

# Water for Education: The Relationship Between Water Needs and Educational Levels of Women in the Southern Nations, Nationalities, and People's Region of Ethiopia.

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## Introduction

- The majority of the Ethiopian population (84%) lives in rural areas and 76% does not have access to clean drinking water (The World Bank, 2017).
- In developing countries, carrying water is one of the hardest activities and is carried out especially by girls and women (Dafaut, 2012).
- Water needs force Ethiopian families to seek water and to invest time and energy in carrying it to meet domestic and agricultural needs (IFPRI, 2017).
- The health issues associated with domestic water carrying activities have been studied. However, many economic and social impacts have been not examined and must be understood (Geree, Hunter & Jagals, 2010).

## Objectives

The purpose of this study is to measure and describe the relationship between carrying water and education levels of women in the Southern Nations, Nationalities, and Peoples' Region (SNNPR) of Ethiopia.

The following objectives guided the study:

1. Describe the water carrying dynamics in the Southern Nations, Nationalities, and People's Region of Ethiopia.
2. Explore the limitations on water use faced by women at home.
3. Describe the cultural water practices in Ethiopian households.
4. Determine the effect that women educational level has on the practice of carrying of water.

## Methodology

- Baseline is from the project "Women's autonomy and decision making in SNNPR: A situational analysis". The data was collected by Hawassa University.
- The following statistics were performed to accomplish the research objectives:
  - Descriptive statistics.
  - Chi-square ( $p < 0.001$ ).

### Population:

- A large percentage (39%) of the population was illiterate.
- The population was relatively young, with 72% between 18-39 years of age.
- The Ethiopian Orthodox Protestant religion was the most common (43%) religious ideology.

## Results

Objective 1. Describe the water carrying dynamics in the Southern Nations, Nationalities, and People's Region of Ethiopia.

