

Marketing Clean Cookstove

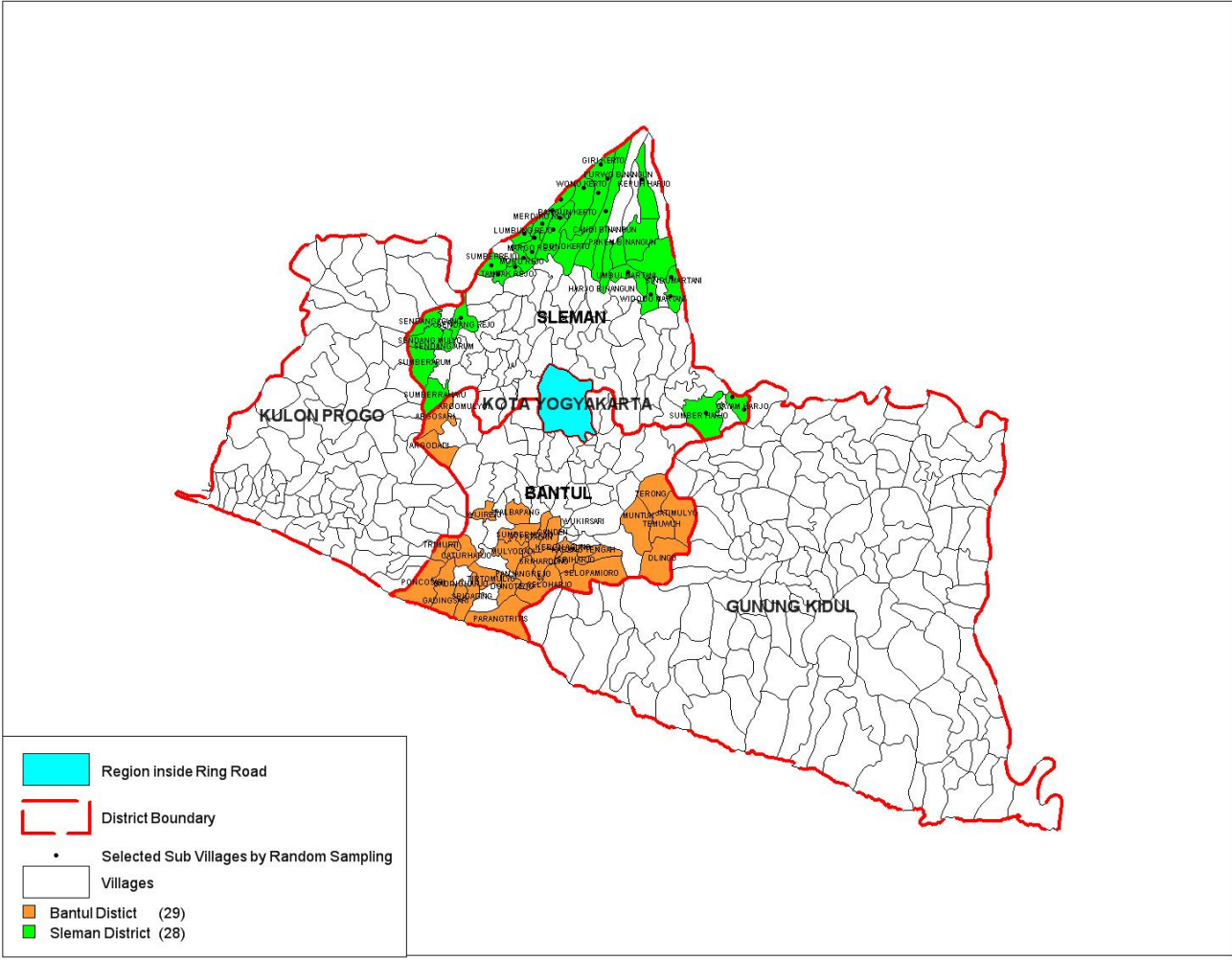
In Peri-Urban Area of
Central Java

Voravate “Tig” Tuntivate

Outline

- ▶ Market Segment of Biomass Stove/Fuel
- ▶ Characteristics of Consumers
- ▶ Biomass Stove Market
- ▶ Preferred Characteristics and Design Feature of Stove

Map of the Market Survey Area Covering Bantul and Sleman District (10 KM Outside the Ring Road)



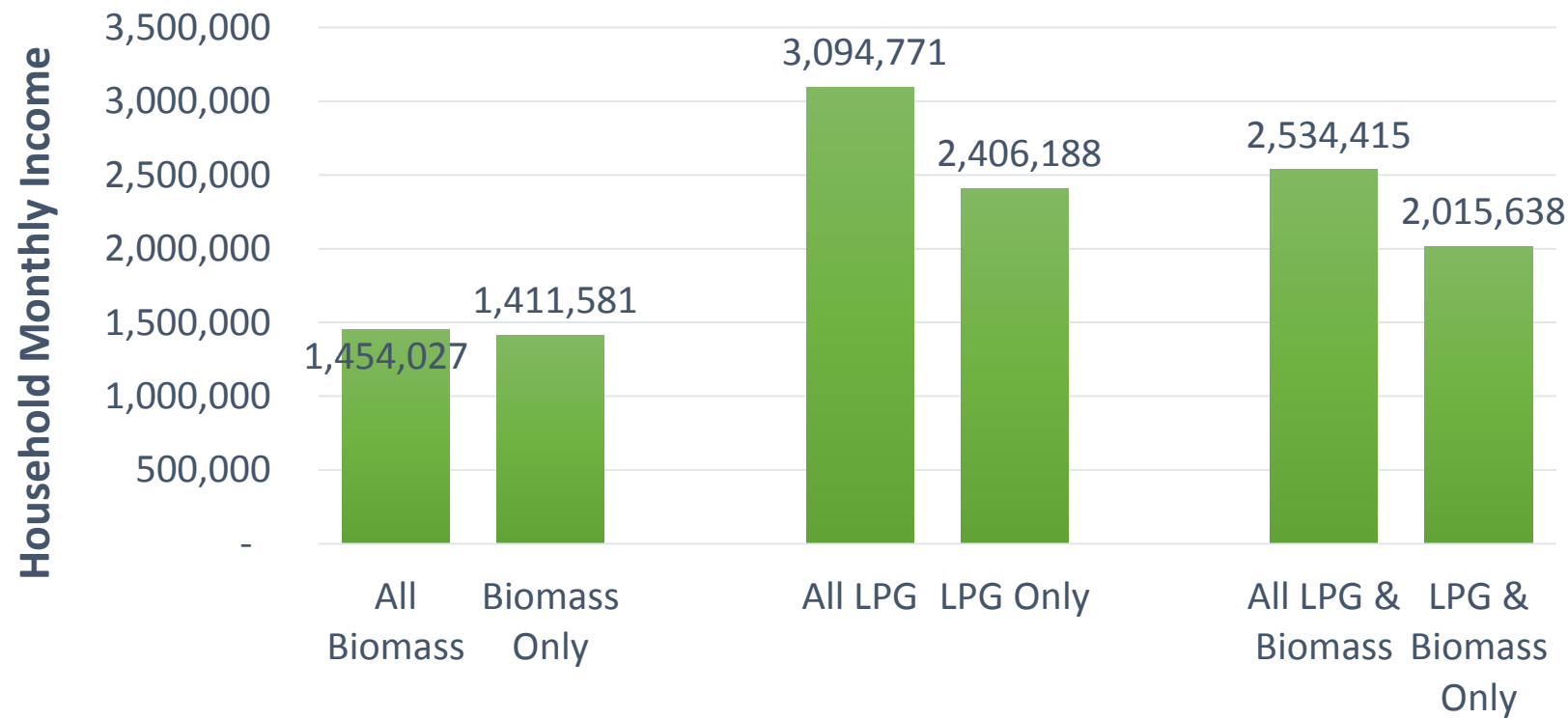
In the Survey Area Three Mutually Exclusive Market Segments Can be Formed

- ▶ Biomass Users 25%)
- ▶ Biomass and LPG Users (48%)
- ▶ LPG Users (27%)

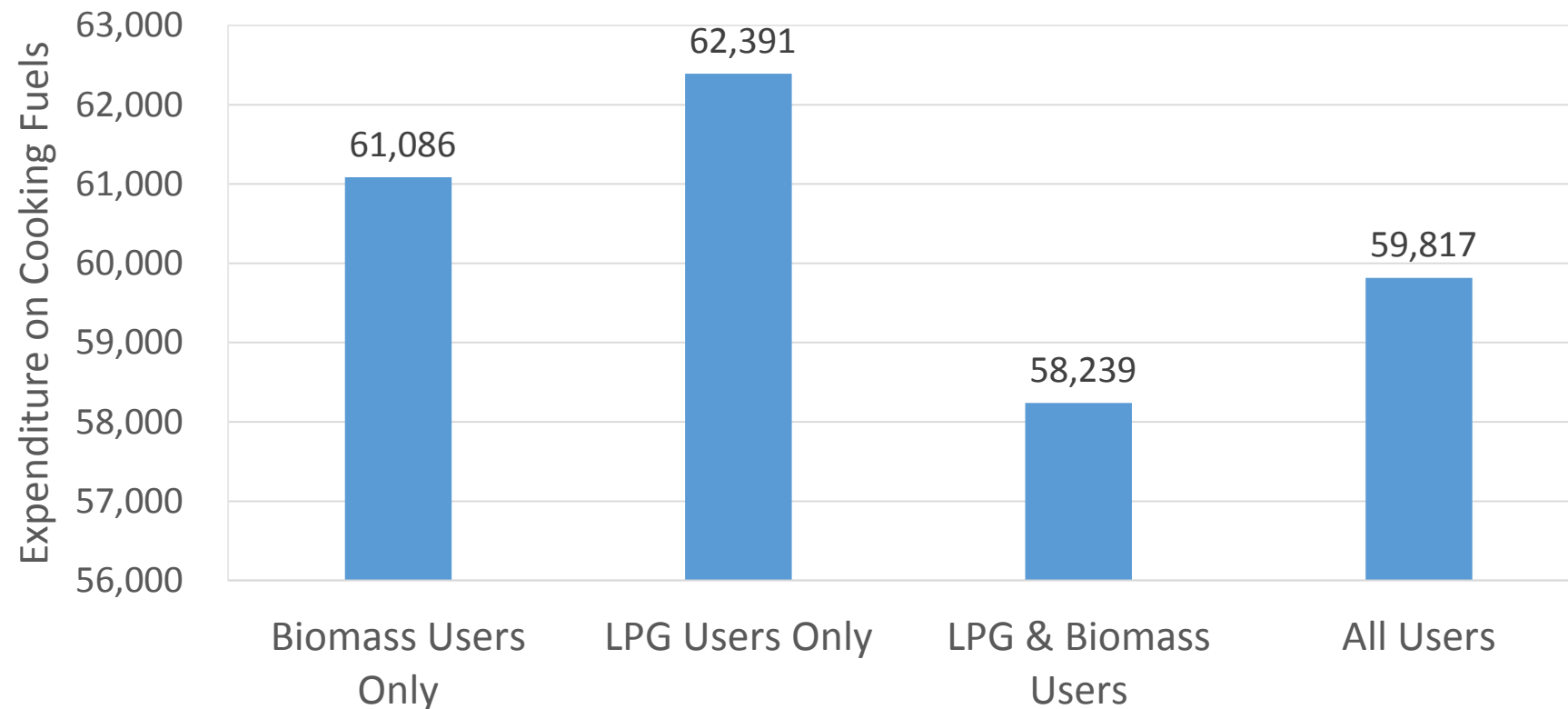
Source of Biomass Fuel Used in the Household

- ▶ More than Three Quarter (78 percent) of the Household Collect Biomass Fuel, and
- ▶ Another 12 Percent Collect and Purchase Biomass Fuel

Average Household Monthly Income by Market Segment



Household Monthly Spending (in IDR) on Cooking Fuels



Who Use Biomass Cookstove?

