

Background

In the Northwest region of Cameroon, conditions for small-scale urban dairy farming greatly deteriorated since 2016 due to market failure and political crisis.

We compared urban households (HHs) having dairy cattle and selling milk (group I) to urban HHs having dairy cattle but selling no more milk since 2016 (group II) and to urban HHs that sold all dairy cattle after market failure (group III),

to test whether owning dairy cows as such, and also selling milk, has an impact on the family's food diversity and food security.

Introduction

- Out of 40 countries in the world needing external assistance for food, 31 are in Africa, including Cameroon (FAO 2018).
- Annual milk consumption in Cameroon is about 20 L per capita/year, which is very low compared to Europe with 280 L per capita/year (Werner et al. 2008).
- Livestock contributes 13% to Cameroon's agricultural GDP and could be an entrance door to address the problem of food insecurity (World Bank 2016).

Methods

- Field research: March 2019 – June 2019
- **Gr I (51 HHs) + Gr II (50 HHs) + Gr III (51 HHs) = 152 HHs (1,147 individuals)**

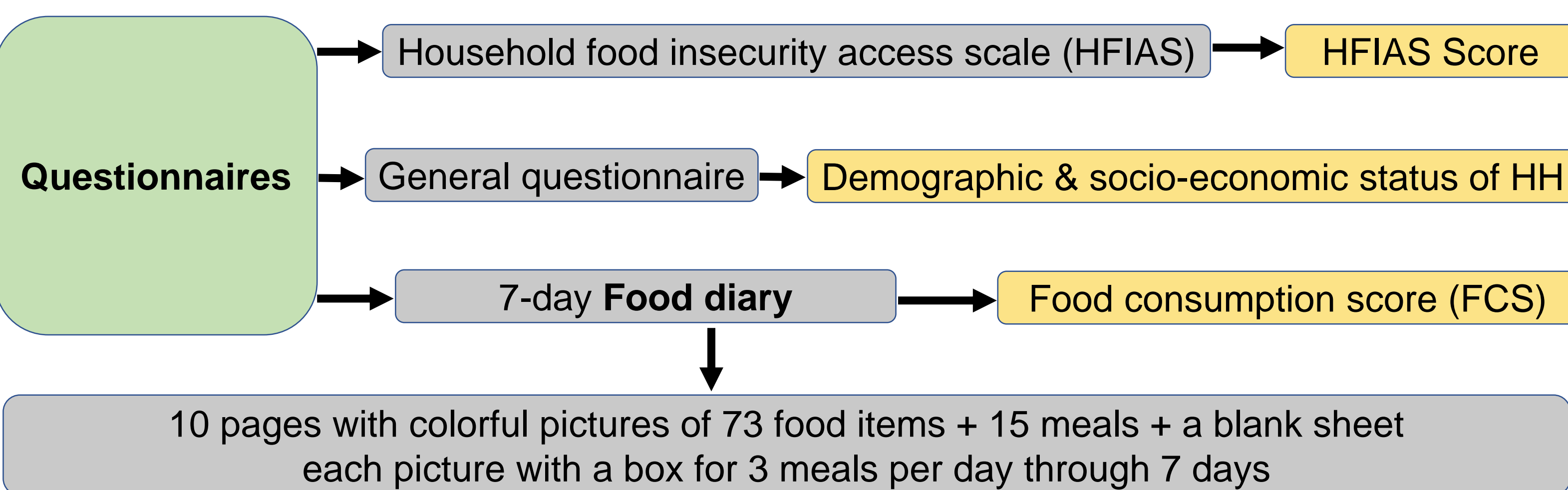


Figure 1: Enumerators interviewing respondents



Figure 2: Local breeds of cattle grazing in transhumance area

Results

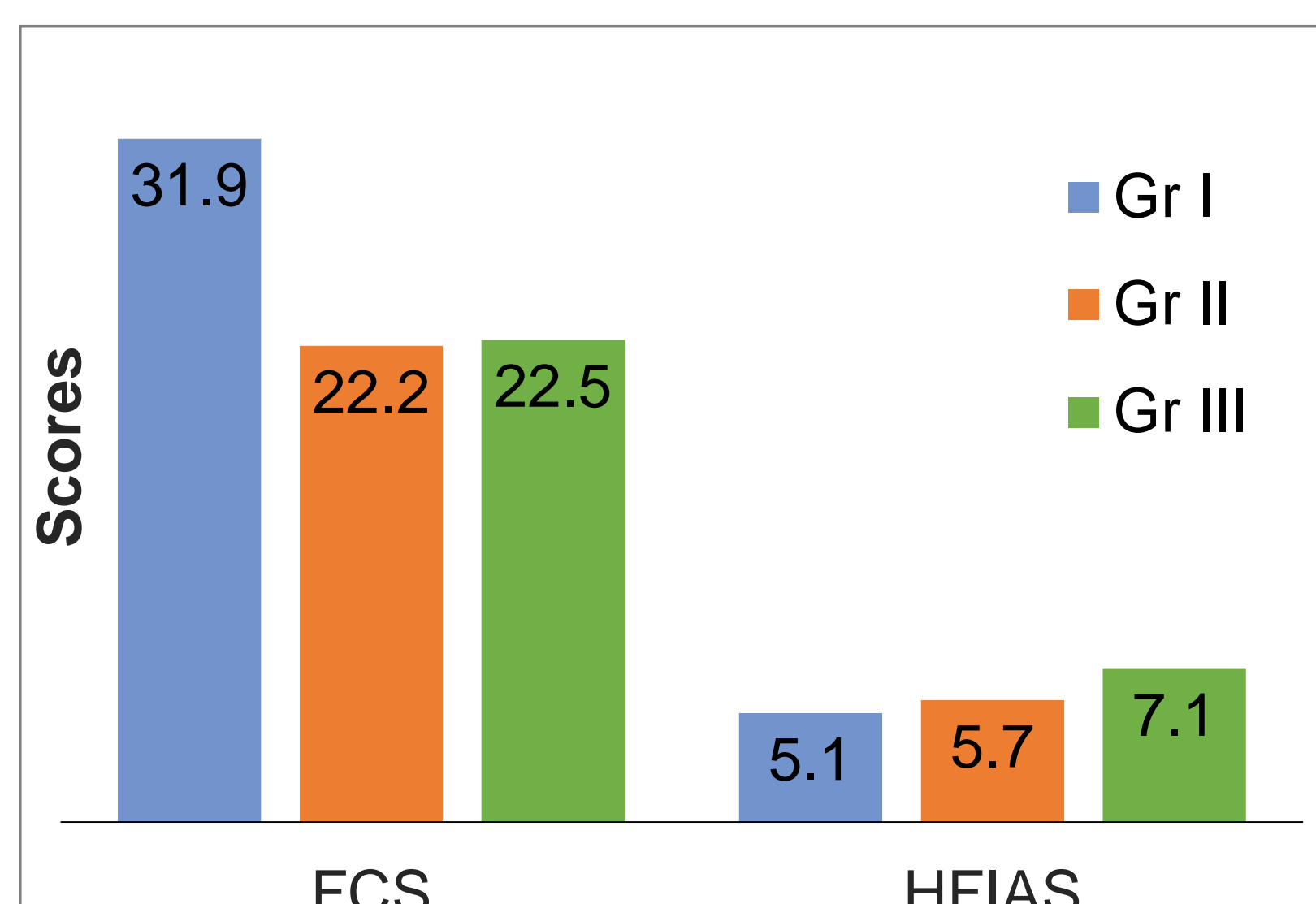


Figure 3: Group-wise comparison of food diversity and food security indicators

Group	Production Diversity Score (PDS)		
	Animals	Crops	12 food groups
I	2.9	12.1	7.9
II	2.7	8.5	7.1
III	0.6	8.4	5.0

Figure 4: Different crops and animals on the farm as expressed in terms of PDS.