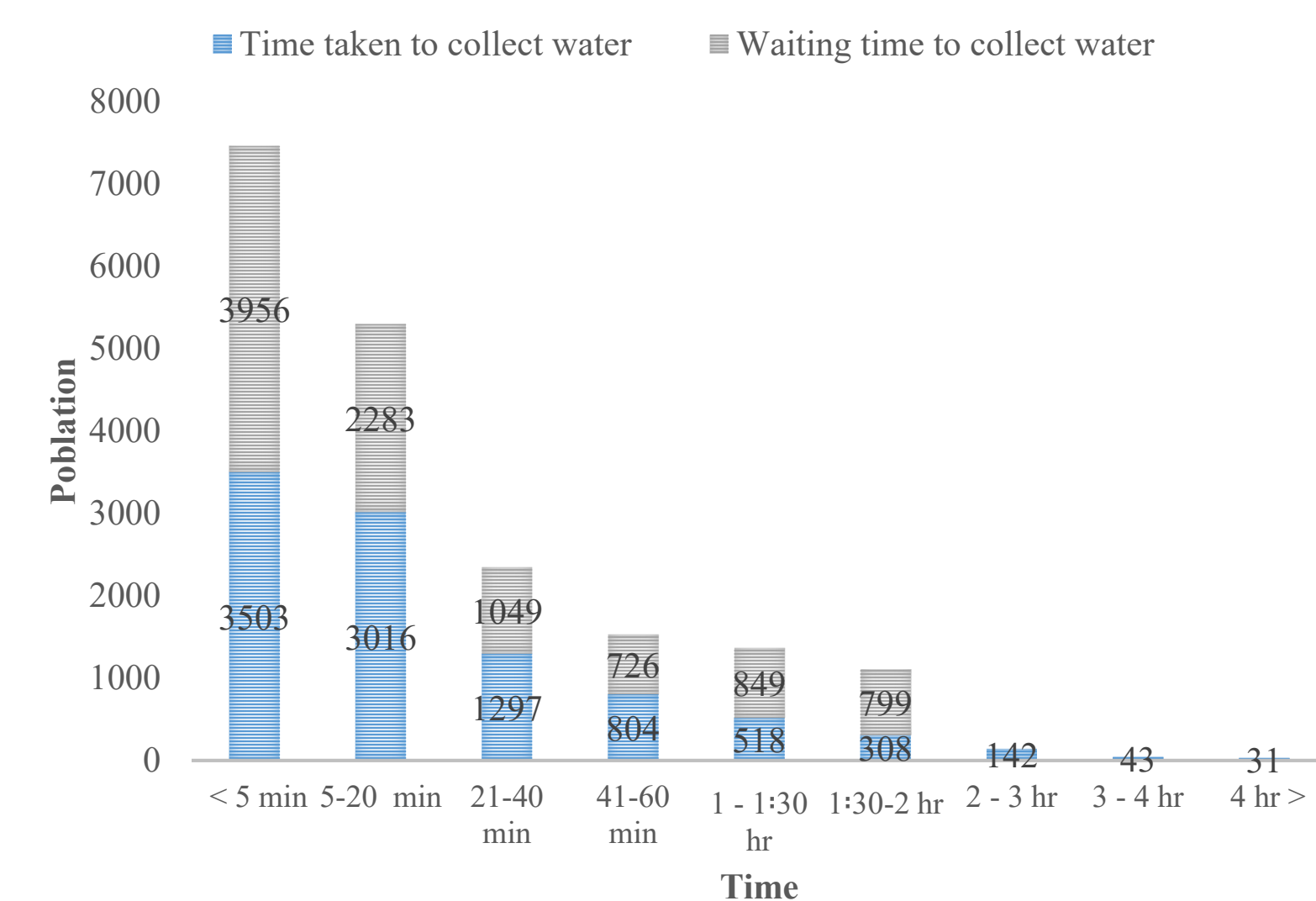


Figure 1. Time consumption in water collection tasks.

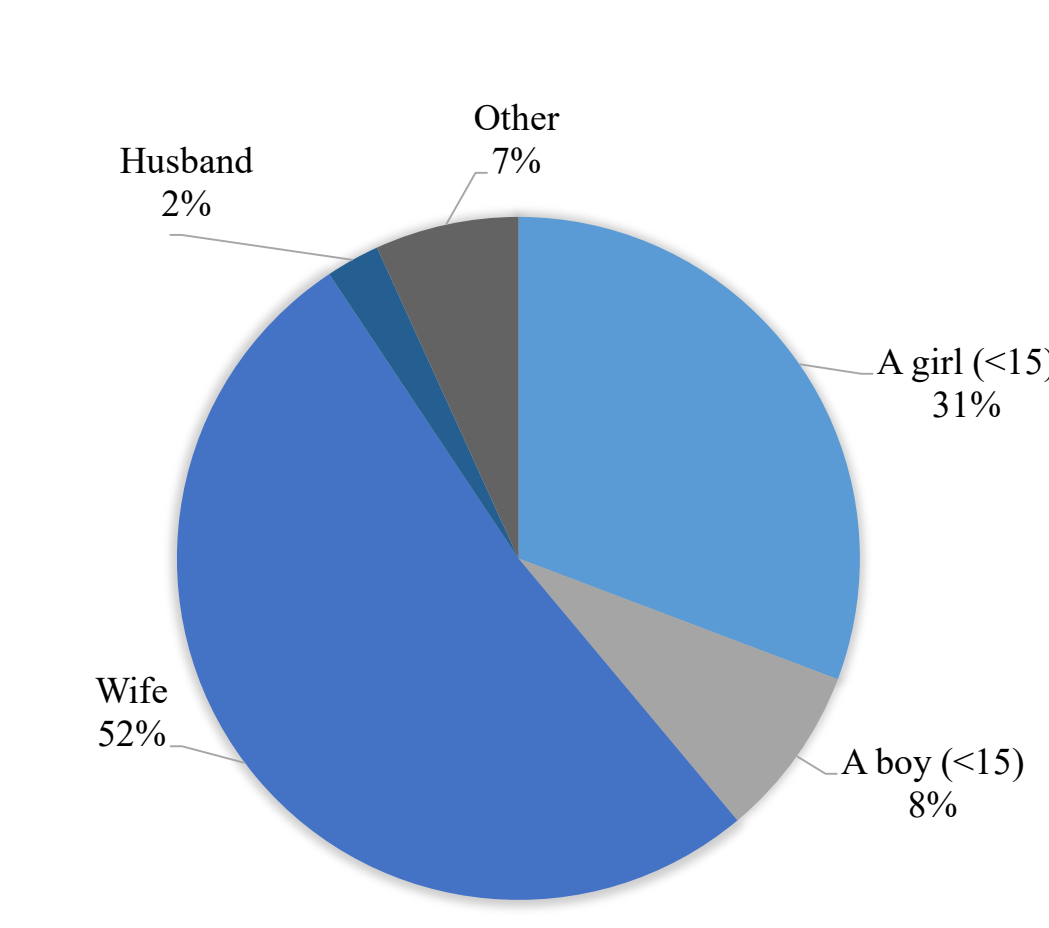


Figure 2. Responsible for water collection at home.