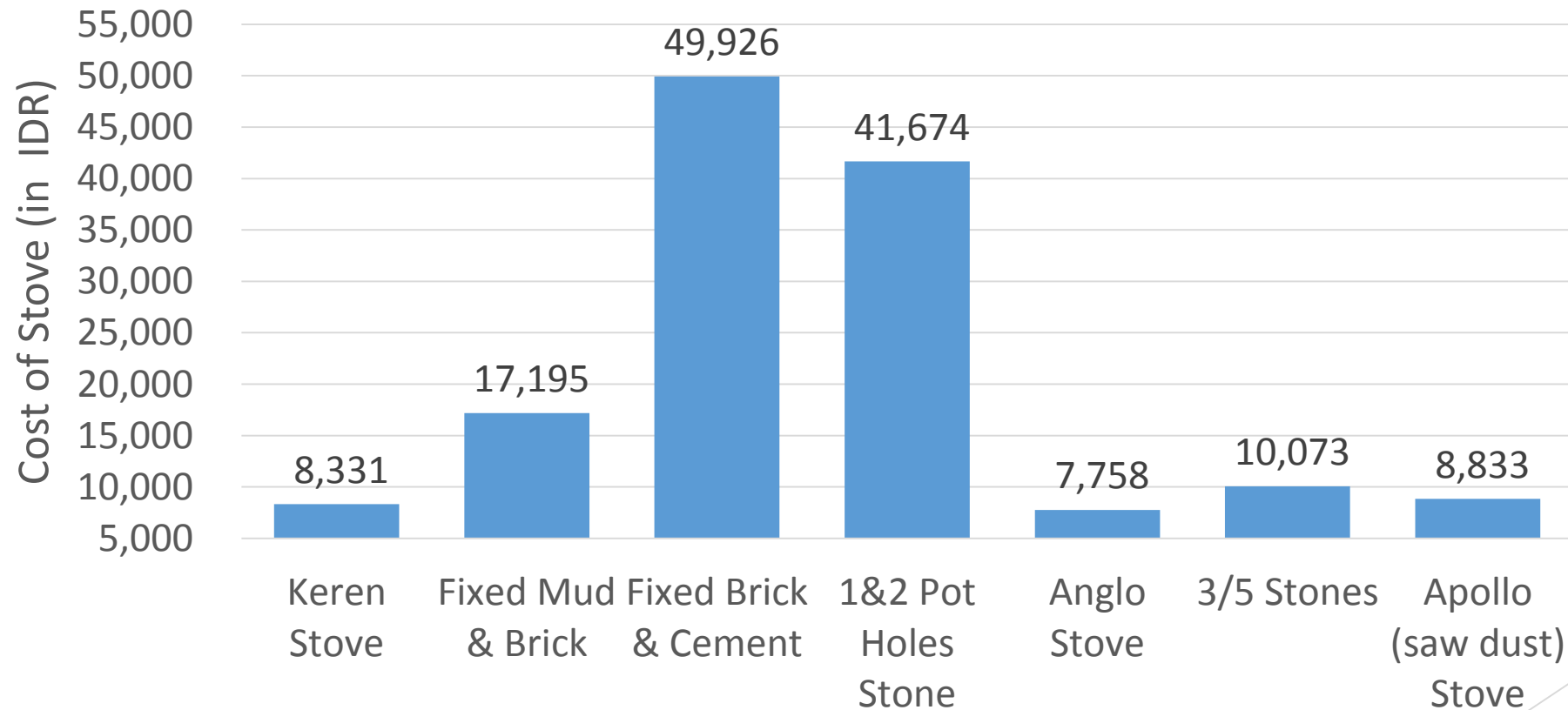
- ▶ Average Age of Cook in the Household
 - ▶ Biomass Users 48 Years Old
 - ▶ Biomass and LPG Users 45 Years Old
 - ▶ LPG Users 41 Years Old

Exclude Male Cook Which Accounts for only 4 percent

Biomass Stove Market is Still Relatively Large

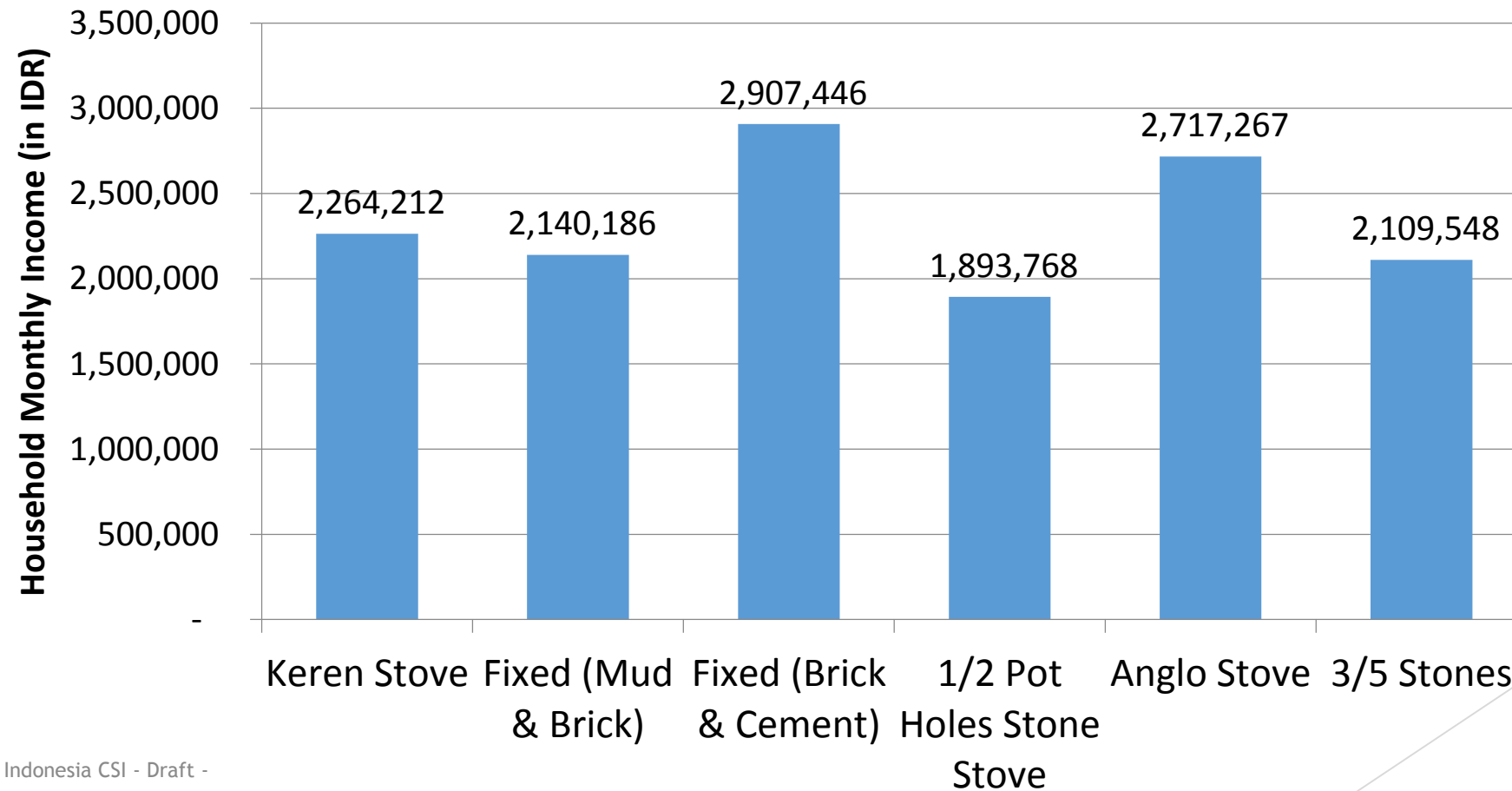
- ▶ Each Household Owns two or more Biomass Stoves,
- ▶ “Keren” Stove accounts for 63%
- ▶ One/Two Potholes Fixed Stove accounts for 31%
- ▶ Stove made of Stone 7%
- ▶ Three/Five Stones 4%

Average Cost of Biomass Cookstove



Note: Cost reflects recollection of cost paid by the household at the time of purchase

