MULTIDIMENSIONAL POVERTY

Community-level research in the marzes of Lori, Shirak, and Tavush

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OVERVIEW

■ CRRC-Armenia piloted a survey to measure multidimensional poverty and vulnerability to COVID-19 on the community-level in the three northern regions of Lori, Shirak, and Tavush.

■ Based on the Alkire-Foster (AF) method of measuring multidimensional poverty.

■ AF method previously used by the World Bank to calculate the national multidimensional poverty index (MPI); CRRC-Armenia is uniquely using this method at the community[1] level rather than national level.

■ Questionnaire based on Integrated Living Conditions Survey (ILCS) questionnaire; WB used ILCS to calculate the national MPI.

■ Sampling – about 2,400 people were interviewed for this survey (randomly sampled).

■ Fieldwork – July-August, 2021

[1]Community used here does not mean the same as enlarged community used by Ministry of territorial development of RA.

OVERVIEW

- The survey data were segmented into eight specific communities to create a community-level MPI and COVID-19 Vulnerability Index (CVI) that provides a nuanced look at the unique issues impacting specific communities within these three regions of Lori, Shirak, and Tavush.

- The eight communities[2] included:

  - (1) rural Tavush, (2) urban Tavush (excluding Ijevan), (3) Ijevan, (4) rural Shirak, (5) Gyumri, (6) rural Lori, (7) Spitak, and (8) Vanadzor.

[2]For the whole presentation "community" refers to this division.

MEASURING POVERTY THROUGH MULTIPLE DIMENSIONS

- Poverty is normally measured in one dimension, usually income or consumption, yet this one dimension inadequately addresses the multiple aspects that contribute to poverty.

- The development of a multidimensional poverty index (MPI) based on the AF method targets the measurement of acute poverty.

  - Acute poverty refers to two main characteristics; (1) those who are living under conditions in which they do not reach the minimum internationally agreed standards in indicators of basic functionings, such as being well nourished, being educated, drinking clean water, etc. (2) those who are living under conditions where they do not reach the minimum standards in several aspects at the same time[3].

- More simply, the MPI measures those experiencing multiple deprivations, such as simultaneously being undernourished, having no access to clean drinking water, experiencing inadequate sanitation, unclean fuel, etc.

[3]Definition of "acute poverty" from Alkire, S. and Santos, M.E. (2011). *Training material for producing national human development reports: The multidimensional poverty index (MPI).*

MPI/CVI CALCULATION SCHEME
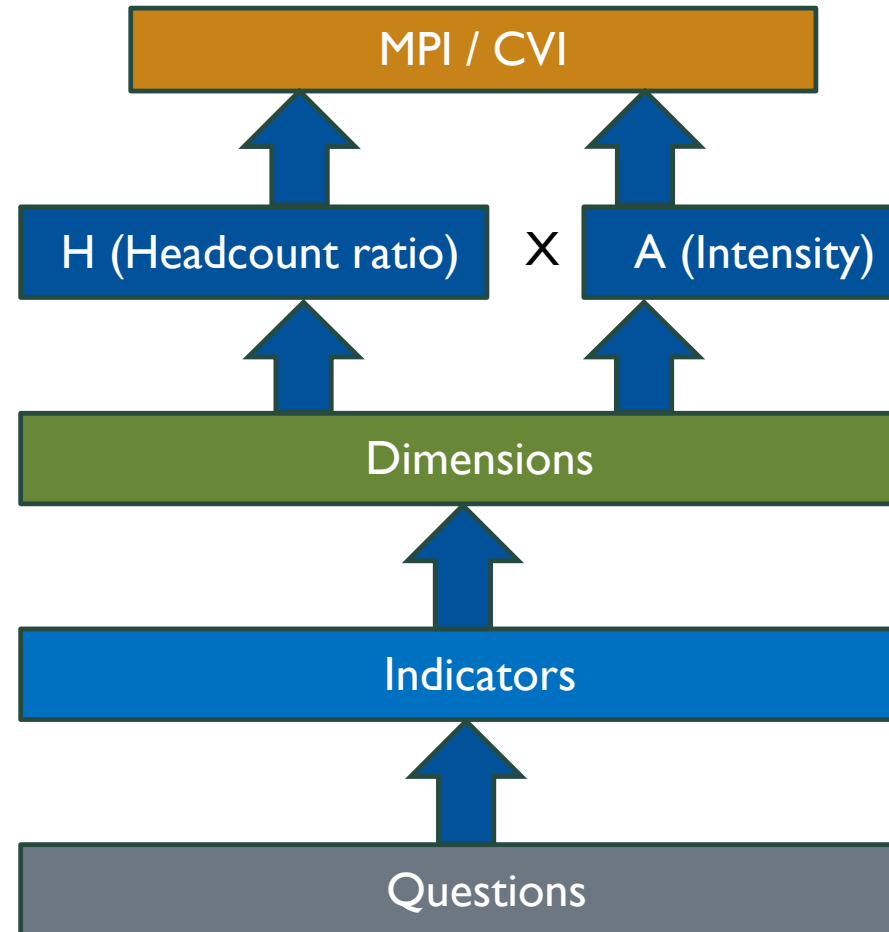
MEASURING POVERTY THROUGH MULTIPLE DIMENSIONS

- Five dimensions were included in the calculation of the MPI (based on the World Bank's approach). Each dimension had its own set of indicators and associated questions for each indicator based on the context of poverty in Armenia.