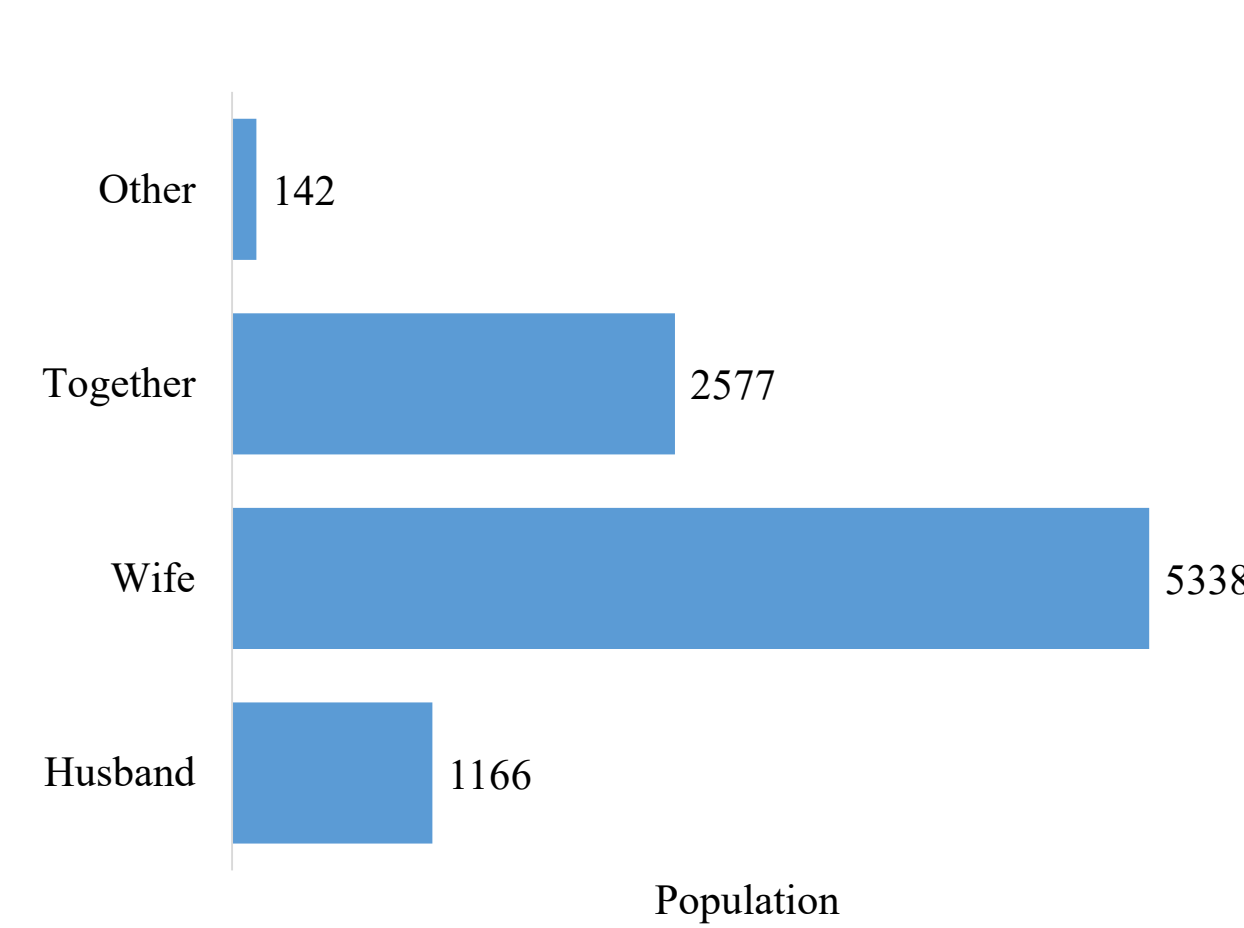


Figure 3. Decision maker on water issues.

Objective 2. Explore the limitations on water use faced by women at home.