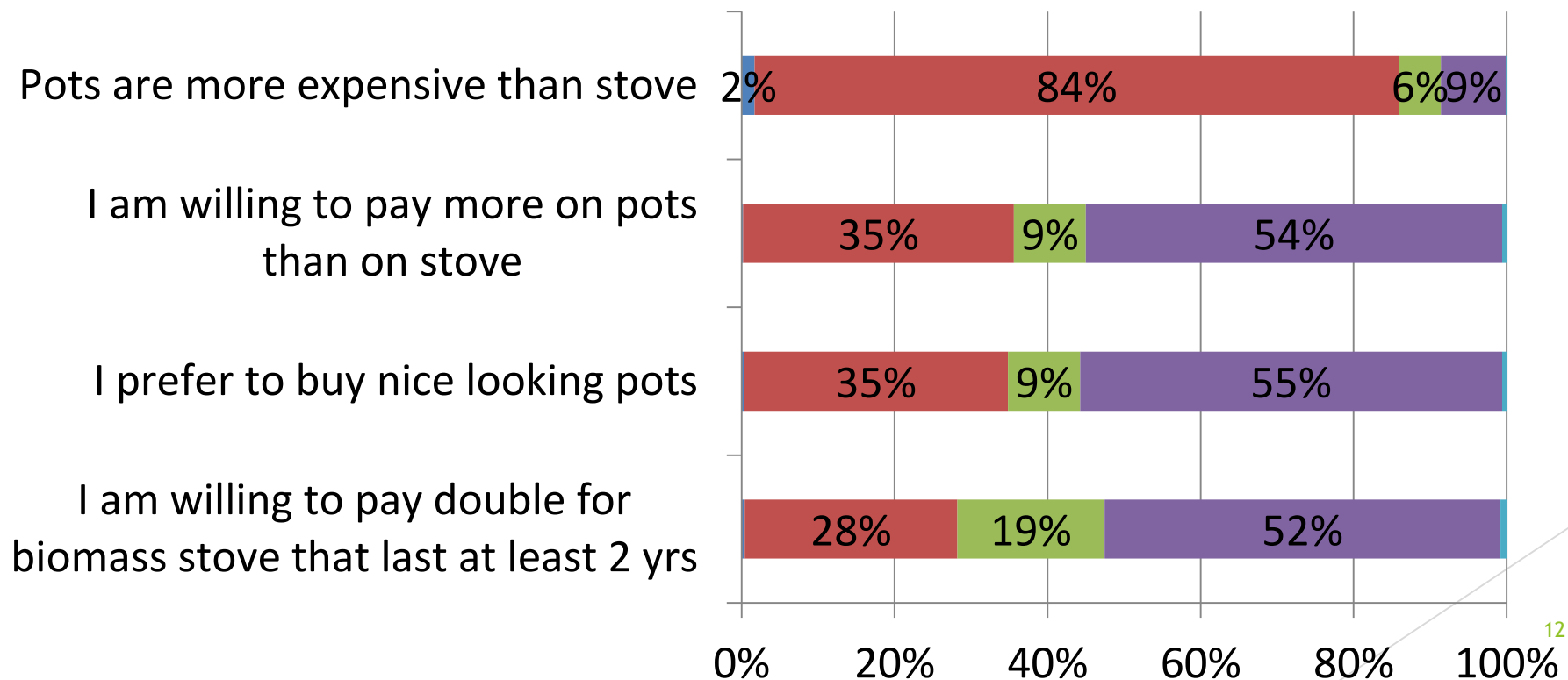
Average Household Monthly Income by Type of Biomass Cookstove Owned



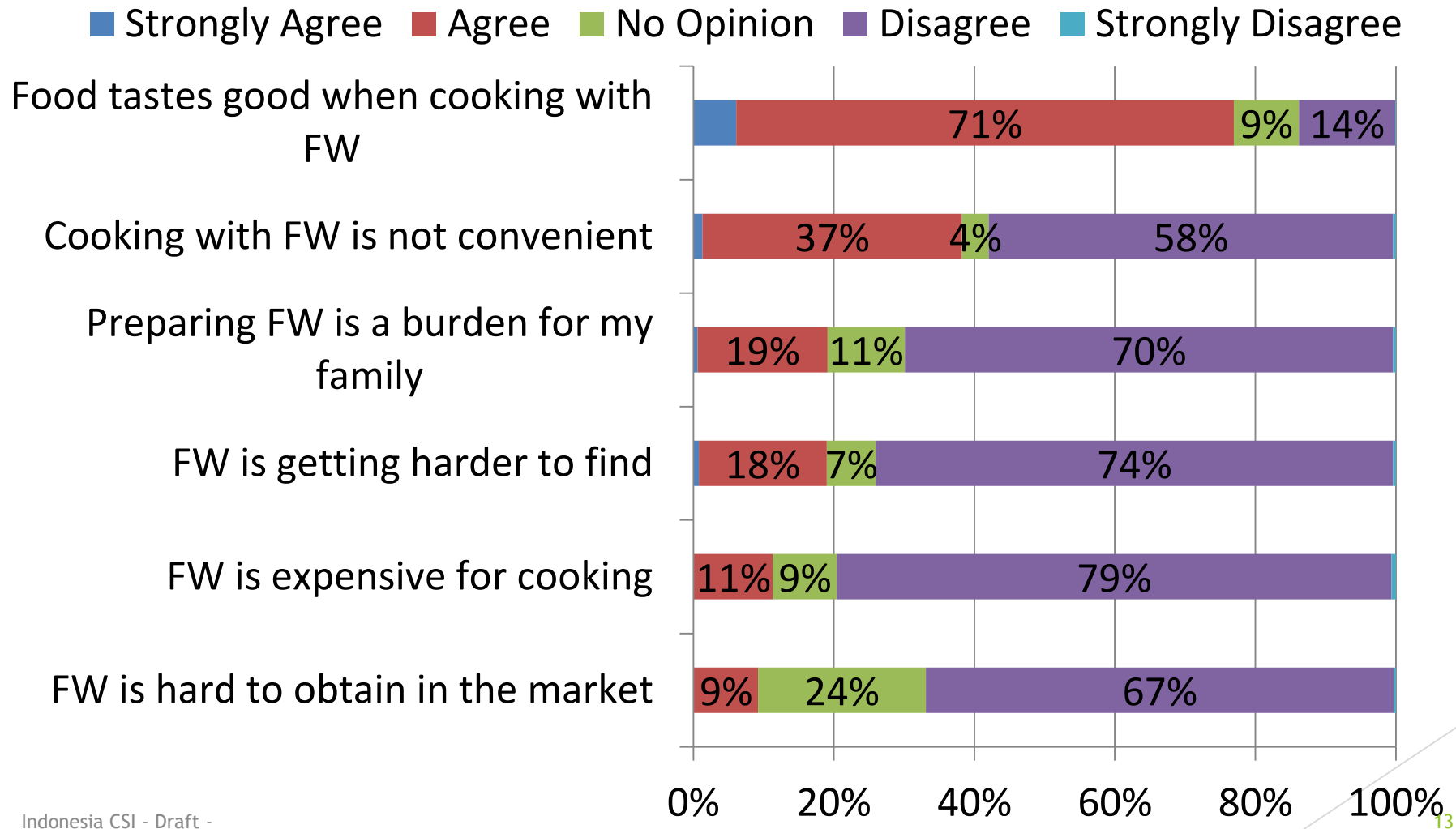
Currently, households spend more on pots than stoves.