Highlights

- Group I had the greatest food diversity, followed by group III and group II.
- Group I was the most food secure, followed by group II and group III.
- PDS and number of income sources showed a significant positive correlation with FCS and a negative correlation with HFIAS.

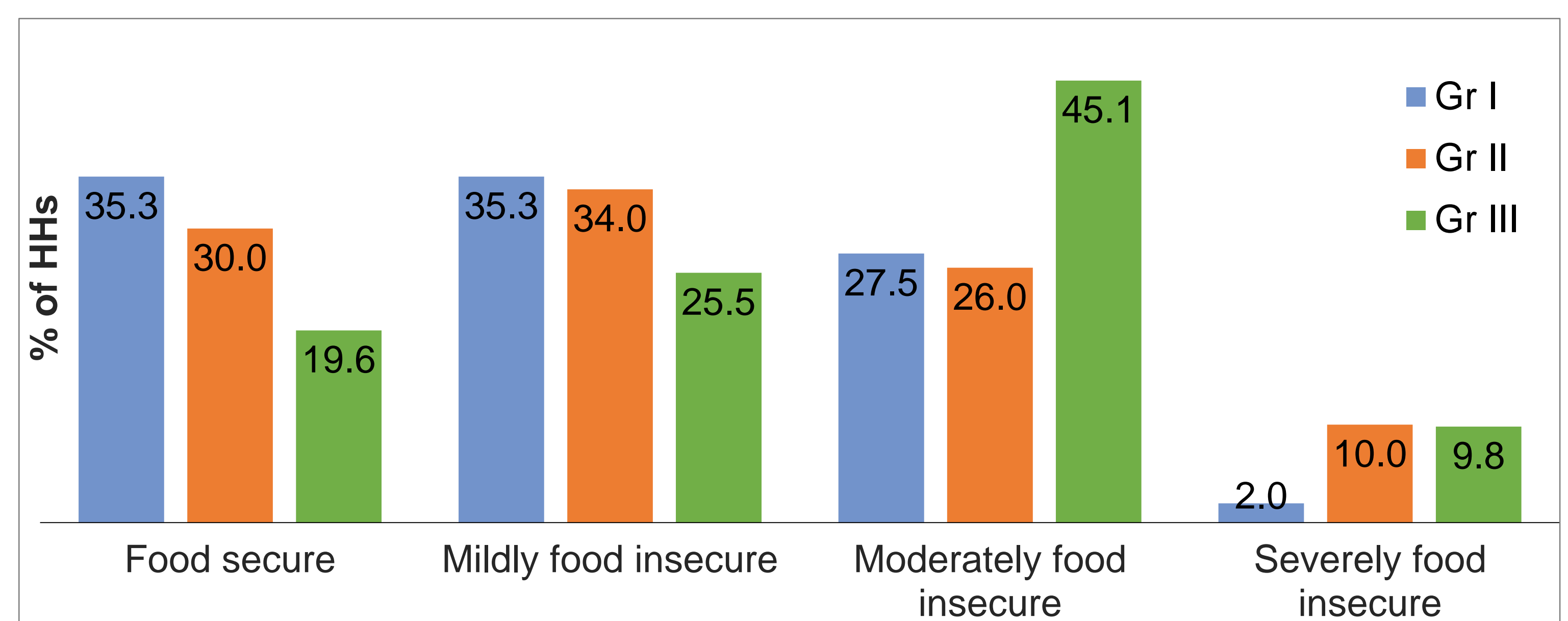


Figure 5: Categorical groups of HFIAS

- In our sample, mean cropped area was 2.8 ha for group I, 2.4 ha for group II and 1.8 ha for group III.
- On an average, 1.4 HH members were financially contributing to group I, compared to 1.2 in group II and 0.8 in group III.
- On an average, group I had 3.2 different sources of HH income, whereas group II and group III had 2.7 and 2.3, respectively.