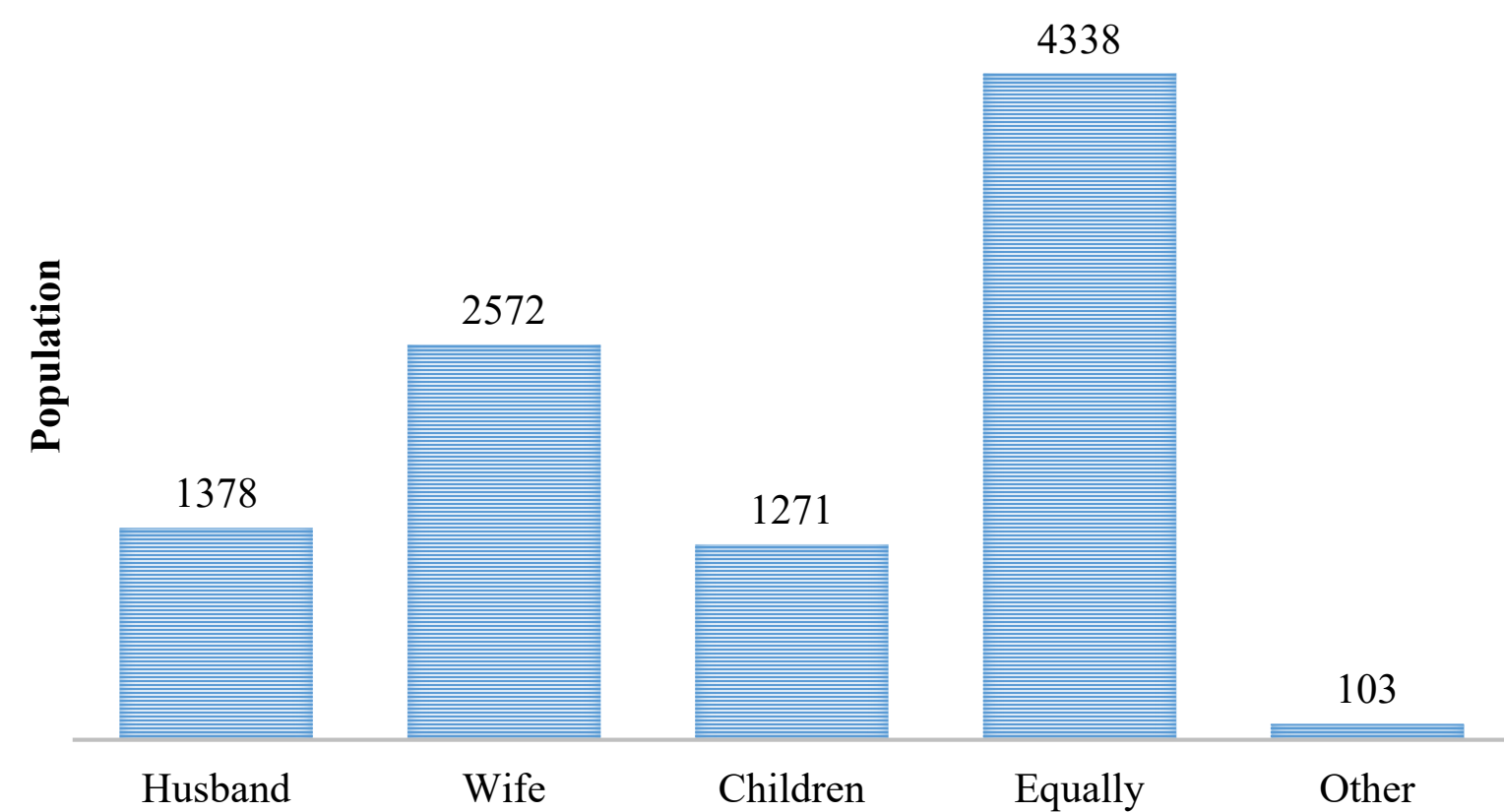


Figure 4. Priority for family members in the use of water.