  - **Basic Needs**
    - *Indicators*: (1) Life in dignity; (2) Humanitarian aid; (3) Remittance-dependency; (4) Extreme food poverty;

  - **Housing**
    - *Indicators*: (1) Subjective housing conditions; (2) Adequate housing; (3) Overcrowding; (4) Healthy heating; (5) Continuous access to a centralized water system; (6) Centralized sanitation and garbage disposal; (7) Hot running water; (8) Quality of public services; (9) Access to transportation

  - **Education**
    - *Indicators*: (1) Secondary education; (2) Compulsory schooling; (3) Quality education services; (4) Access to education

  - **Labor**
    - *Indicators*: (1) Labor market participation; (2) Long-term unemployment; (3) Decent jobs

  - **Health**
    - *Indicators*: (1) Affordability of health services; (2) Termination of usual activities; (3) Access to health services; (4) Quality of health services

FRAMEWORK TO MULTIDIMENSIONAL POVERTY

Choose
> a. Unit of analysis: HH or individual level
> b. Dimensions: topics of interest
> c. Indicators: outcomes of interest

Set
> a. Deprivation cutoff for each (continuous) indicator
> b. Weights for indicators: build composite index
> c. Poverty cutoff: identify multidimensionally poor

Calculate
> a. Headcount: share of multidimensionally poor in the country or region
> b. Poverty gap: average number of deprivations for multidimensionally poor
> c. Adjusted headcount: combines headcount and poverty gap into MPI

Graphic from the presentation "Measuring Welfare" - Moritz Meyer, The World Bank

FIELDWORK AND SURVEY DESIGN

Poll Quick Facts	Data	Remarks
Name of fieldwork firm	CRRC Armenia Foundation	
Fieldwork Dates	29 July 2021 – 23 August 2021	
Sampling Frame Data	List of electoral precincts of RA	
Sample size	n=2406	
Target population	Residents of the Republic of Armenia	
Total target population	426,930 (people aged 18+)	
Survey type	Regional	
Sampling Method	Stratified randomized cluster sample	
Margin of error	+/- 2%	95% confidence interval
Interview method (mode)	CAPI	
Response Rate	34%	
Interview language(s)	Armenian	
Weight factors	Individual and household level weights calculated	

COMMUNITY LEVEL DATA – RESPONSES

		Frequency/ Number of Observations	Percent	Valid Percent	Cumulative Percent
Valid	Vanadzor	354	14.7	14.8	14.8
	Spitak	125	5.2	5.2	20.0
	rural Lori	329	13.7	13.7	33.7
	Gyumri	469	19.5	19.6	53.3
	rural Shirak	316	13.1	13.2	66.5
	Ijevan	141	5.9	5.9	72.4
	urban Tavush (excluding Ijevan)	202	8.4	8.4	80.8
	rural Tavush	460	19.1	19.2	100.0
	Total	2396	99.6	100.0	
Missing	System	10	.4		
Total		2406	100.0		

MULTIDIMENSIONAL POVERTY INDEX (MPI)

Overall totals by marz and community.