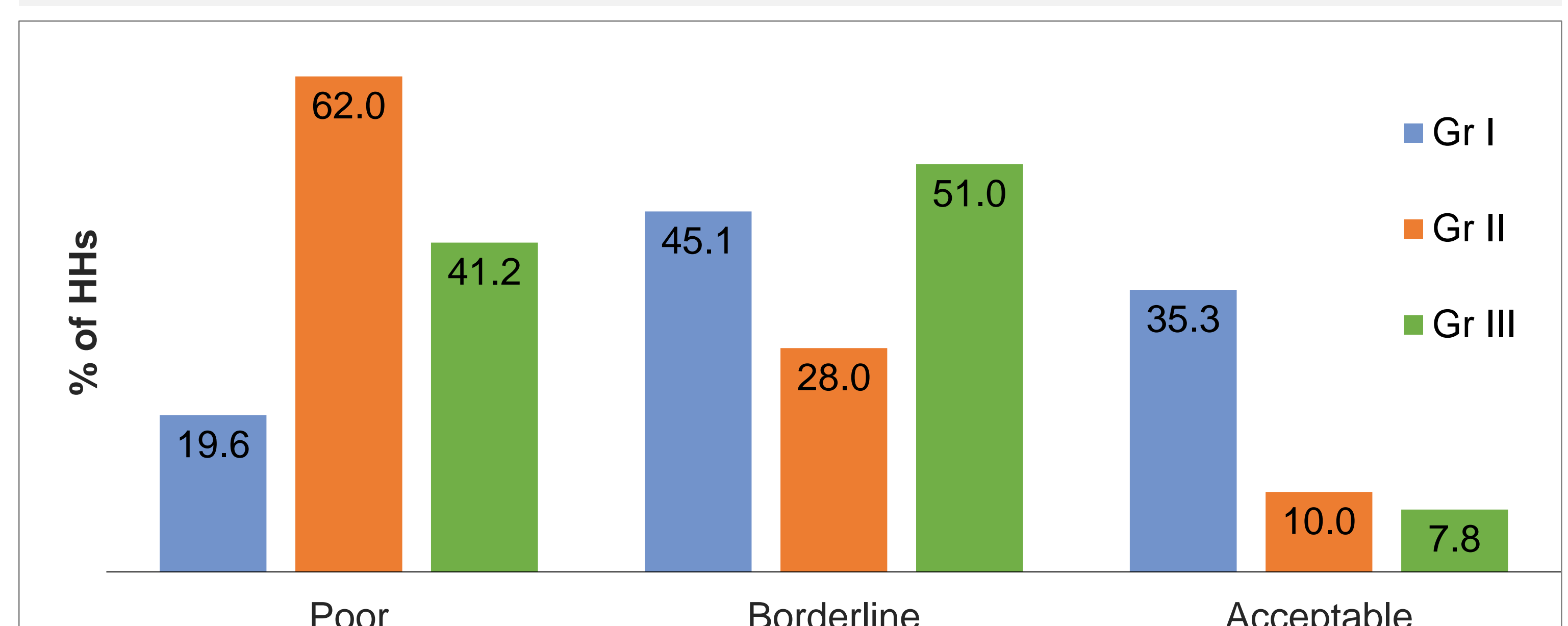


Figure 6: Categorical groups of FCS (Poor: 0 - 21, Borderline: 21.5 - 35, Acceptable: > 35)

- Around 50% of HHs in group II and III never included egg, fish and milk in their diet during the 7 days.
- At least 25% of HHs in group II and III didn't consume meat during the 7 days.
- HHs with no dairy cattle were more worried about their food (Fig. 5).
- The proportion of HHs of group I belonging to the acceptable FCS category was more than 3.5 times higher than in groups II and III (Fig. 6).

Conclusion

Diversification of income sources through diversification of farm operations, training on agriculture-related skills and encouragement for dairy farming along with development of a dairy infrastructure can improve the food security status of agriculture-based HHs in Cameroon's Northwest region.

References

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