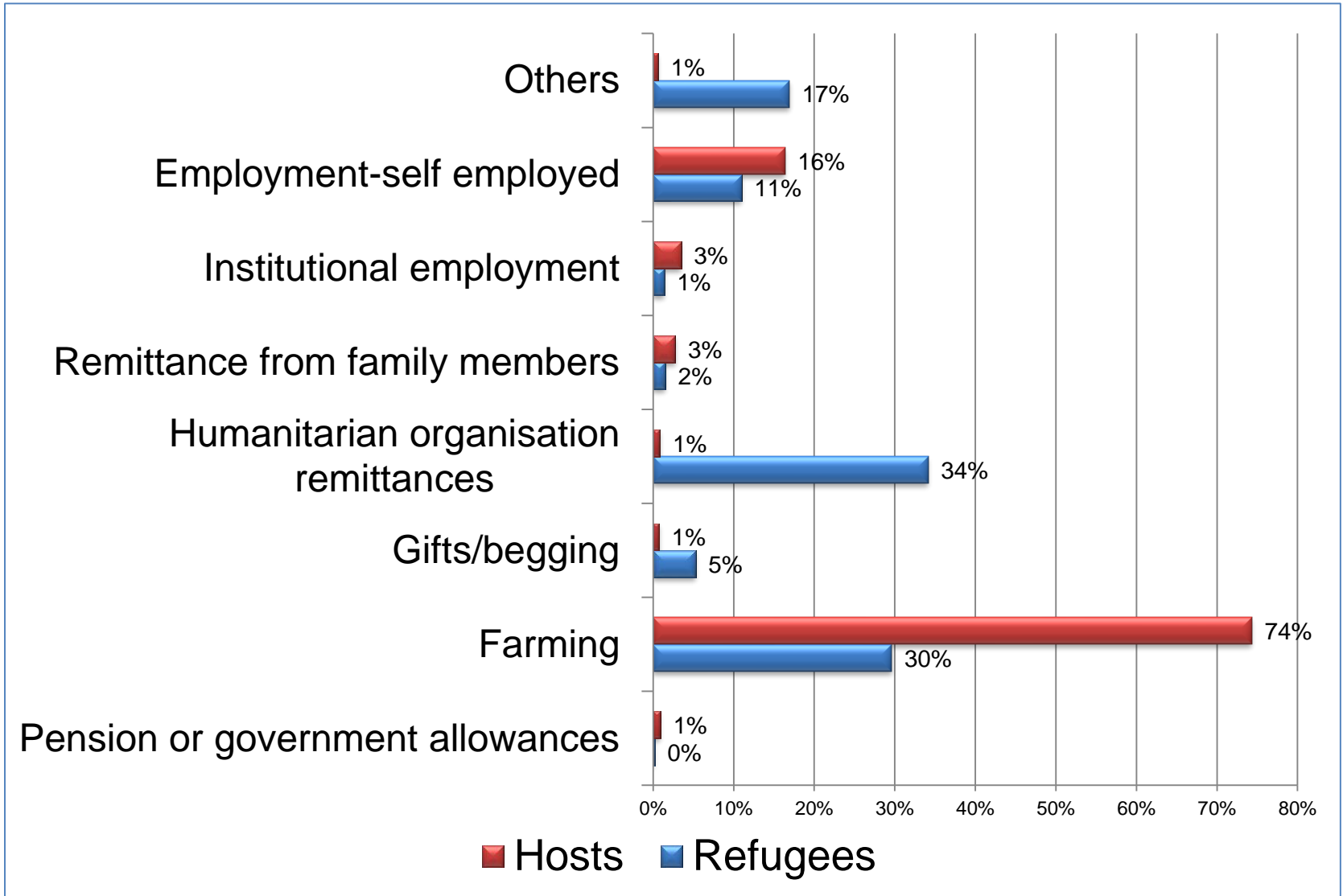
There are various ways they experience the scarcity of wood fuel. These include walking longer distance to gather firewood, skipping cooking meals, using other resources to cook.