Share of deprived households on

marz level
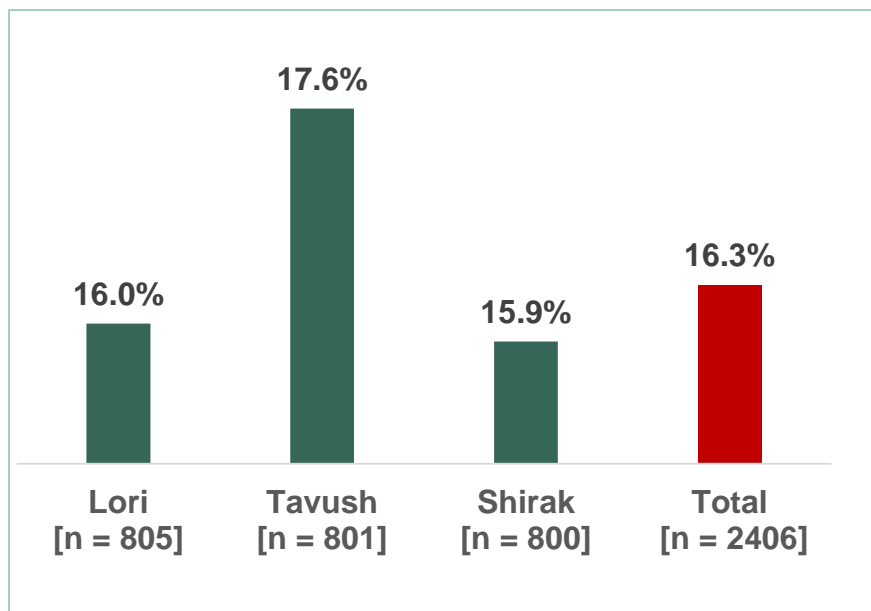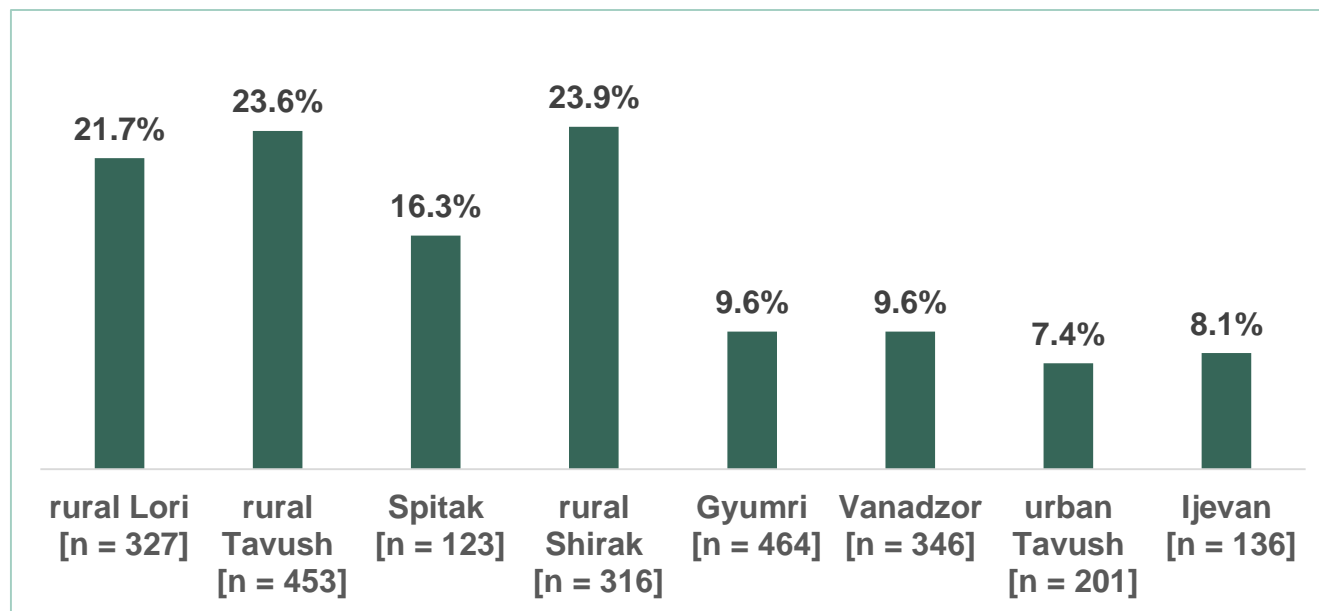
community level

MPI in 2020 (calculated by World Bank)
According to the recently published Social Snapshot and Poverty in Armenia 2021 report, the MPI on national level in Armenia was 19.1% in 2020, 16.4% in Yerevan, 16.0% in other urban communities and 23.2 %in rural communities.

MULTIDIMENSIONAL POVERTY INDEX (MPI) BY INDICATOR

MPI Dimensions by Indicators

Among the 24 indicators, deprivation is highest in life in dignity, healthy heating, labor market participation and decent jobs.