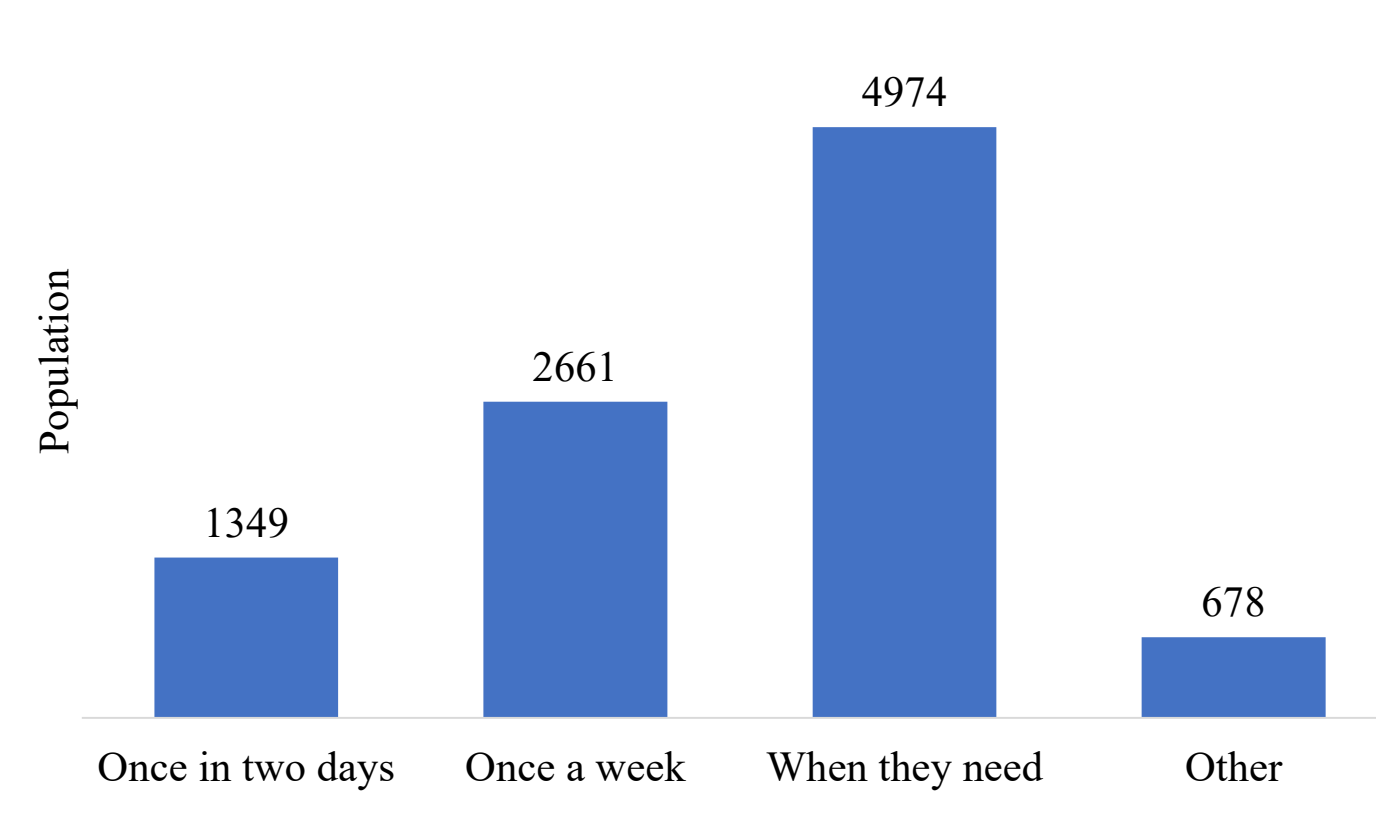


Figure 5. Water availability for women's hygiene.

89.5% of homes have a latrine.  
15% of latrines are not suitable for women.

Objective 3. Describe the cultural water practices in the Ethiopian households.