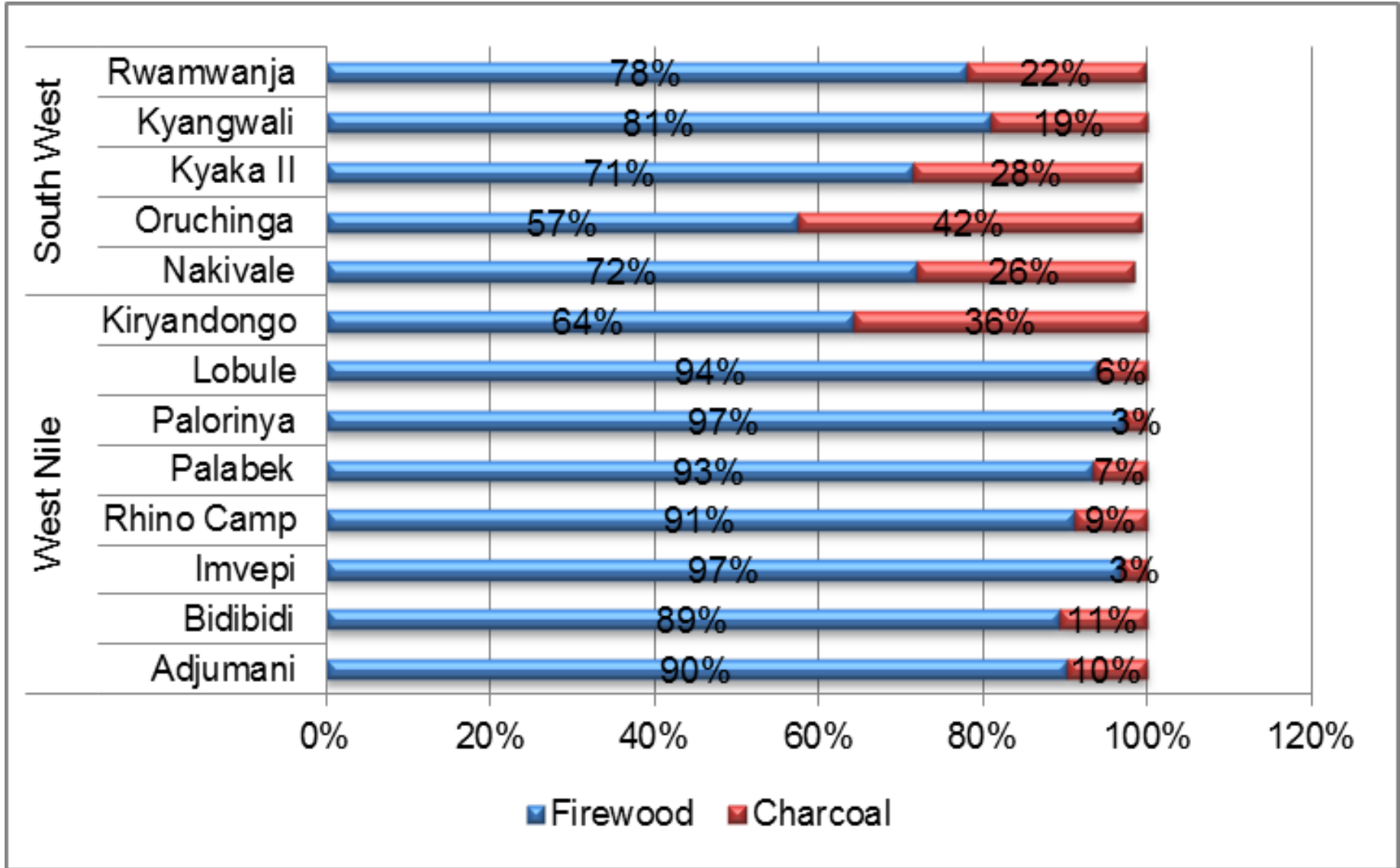
Energy Use

Livelihoods

Paid labour



Fuel consumption per settlement



Fuel Use

A random one day survey of about 82 households in the settlements of Bidi Bidi & Adjumani revealed the following:

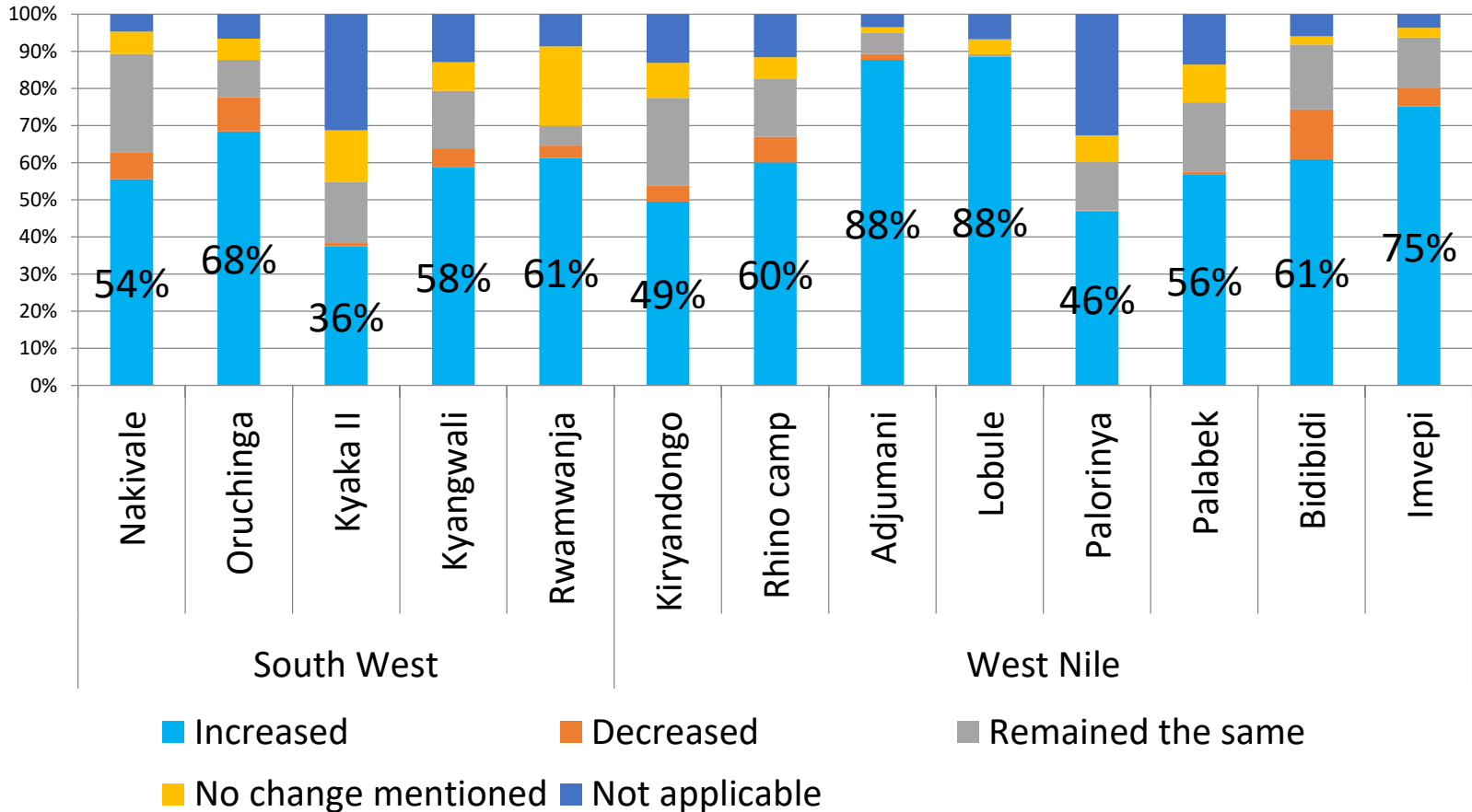
- Estimated average firewood consumption: **2 kgs/person/day**
- Firewood consumption ranged from **0.8 – 4 kgs/person/day**
- A bundle of wood (6-7 pieces) costs UGX 500



- Estimated average charcoal consumption: **0.2kgs/person/day**
- In most households, charcoal is used as an alternate fuel

Change in distance

62% reported that the distance walked to collect firewood had increased over the last one year. **59%** of the respondents reported the cause being unavailability of firewood in the old place.