Attitude Toward Cost of Stoves and Pots

■ Strongly Agree ■ Agree ■ No Opinion ■ Disagree ■ Strongly Disagree

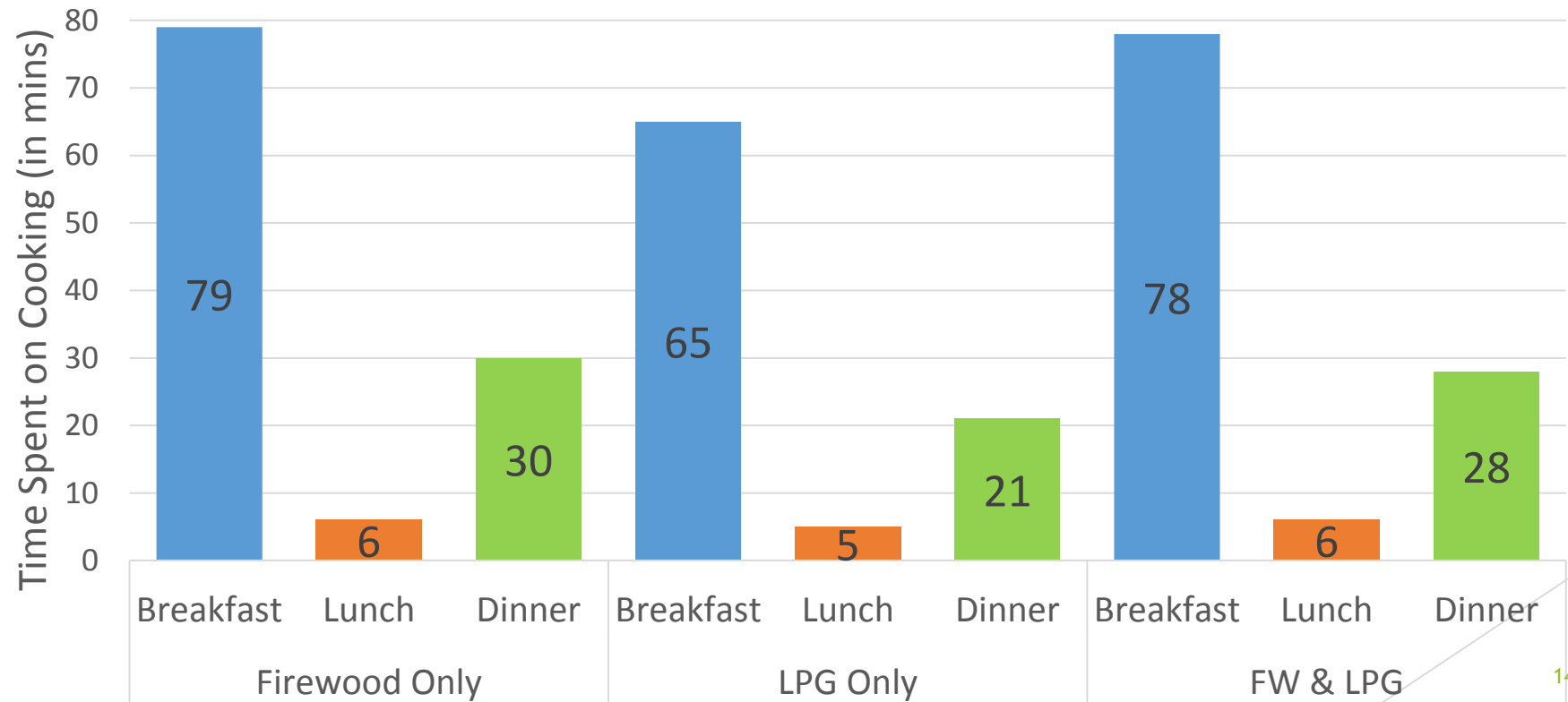


Attitude toward Firewood

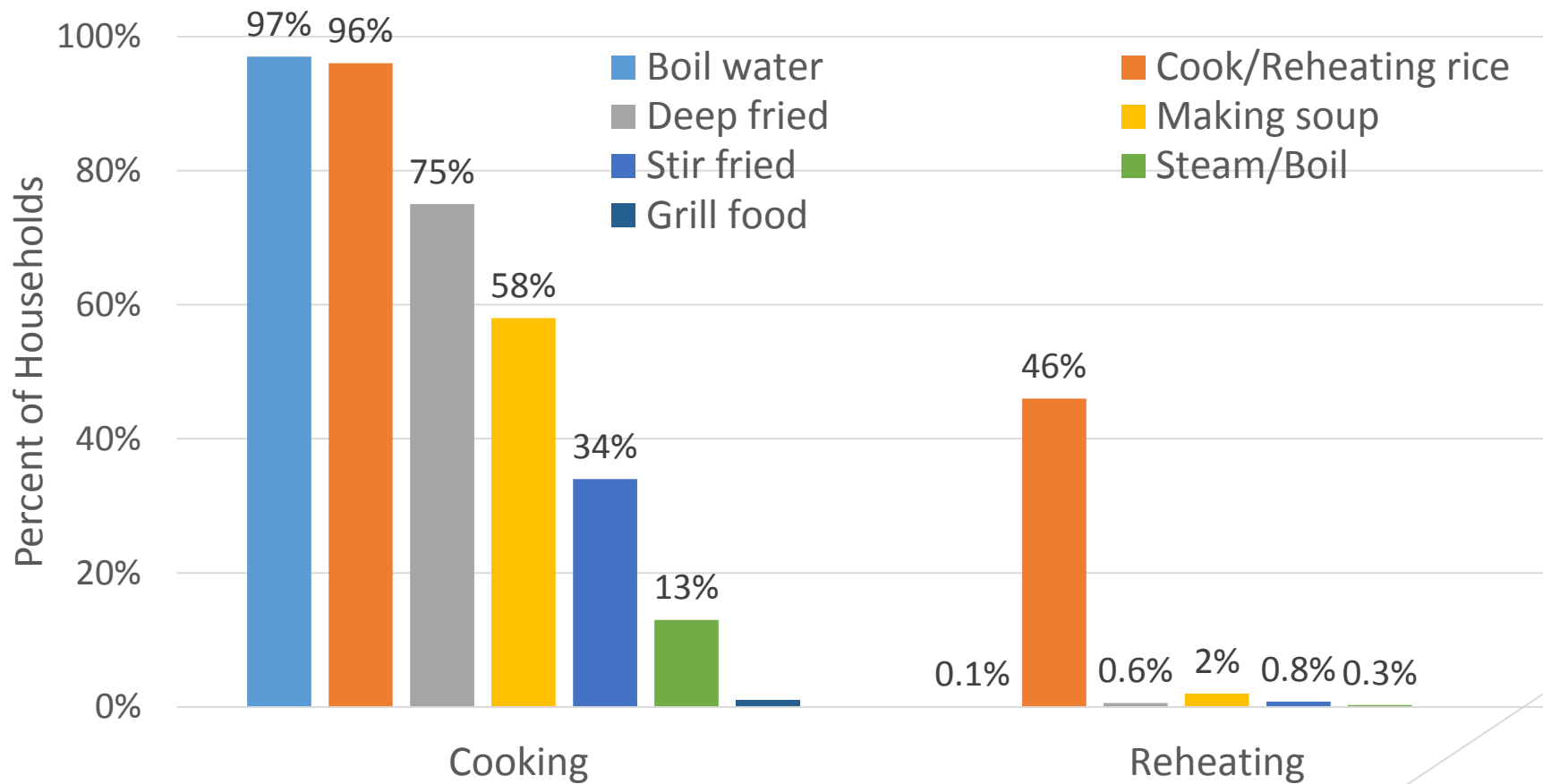


Majority of Households in the Survey Area only do One Major Cooking in a Day

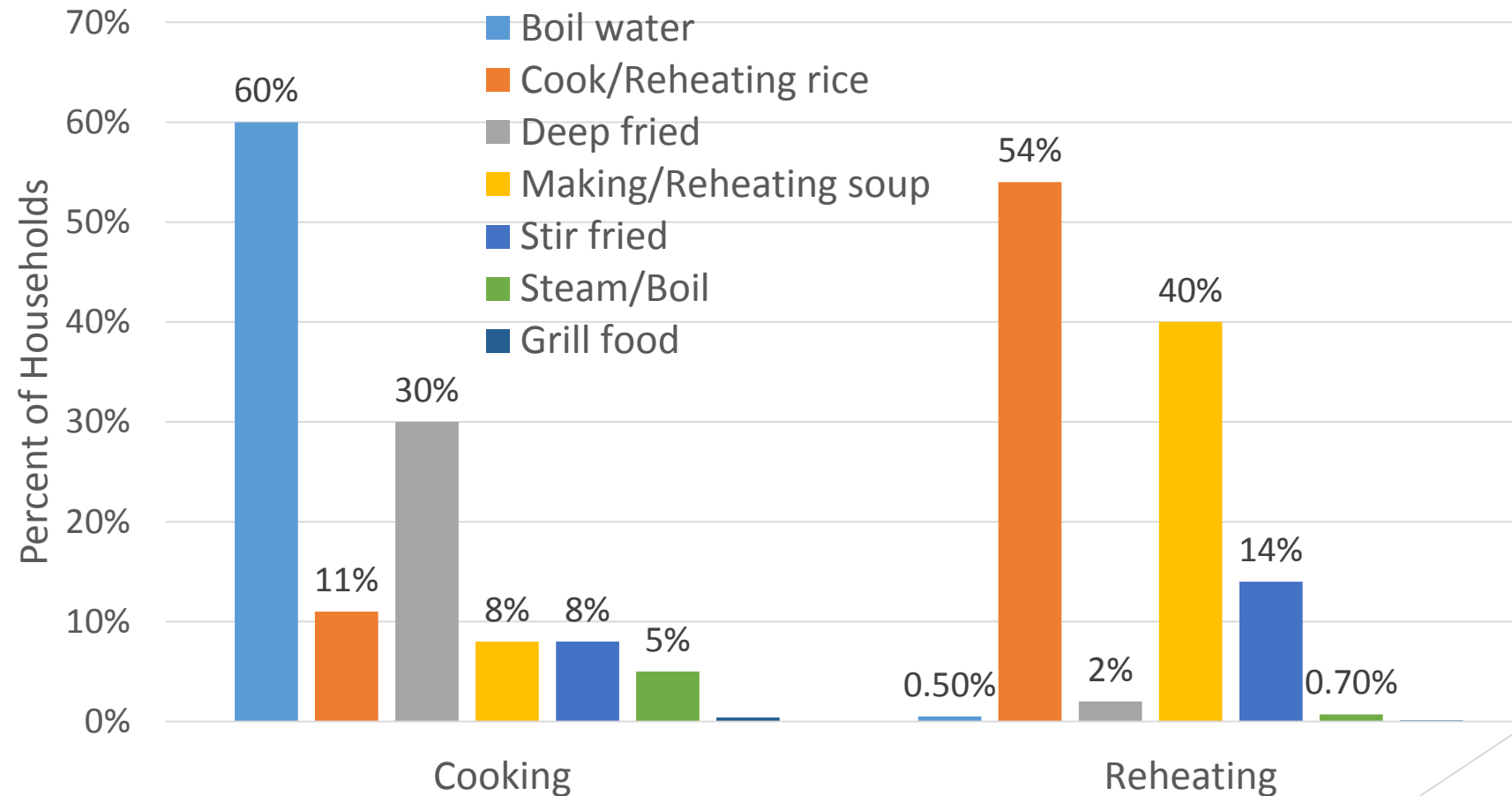
Average Total Time (in Minutes) Spent on Cooking



Cooking and Reheating Activity in the Morning



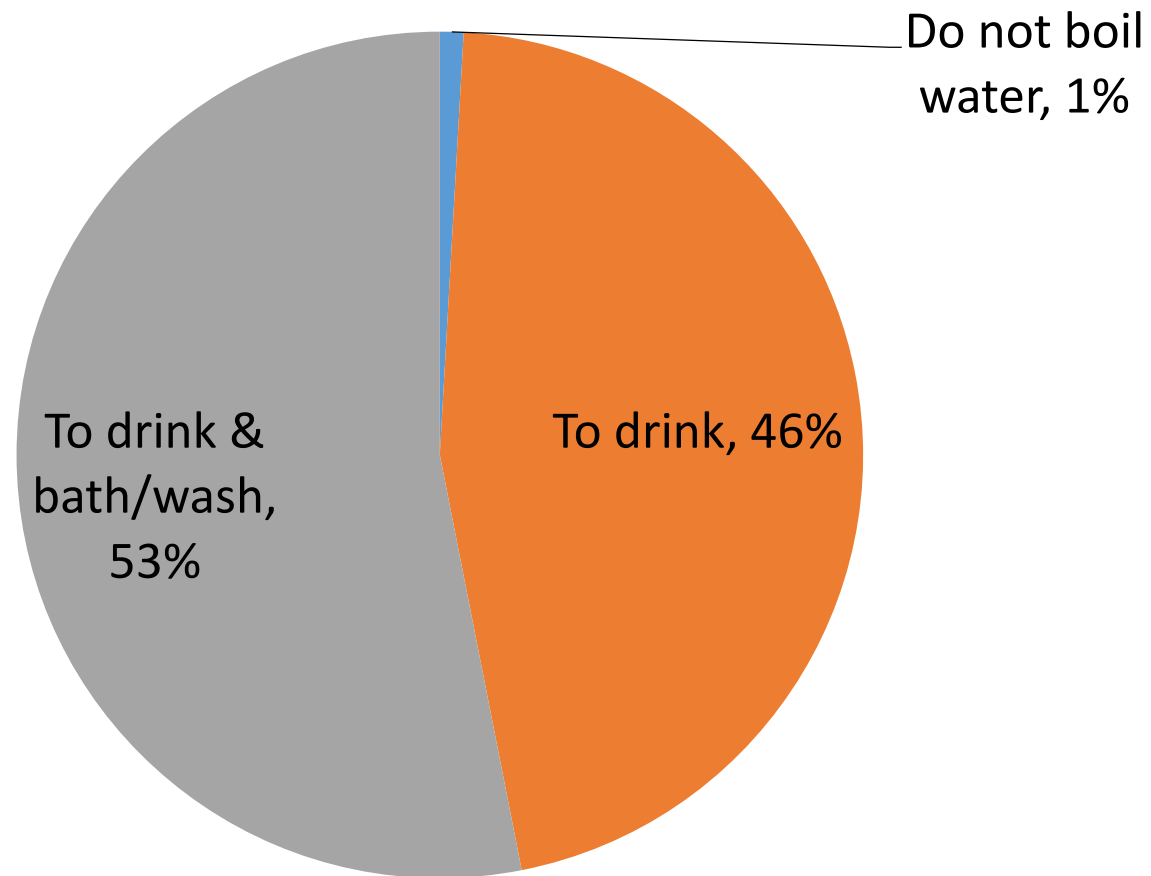
Cooking and Reheating Activity in the Evening