Share of deprived households on overall three marz level
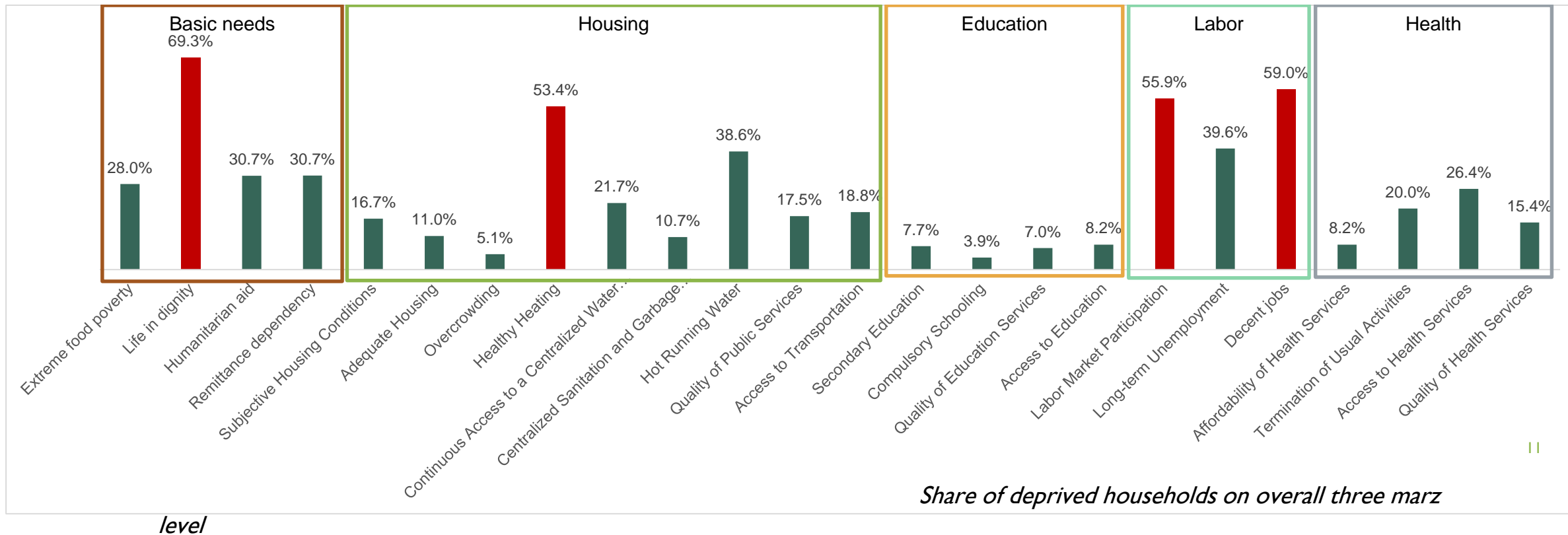
BASIC NEEDS

Life in Dignity

The life in dignity indicator referred to whether a household could afford to buy food or clothes. The household was considered deprived if respondents stated that there was not enough money for everyday meals or clothes.

Share of deprived households on
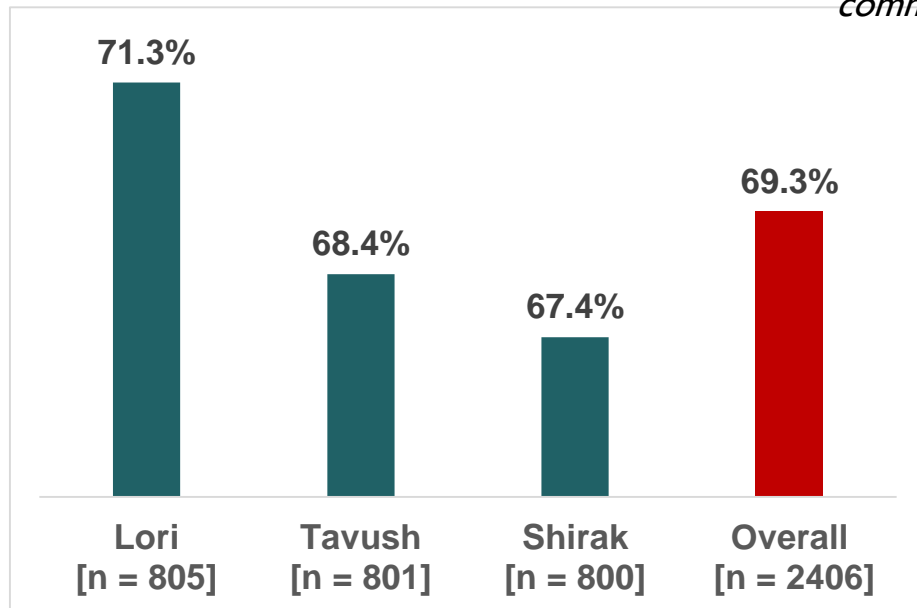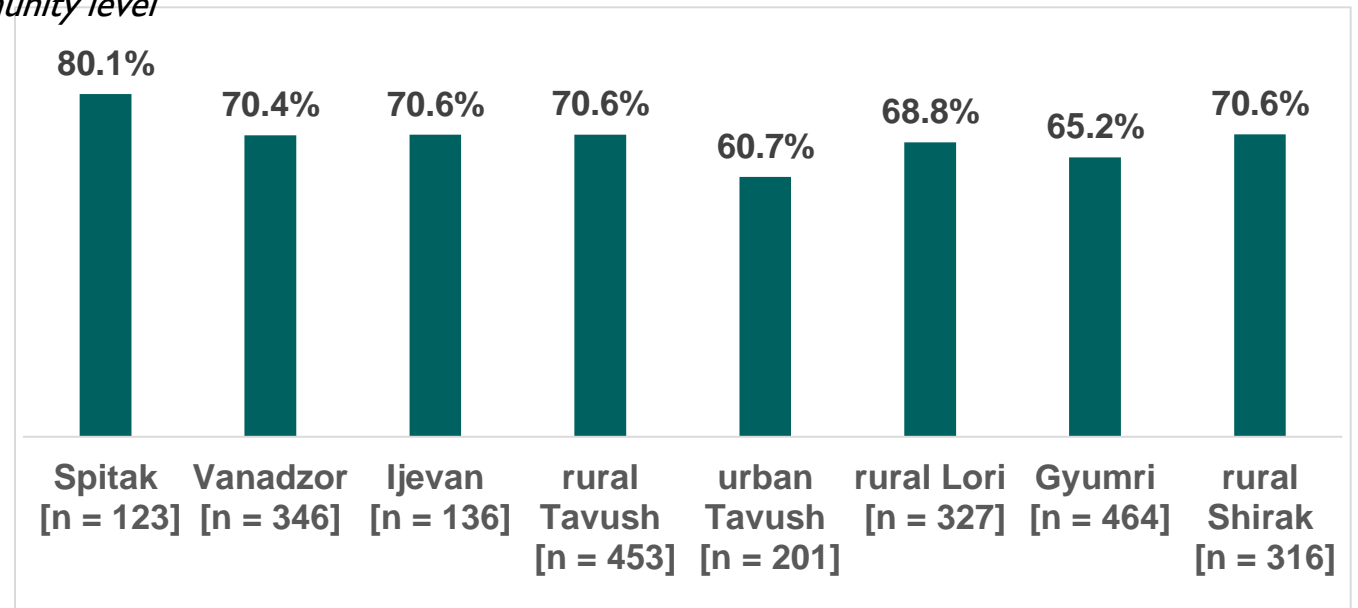
marz level