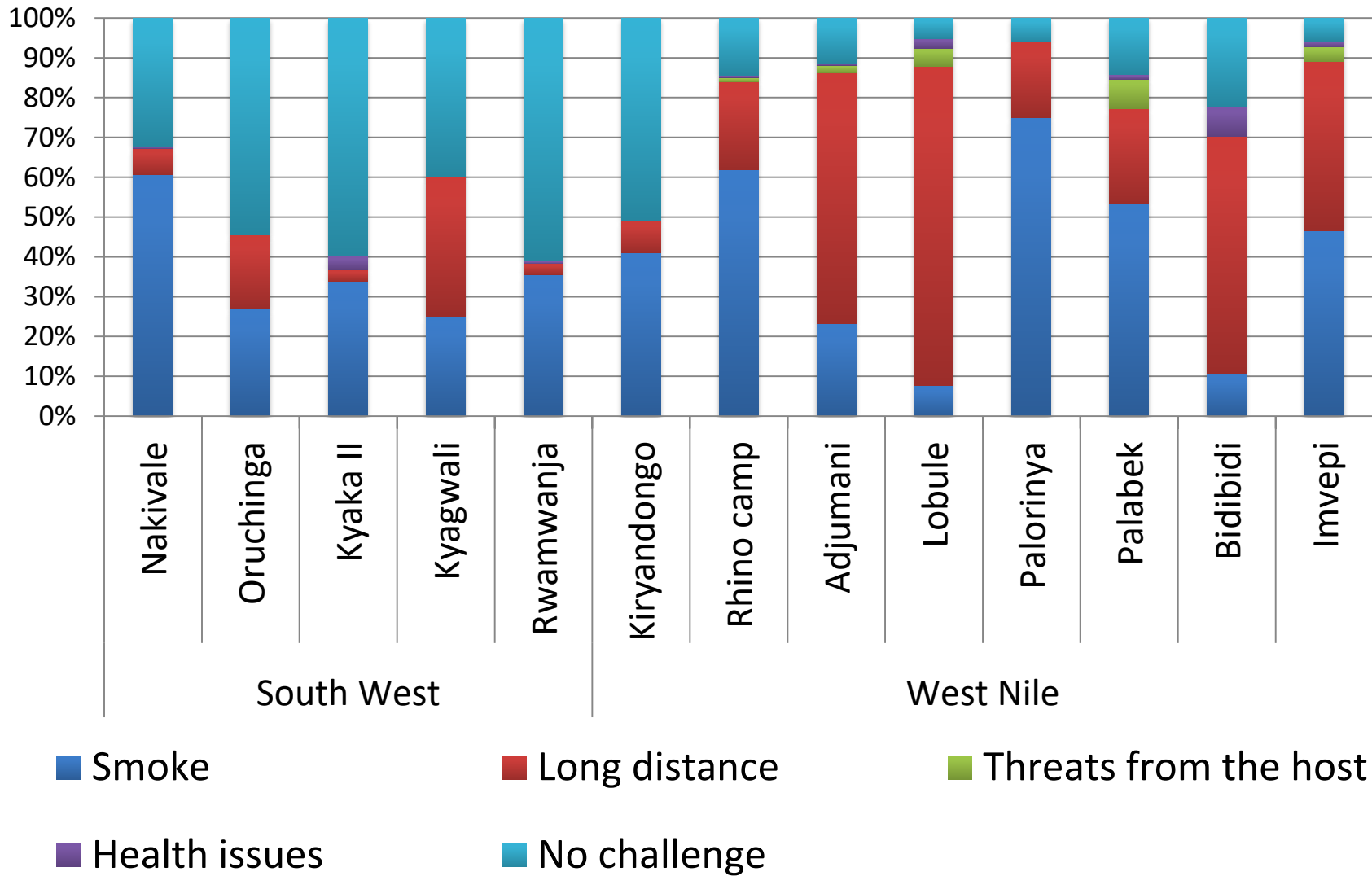


Fuel coping mechanisms

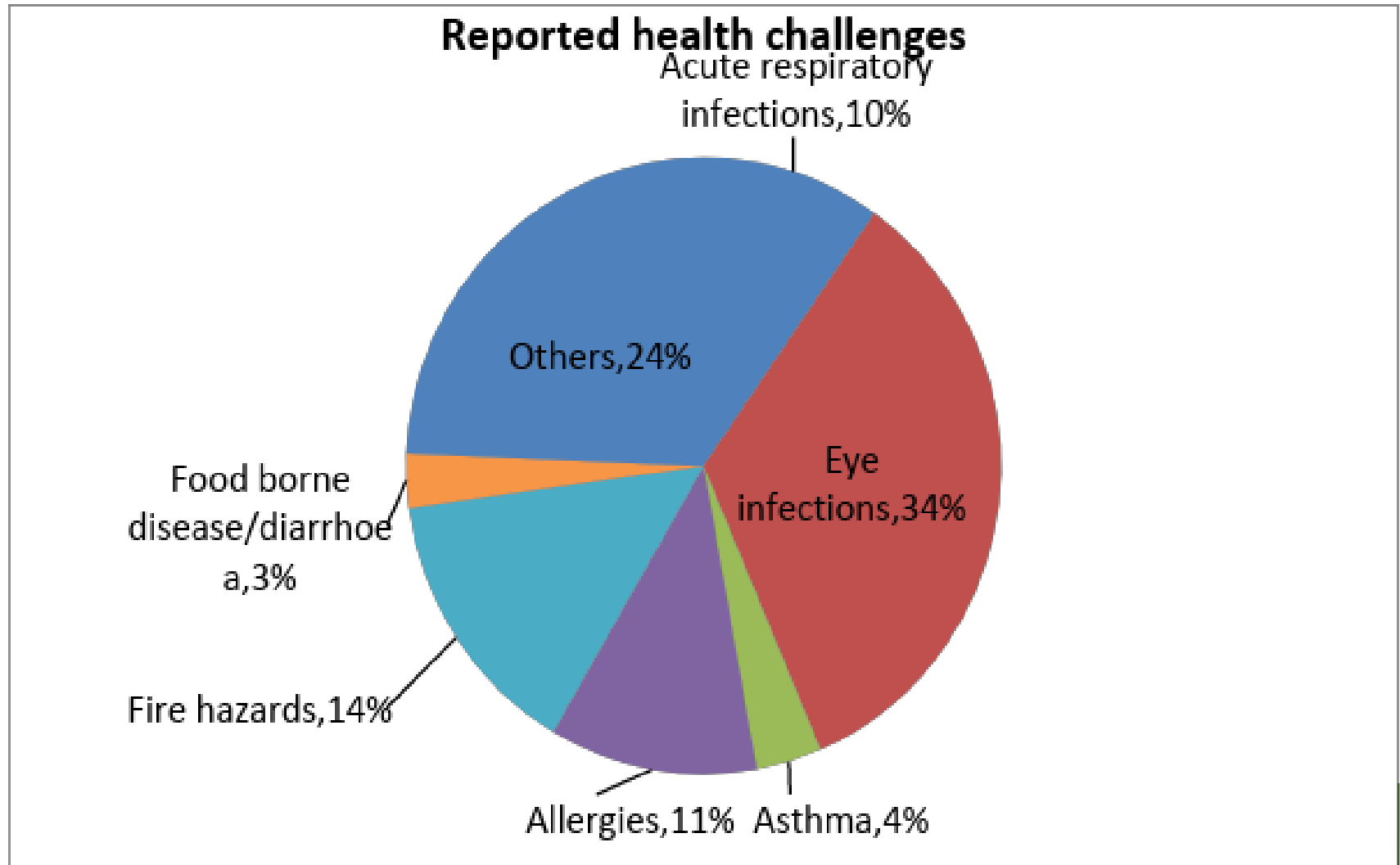
Due to the scarcity of fuel for cooking many of the respondents resort to various mechanisms

- **51%** skip meals,
- **19%** change the diet to greens, porridge
- **18%** find other means of survival either by looking for it from far places selling food or another item to begging from the neighbours
- **8%** undercooking the food
- **5%** cooked with their neighbours