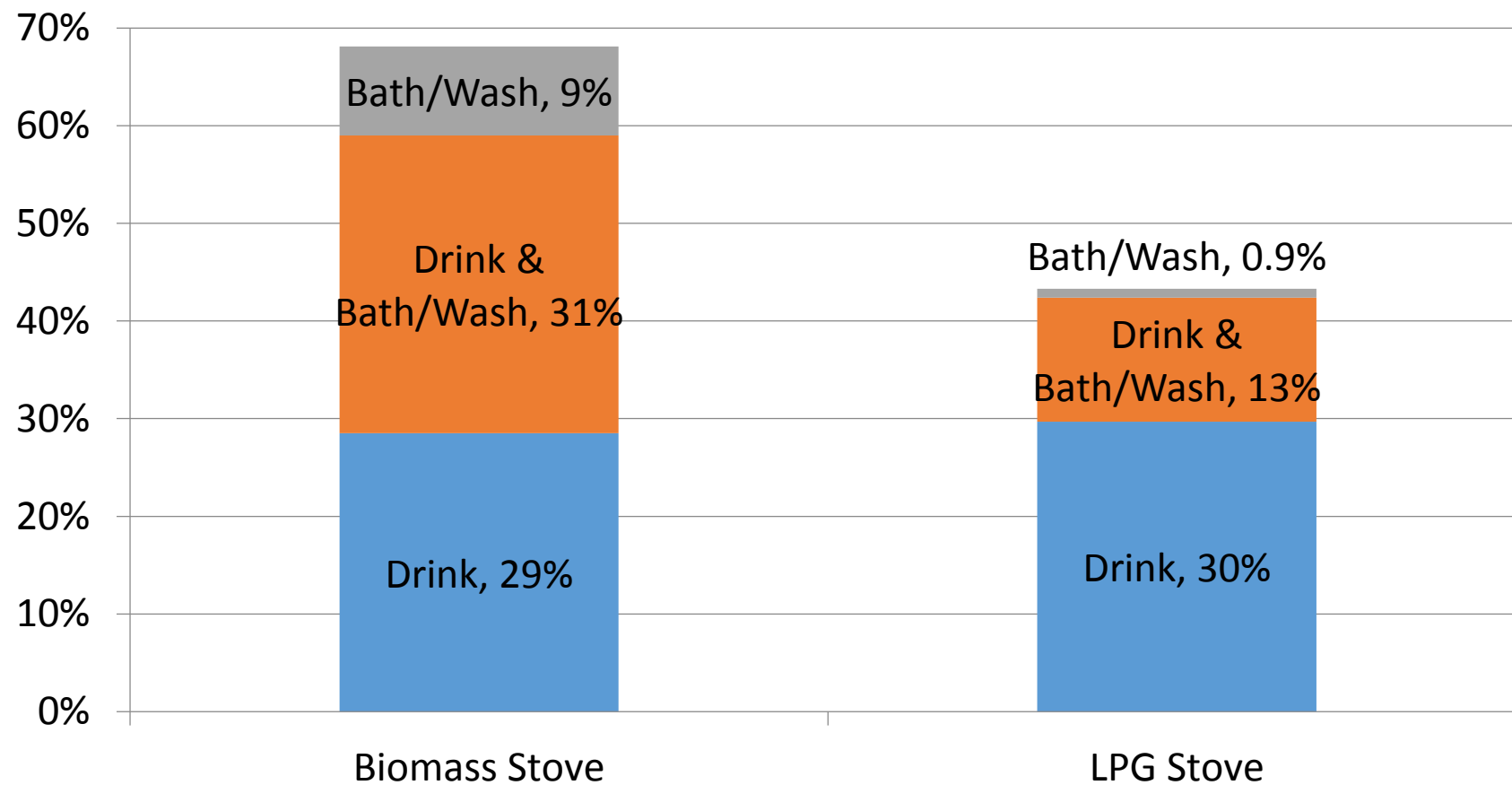
Water Boiling is One of the Most Important Activities Carried Out in the Kitchen

- ▶ Almost Every Households Boil Water in the Morning for Drinking, and
- ▶ Close to Two Third of the Households Boil Water Again in the Evening.
- ▶ Biomass Stove is the Preferred Stove Used to Boil Water.
- ▶ There is a Good Potential for Marketing Biomass Stove to Specifically Used for Boiling Water.