community level

Lori [n = 805]	71.3%
Tavush [n = 801]	68.4%
Shirak [n = 800]	67.4%
Overall [n = 2406]	69.3%

Spitak [n = 123]	80.1%
Vanadzor [n = 346]	70.4%
Ijevan [n = 136]	70.6%
rural Tavush [n = 453]	70.6%
urban Tavush [n = 201]	60.7%
rural Lori [n = 327]	68.8%
Gyumri [n = 464]	65.2%
rural Shirak [n = 316]	70.6%

BASIC NEEDS

Life in Dignity

In the past 12 months, was there a time when you or others in your household went without eating for a whole day due to a lack of money or other resources?
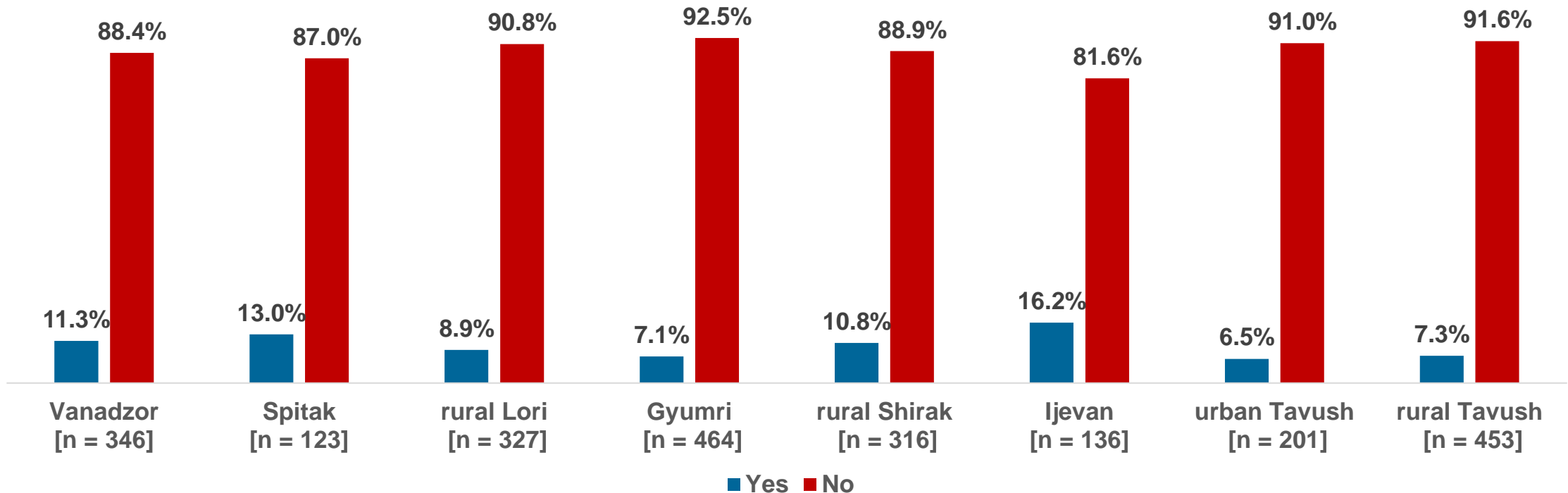
Region	Yes	No
Vanadzor [n = 346]	11.3%	88.4%
Spitak [n = 123]	13.0%	87.0%
rural Lori [n = 327]	8.9%	90.8%
Gyumri [n = 464]	7.1%	92.5%
rural Shirak [n = 316]	10.8%	88.9%
Ijevan [n = 136]	16.2%	81.6%
urban Tavush [n = 201]	6.5%	91.0%
rural Tavush [n = 453]	7.3%	91.6%