Challenges faced using firewood



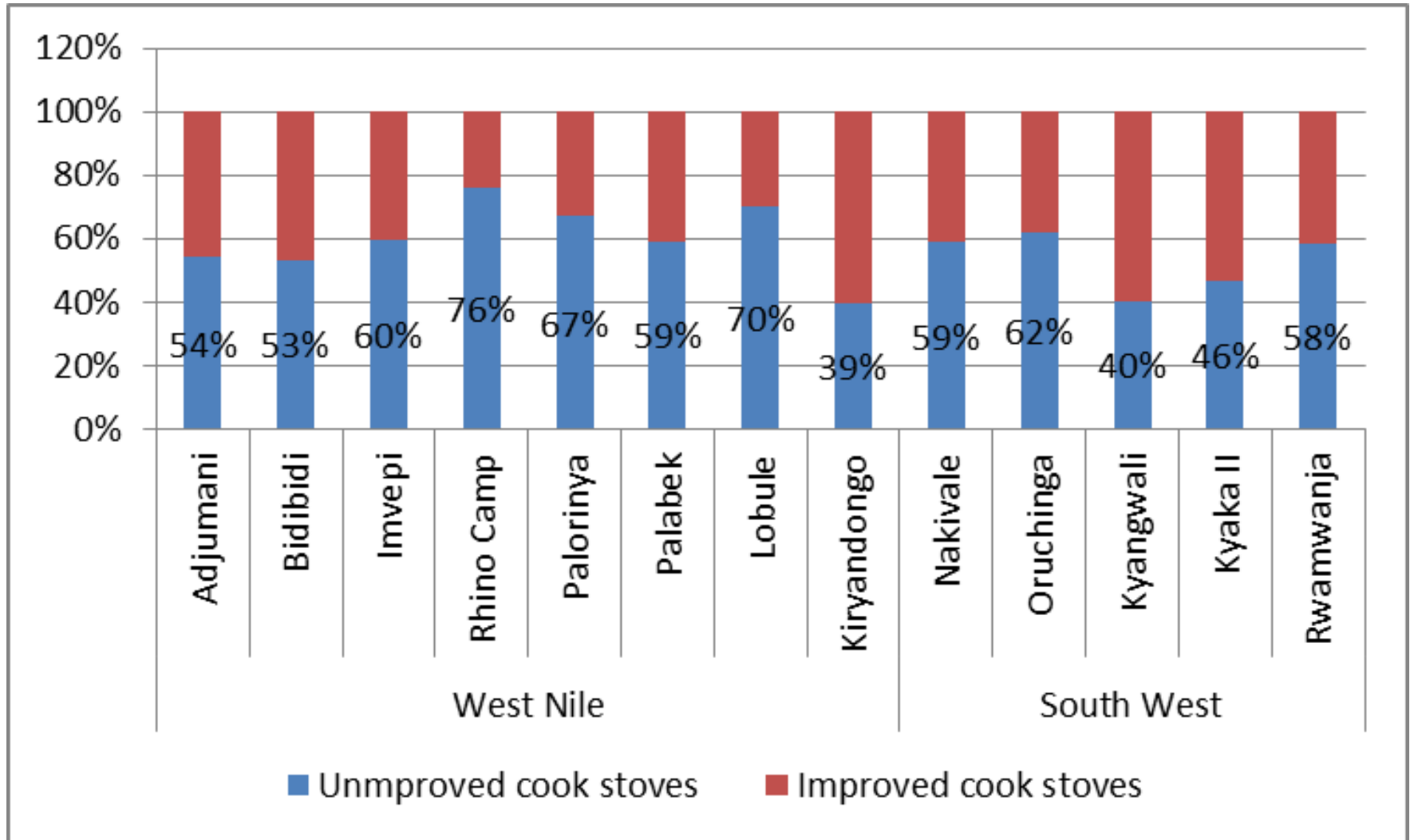
Health challenges related to fuel



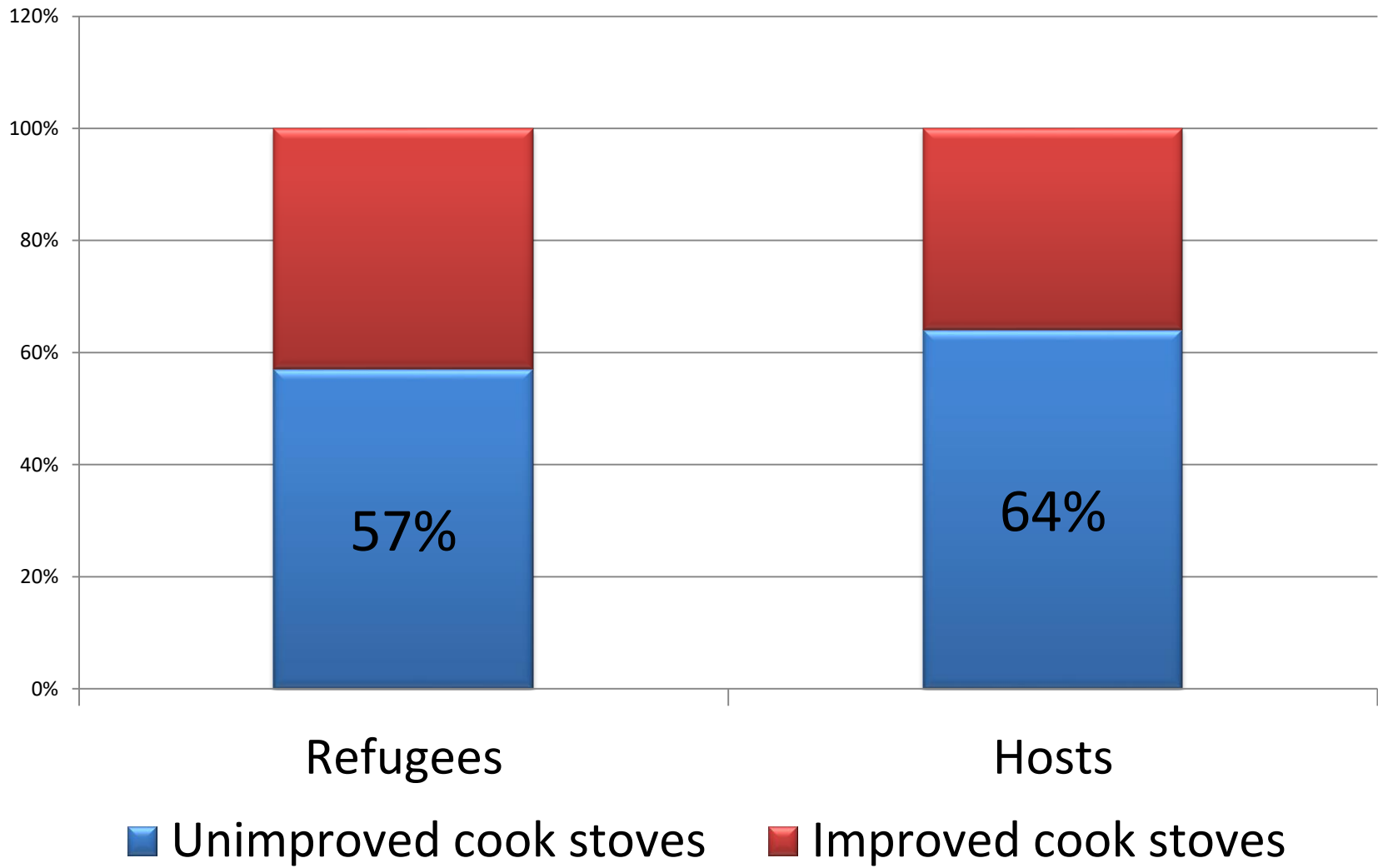
Health challenges related to fuel



Stove Technologies Used



Stove used Refugees Vs Hosts



Common stoves used





Recommendations

Proposed interventions

- Stove for work principle
- Tree growing and wood lot planting
- Alternative fuels
- Market led solutions such as PAYG, micro enterprise offer a stronger basis for energy sustainability.
- Involving both men and women in the design process.

Promotion of energy efficient cook stoves

- Lorena stove: adoption rate and feedback are positive



Laws and Regulations

1



Marking
of trees



2



Selling
charcoal

3



Cutting
trees

Thank you!



Eileen Lara

Centre for Research in Energy and Energy Conservation
Makerere University
P.O. Box 7062,
Kampala, Uganda