Boiling Water Yesterday

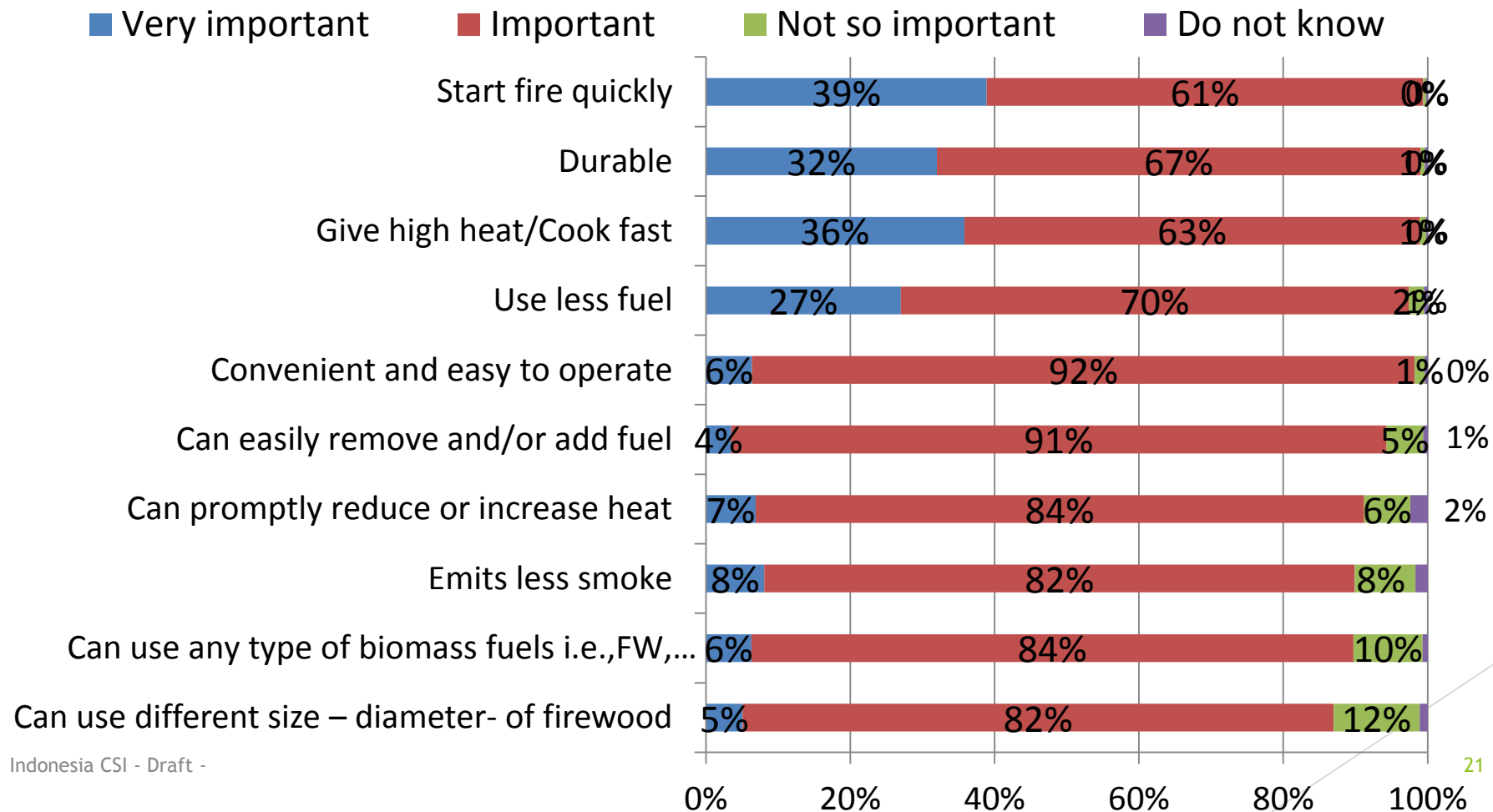


Type of Stove Used to Boil Water

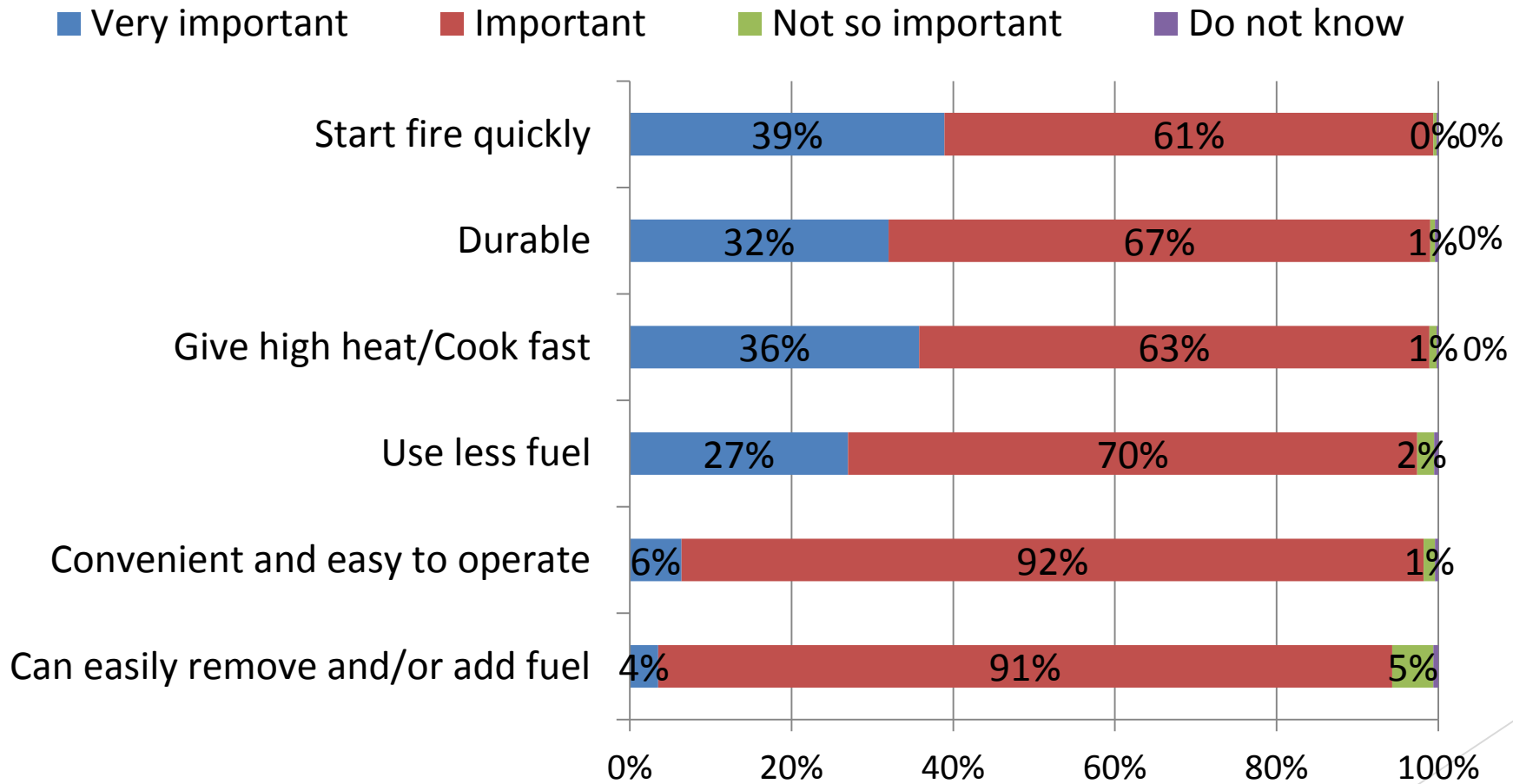


What are the preferred characteristics and design features of stove?

Important Design Features of Cookstove (1)



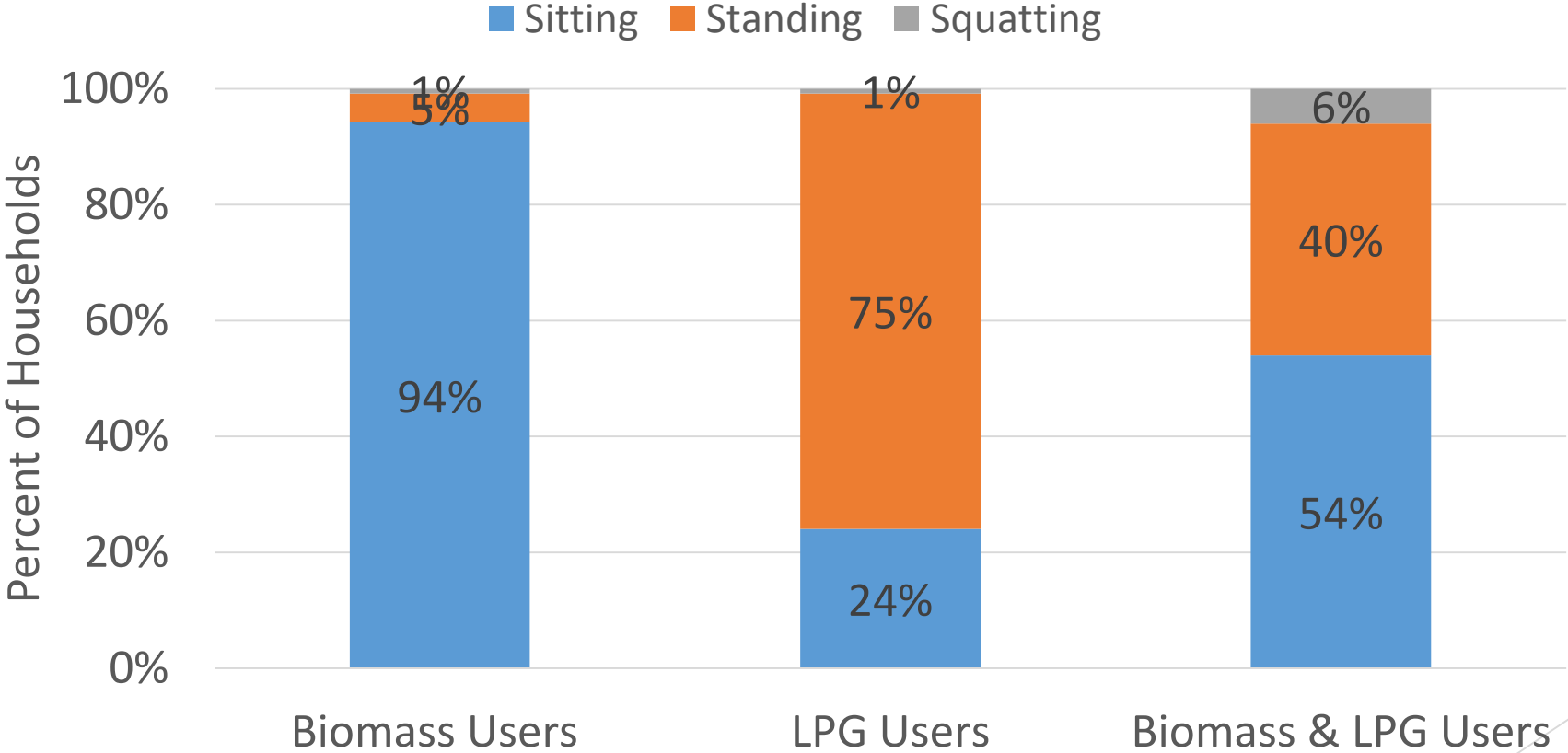
Important Design Features of Cookstove (2)



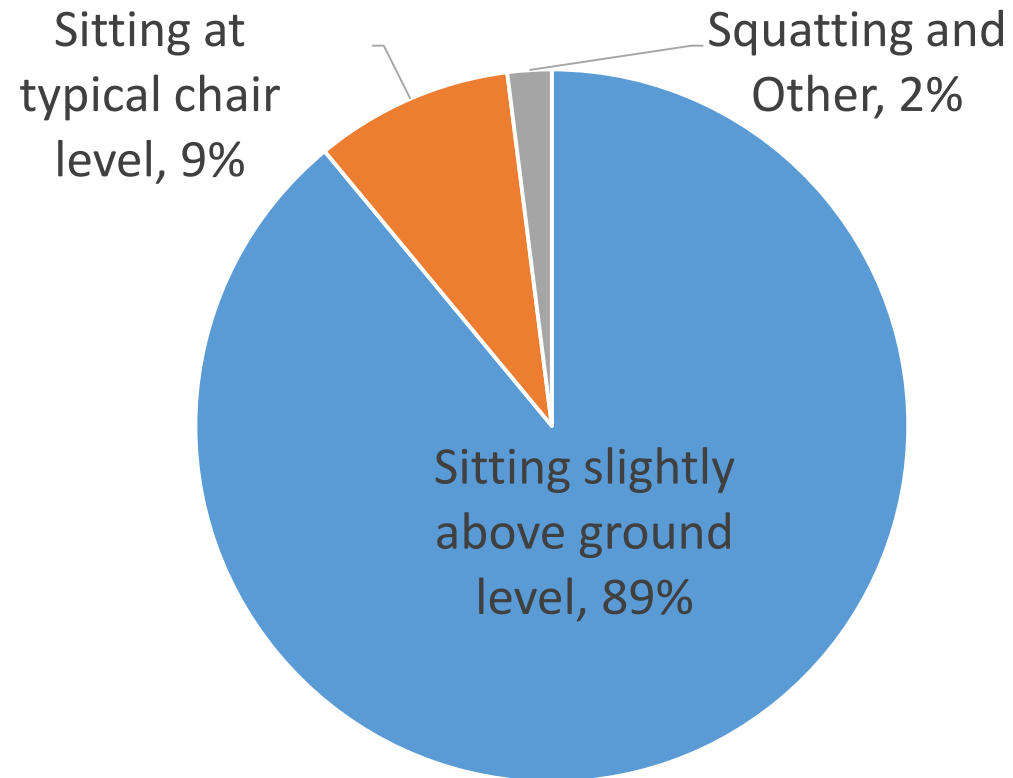
Preferred Cooking Position

Implication on Height of Stove

Preferred Cooking Position



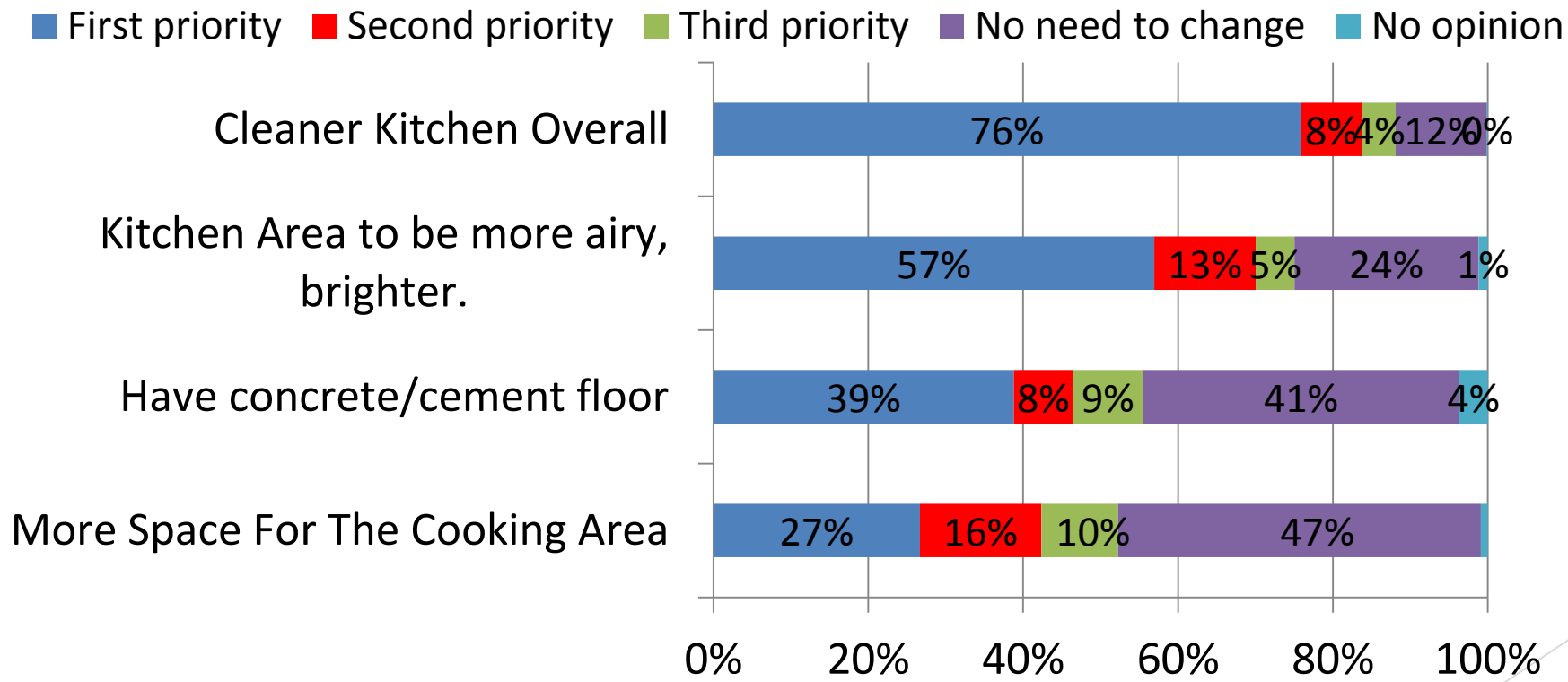
Height of Seating While Cooking



Majority of the households surveyed have strong desire to change cooking environment.