■ Yes ■ No

BASIC NEEDS

Life in Dignity

Can your household afford to have a meal with meat, chicken, fish or vegetarian equivalent every second day?

Location	Yes	No
Vanadzor [n = 346]	27.9%	72.1%
Spitak [n = 123]	16.3%	83.7%
rural Lori [n = 327]	28.7%	70.9%
Gyumri [n = 464]	36.2%	63.4%
rural Shirak [n = 316]	32.9%	66.8%
Ijevan [n = 136]	24.6%	75.4%
urban Tavush [n = 201]	35.3%	64.2%
rural Tavush [n = 453]	35.5%	63.8%

■ Yes ■ No

14
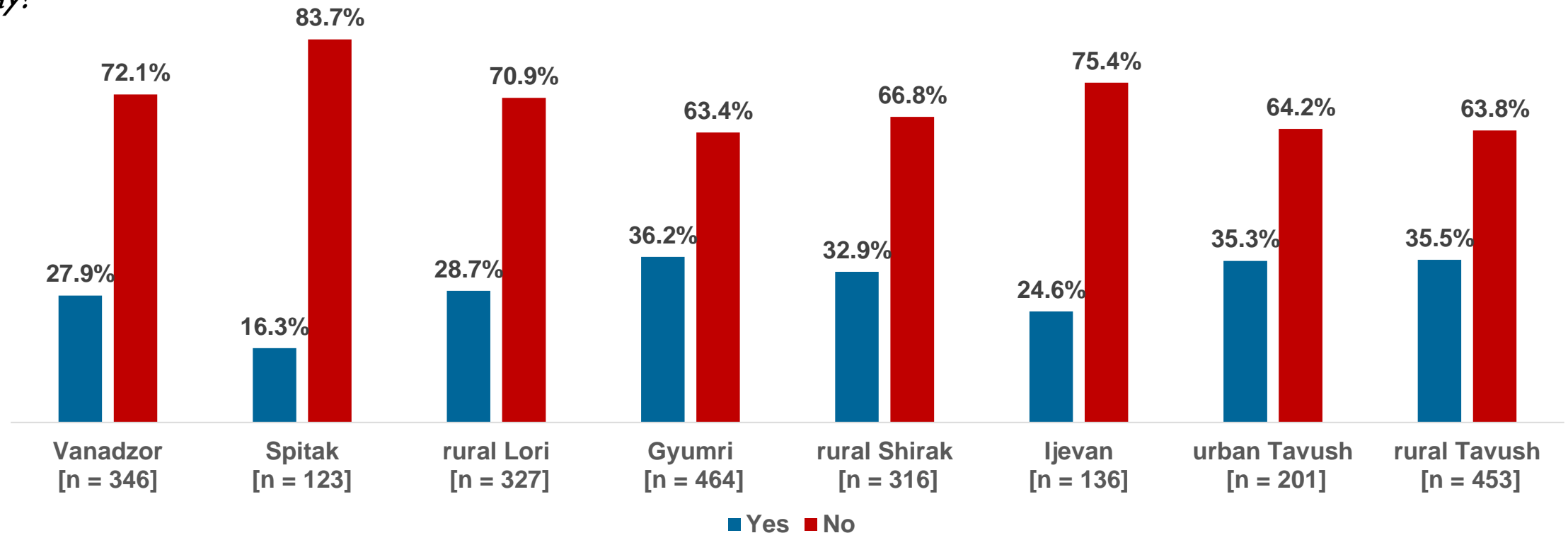
BASIC NEEDS

Life in Dignity

Can your household afford to go for a week's annual holiday, away from home, including stays in second dwelling or with friends/relatives?