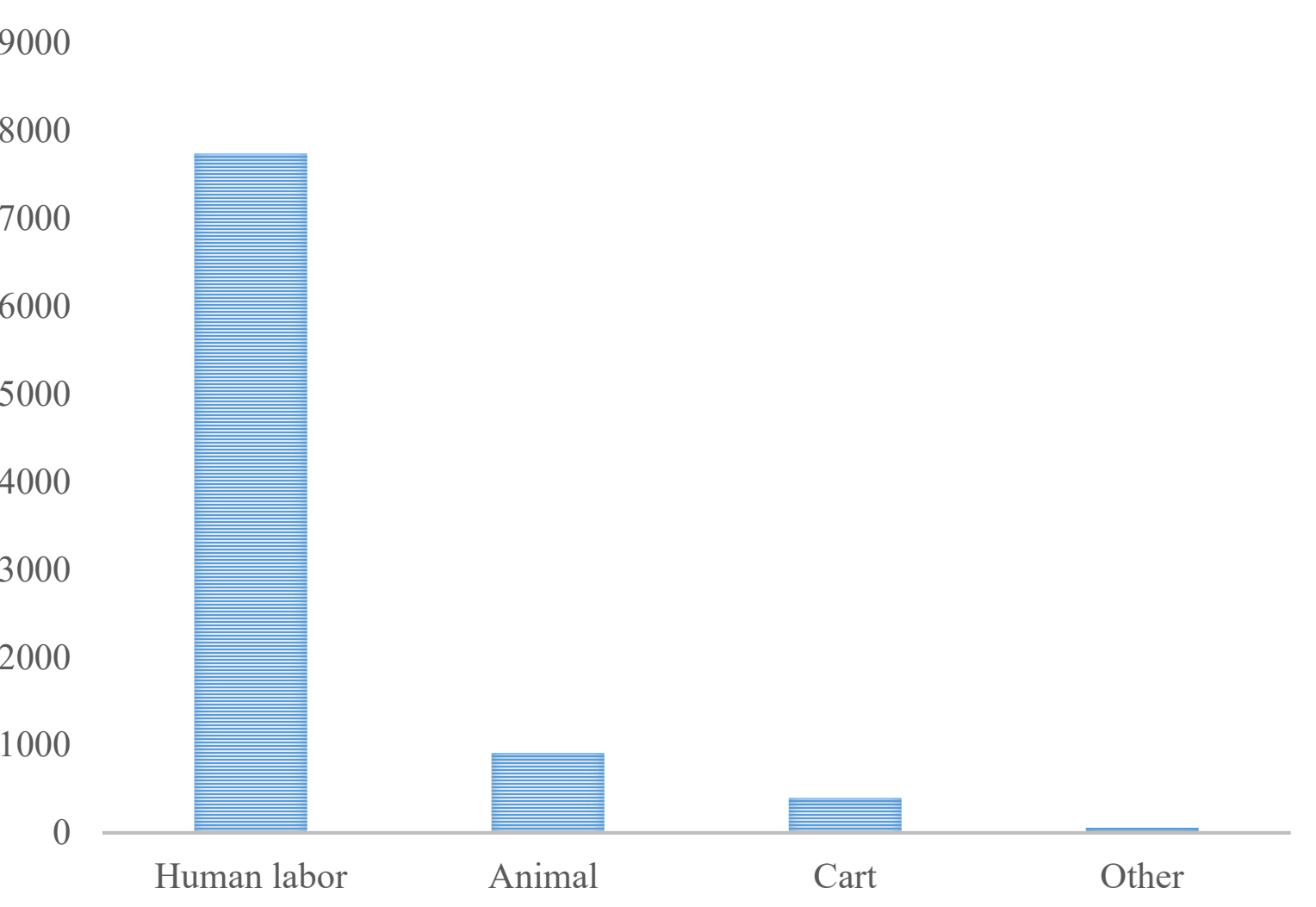


Figure 6. Types of transportation used to collect water.