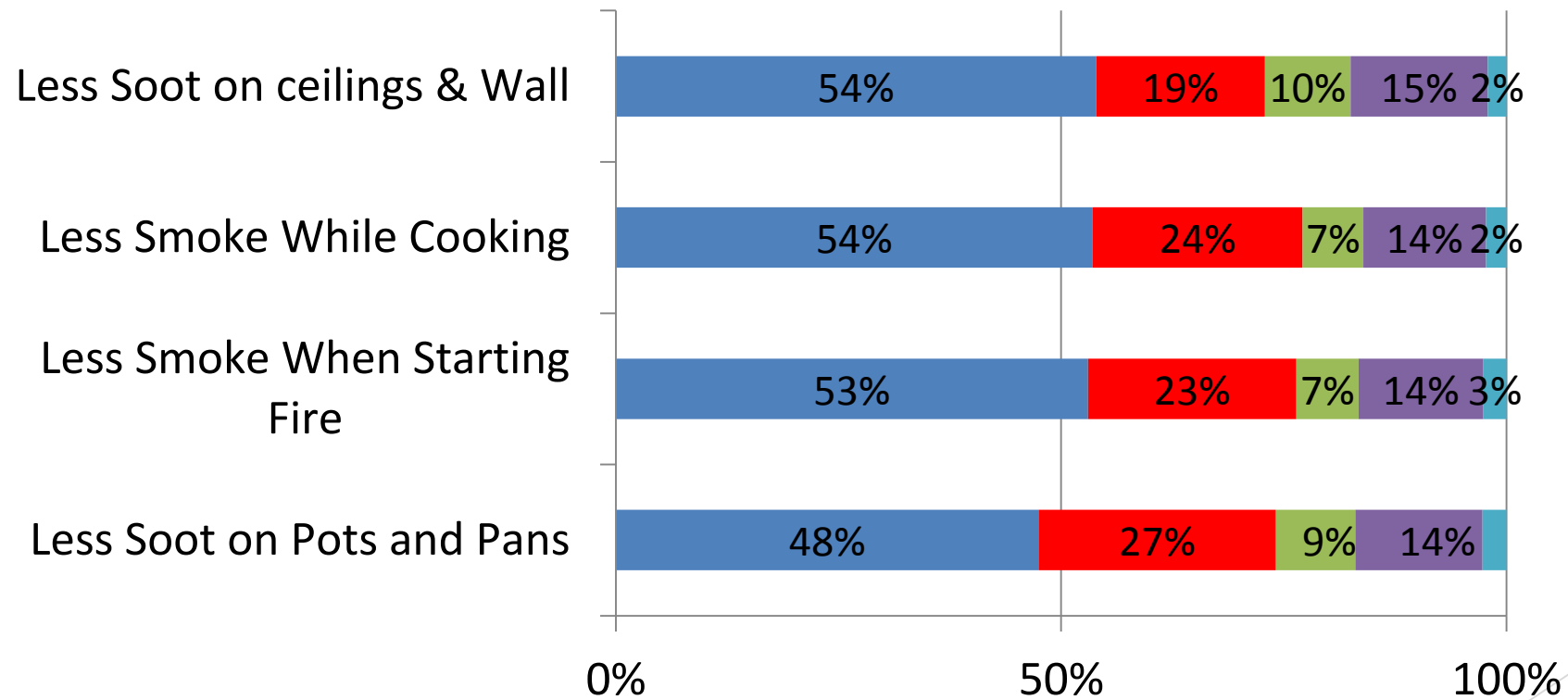
- ▶ Households' desire to change are not based on health threat of smoke from cooking
- ▶ Households' desire to change is based on soot deposits on the wall and ceiling of the kitchen, pots, and pans
- ▶ In general, households are not aware of health threat of smoke from cooking, but they do not like smoke and would like to see less smoke in the kitchen
- ▶ Buying new stove is low on the list of desire to change cooking environment
- ▶ Switching to LPG is also low on the list

Households Desire to Change Cooking Environment (Kitchen)



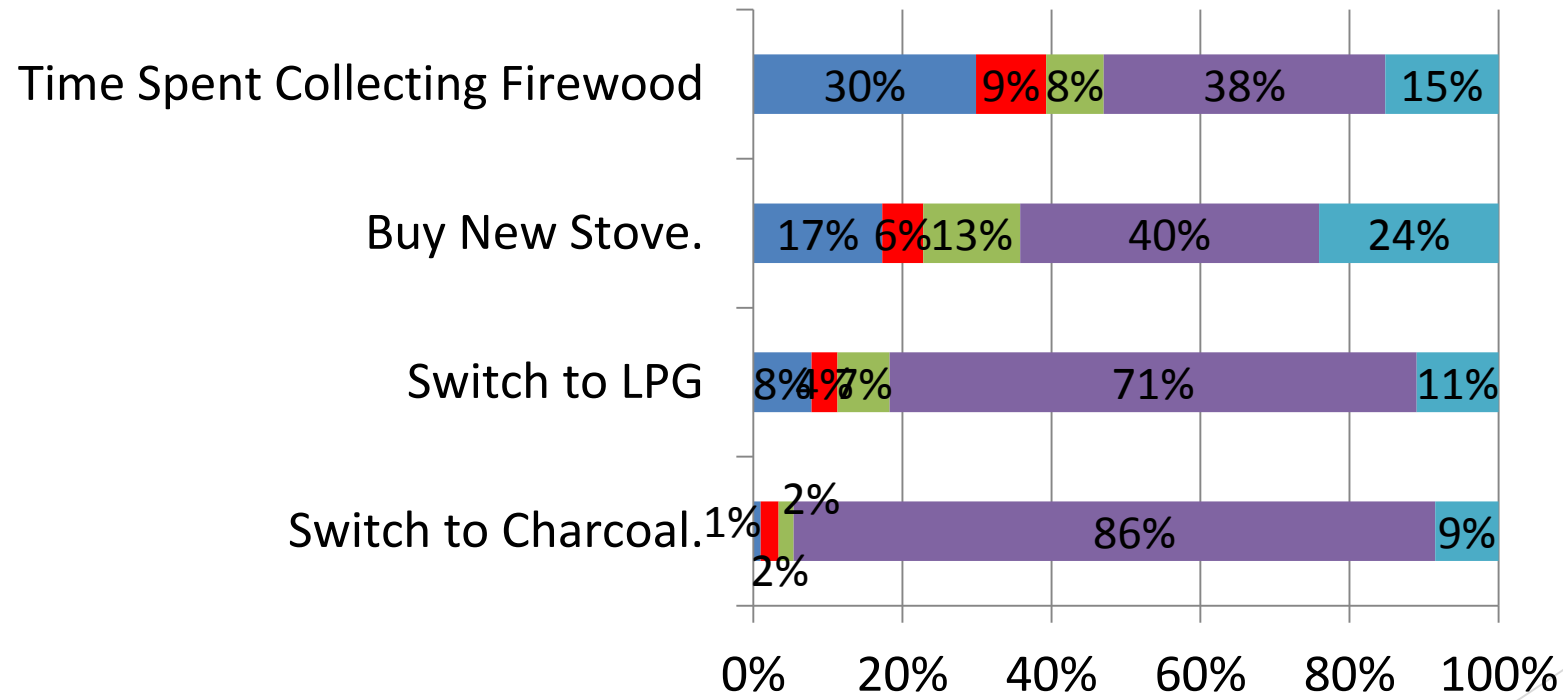
Households Desire to Change Cooking Environment (Smoke & Soot)

■ First priority ■ Second priority ■ Third priority ■ No need to change ■ No opinion



Households Desire to Change Cooking Environment (Stove & Fuel)