	Yes	No
Vanadzor [n = 346]	15.6%	83.8%
Spitak [n = 123]	8.1%	91.9%
rural Lori [n = 327]	8.0%	92.0%
Gyumri [n = 464]	16.2%	83.4%
rural Shirak [n = 316]	10.4%	89.6%
Ijevan [n = 136]	14.7%	83.8%
urban Tavush [n = 201]	17.9%	82.1%
rural Tavush [n = 453]	13.7%	86.1%

■ Yes ■ No

15
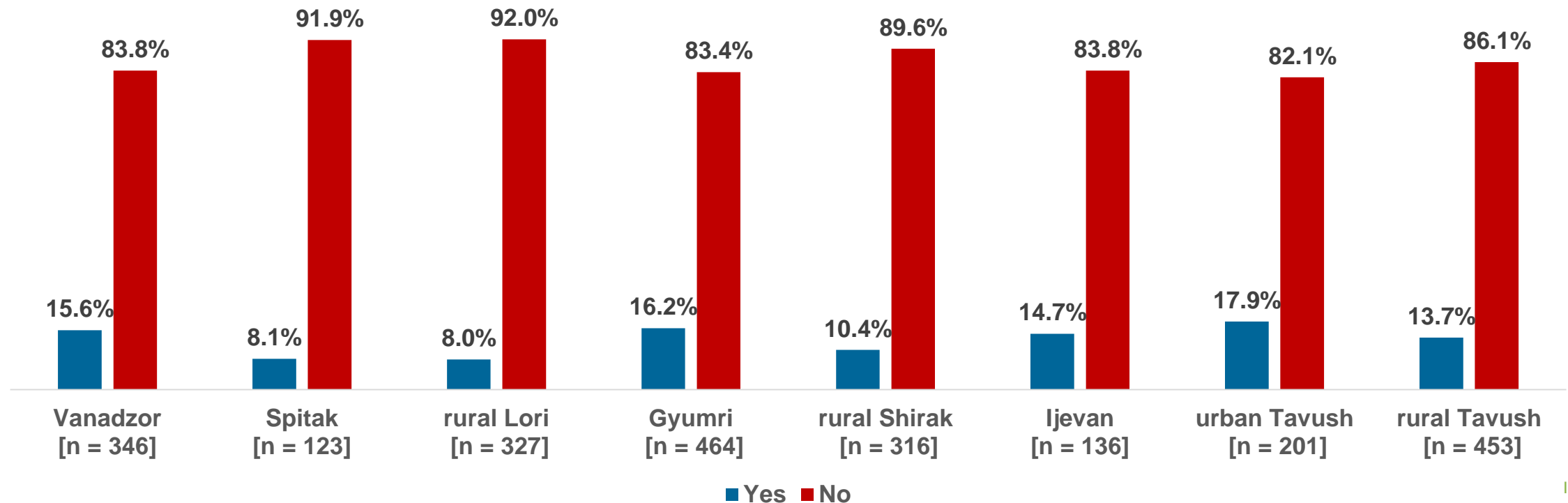
BASIC NEEDS

Life in Dignity

Is your household's total income enough to pay monthly required minimal expenses?

	With great difficulty	With difficulty	With some difficulty	Easily
Vanadzor [n = 346]	49.7%	21.1%	17.1%	9.8%
Spitak [n = 123]	68.3%	13.0%	13.8%	1.6%
rural Lori [n = 327]	60.6%	16.5%	15.0%	6.7%
Gyumri [n = 464]	54.1%	22.2%	19.8%	2.2%
rural Shirak [n = 316]	62.7%	21.5%	13.9%	1.9%
Ijevan [n = 136]	43.4%	27.9%	26.5%	1.5%
urban Tavush [n = 201]	42.3%	25.4%	28.9%	3.5%
rural Tavush [n = 453]	49.7%	19.0%	24.3%	6.0%
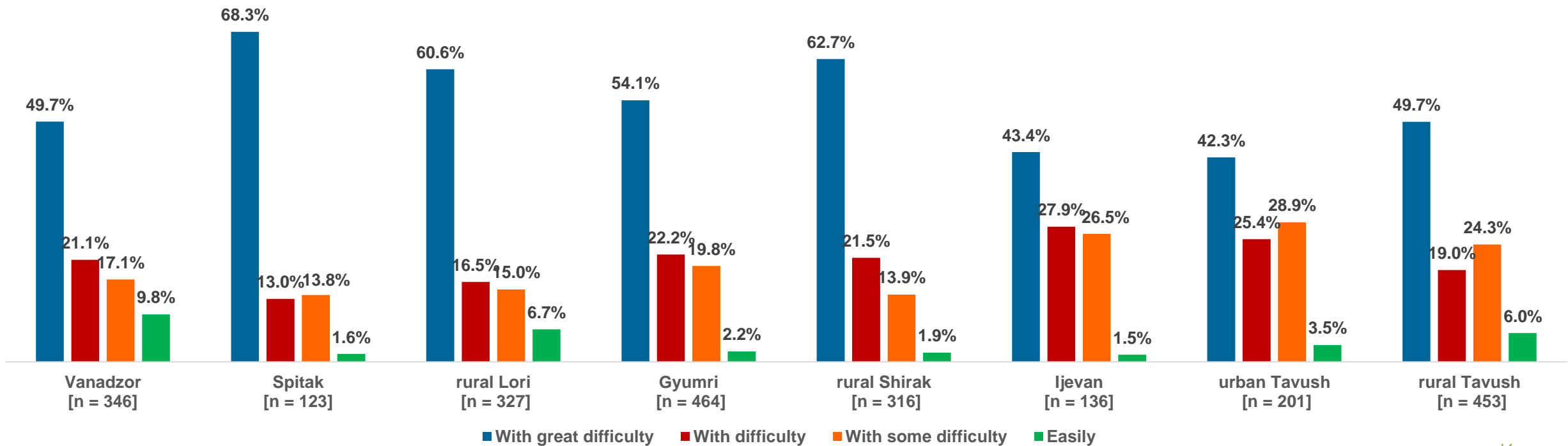
*Note: No community had more than 2.4% of households that responded, "very easily".