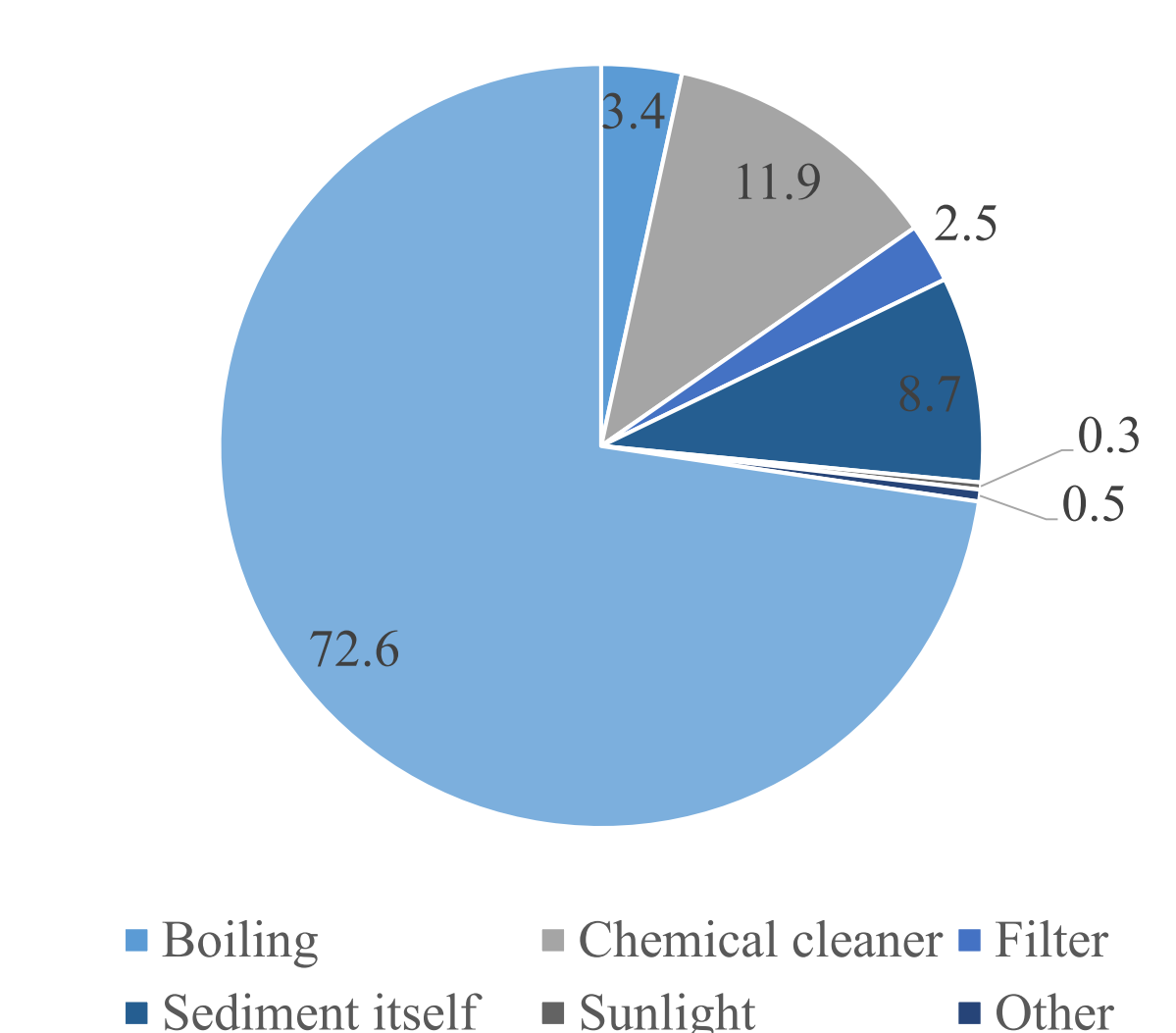


Figure 7. Water treatments used at households.