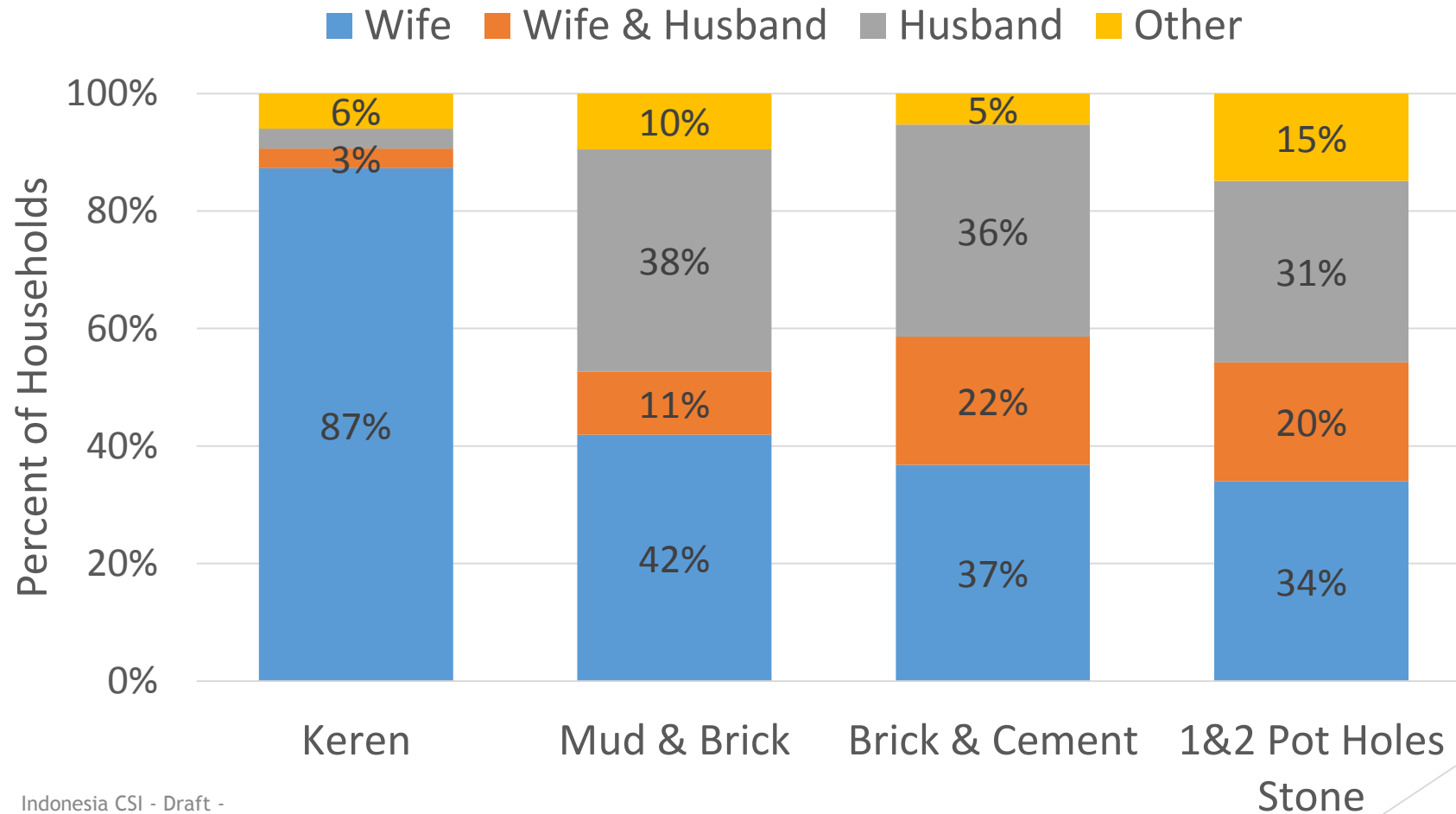
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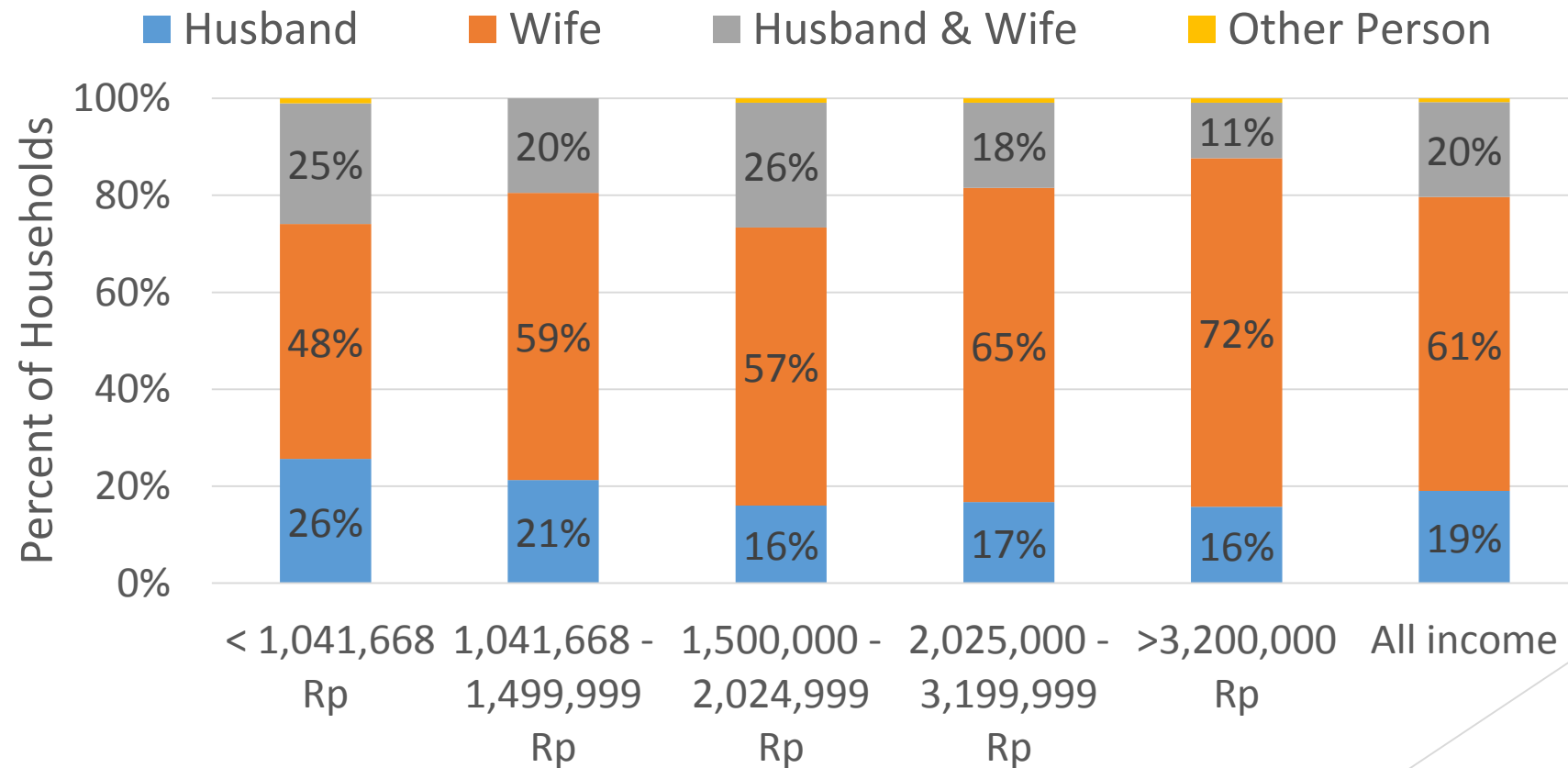
Women of the households are the persons who decide to buy new stove.

- ▶ For lower cost of stove women can independently decide to buy a new one
- ▶ To purchase more expensive stove women have to consult with and/or make joint decision with the husband
- ▶ Household decision to purchase new stove reflects typical decision making process to buy small home appliance

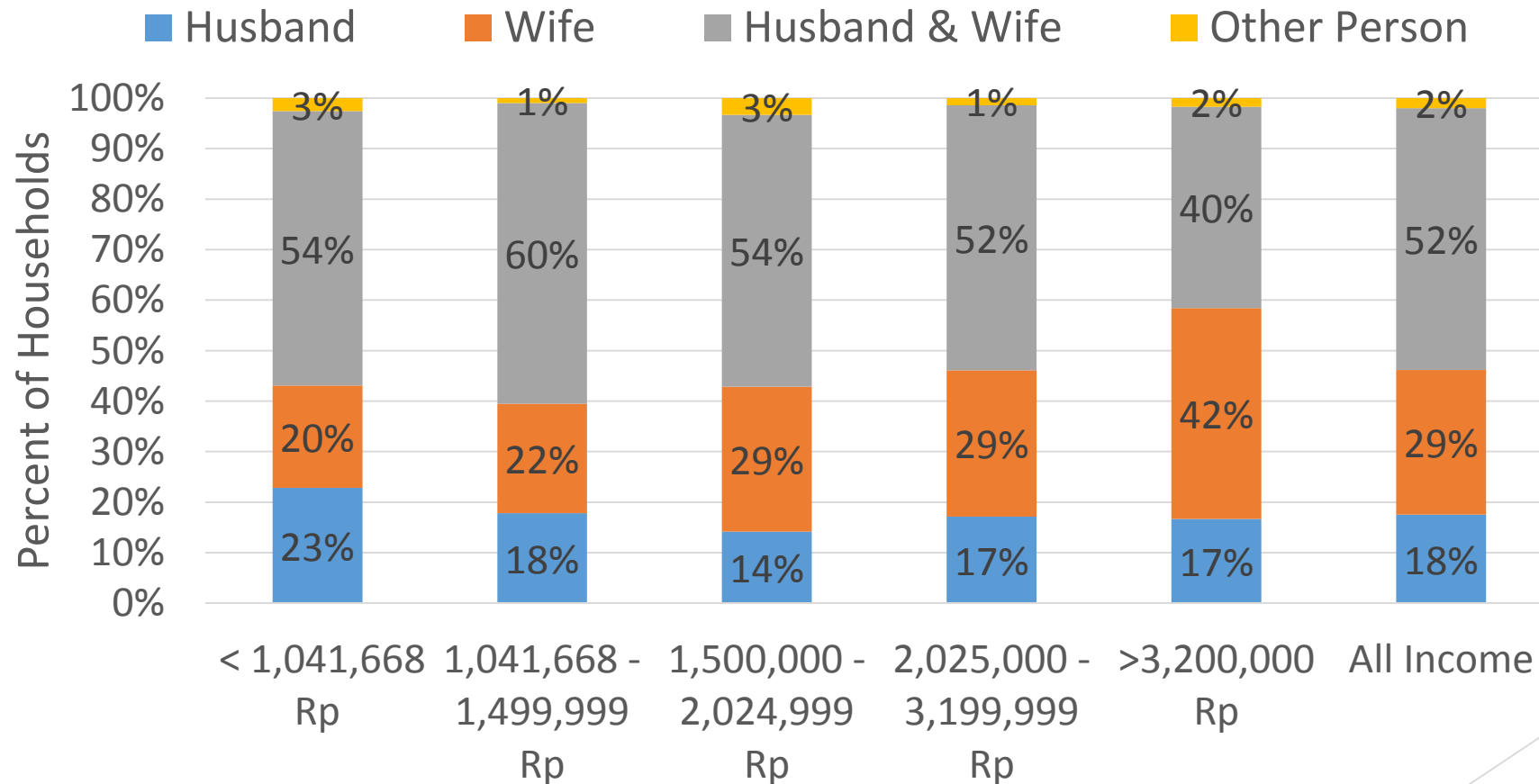
Decision to Replace Old Stove



Decision to Purchase Home Appliance Costs less than Rp. 50,000



Decision to Purchase Home Appliance Costs Rp. 50,000-200,000



Thank You