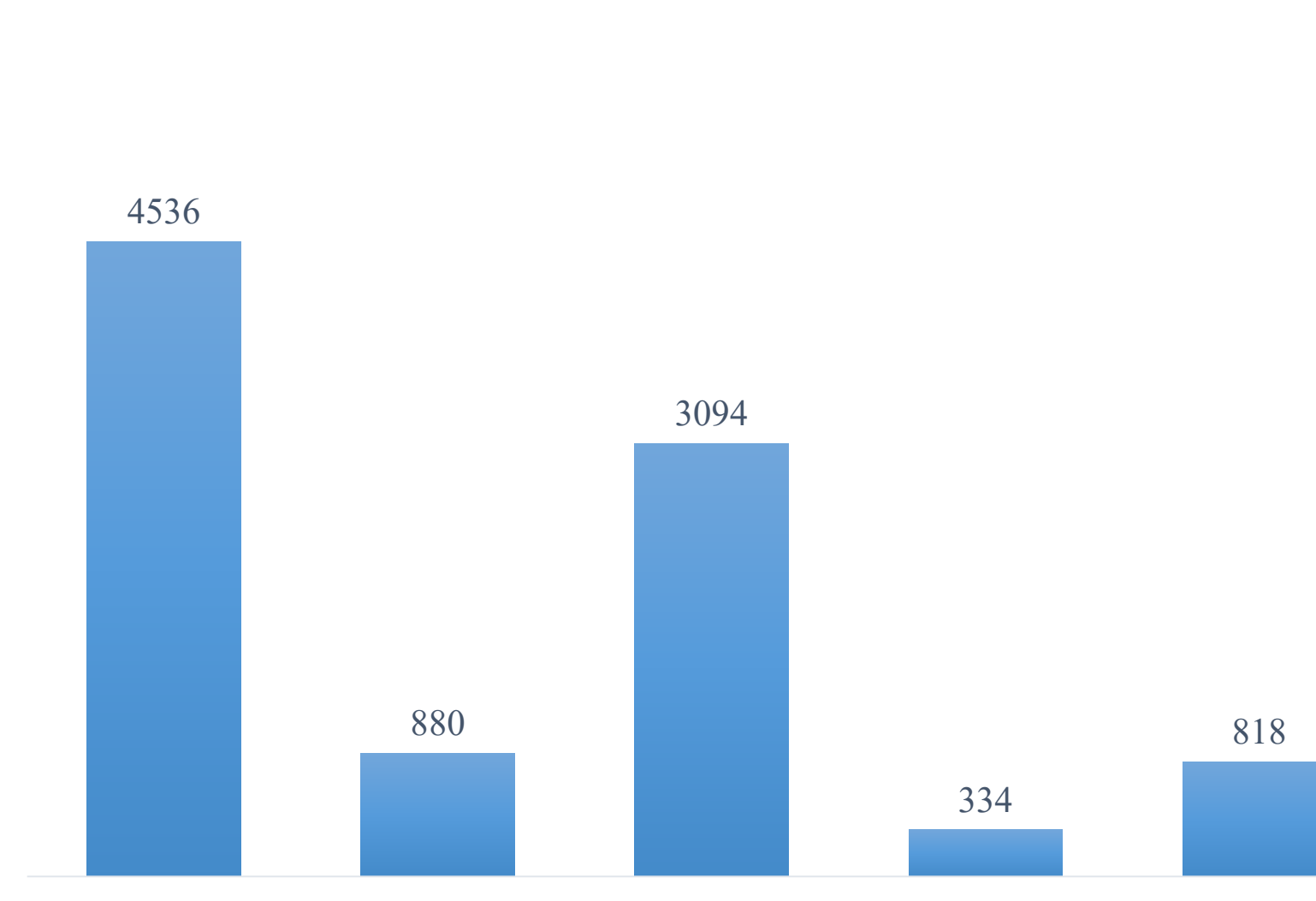


Figure 8. Protection mechanisms for contaminated water.

Objective 4. Determine the effect that the educational level has on the carrying of water.

| Table 1. Carrying water and education levels |             |                    |       |
|----------------------------------------------|-------------|--------------------|-------|
| Groups                                       | Carry Water | Do Not Carry Water | Total |
| Illiterate                                   | 3399 (89%)  | 413 (11%)          | 3812  |
| Primary                                      | 2719 (80%)  | 689 (20%)          | 3408  |
| Secondary                                    | 740 (58%)   | 526 (42%)          | 1266  |
| Bachelor's degree                            | 749 (64%)   | 419 (36%)          | 1168  |
| Master's degree or above                     | 1(13%)      | 7 (87%)            | 8     |
| Total                                        | 7608        | 2054               | 9662  |

$$\chi^2(n=9662)=68.7, p < 0.001$$

## Conclusions

- Findings support the trend that women (52%) and kids (39%) are responsible for the water collection tasks at home.
- The majority of the houses have a latrine (89.5%). However, 15% of the latrines available are not appropriate for women.
- Water use at home is inequitable among the family members. Fifty-five percent of the households have unequal water distribution.
- Water-carrying is mainly done using human transport (80%). Water transport methods impose a physical burden with the potential to produce musculoskeletal disorders and related disabilities. Several studies have shown the physical implications in the human body caused by the carrying of water (Geere, Hunter, & Jagals, 2010).
- There is statistical difference in the educational level of women who carried water and those who have direct access to water. In general, women in the SNNPR region do not participate in educational programs for social, economic, and cultural reasons. One reason is the need to carry water to meet household needs.

## Recommendations

- This information can be used for future interventions and projects, looking to improve the access to clean and safe water and reduce water-carrying burdens on women.
- Women need to be a priority in the educational and development interventions in the SNNPR of Ethiopia.
- Further studies can be developed to determine other impacts of water-carrying activities for women.
- Despite the improvements in the levels of education of women, there are limitations at the household level in equitable access and use of resources for all family members.

## References

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