BASIC NEEDS

Life in Dignity

Do you have two pairs of properly fitting shoes, and which are enough to wear during different seasons of the year?

	Vanadzor [n = 346]	Spitak [n = 123]	rural Lori [n = 327]	Gyumri [n = 464]	rural Shirak [n = 316]	Ijevan [n = 136]	urban Tavush [n = 201]	rural Tavush [n = 453]
Yes	75.7%	68.3%	71.6%	82.5%	75.0%	66.9%	72.6%	65.6%
No, cannot afford	21.4%	28.5%	27.8%	15.9%	21.5%	30.9%	25.9%	33.3%
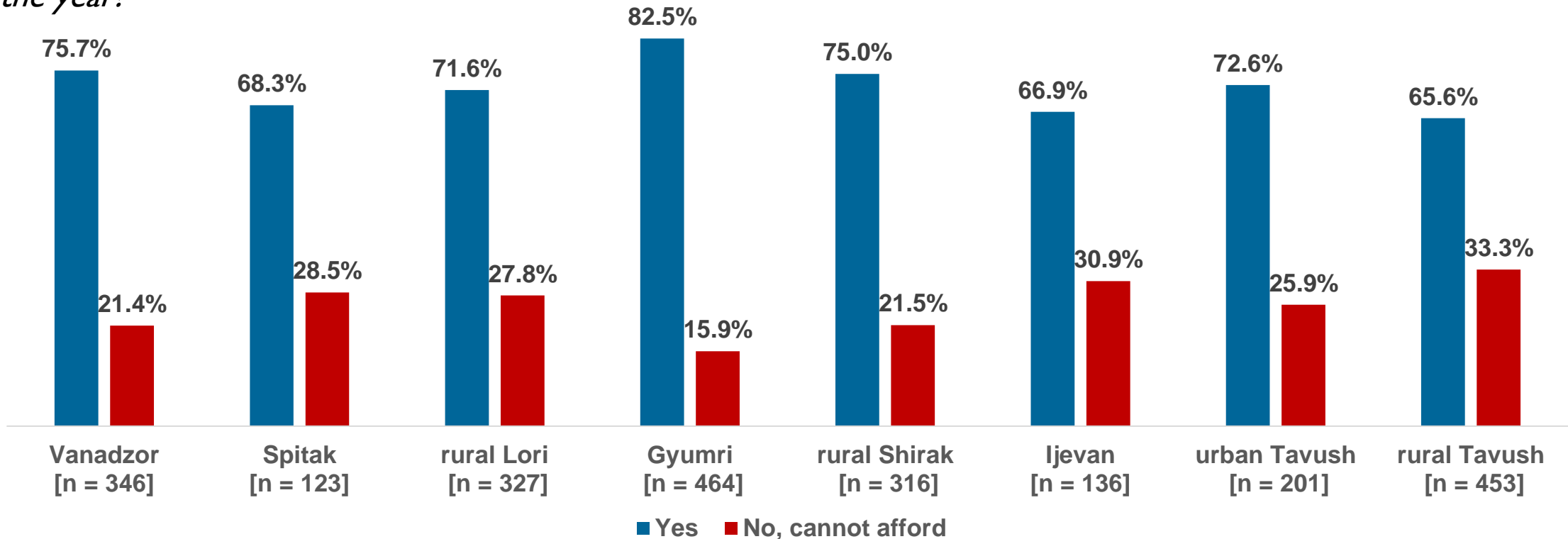
BASIC NEEDS

Life in Dignity

What are the three main problems in your household? Rank them according to their importance.

- ■ **Can't solve health problems**

- ■ **Housing problems**

- ■ **Have money for food, but not for clothes**

- ■ **Don't have money even for every day food**

- ■ **Other**

- ■ **Can't ensure a good education**

rural Tavush [n = 383]	40.5%	31.1%	16.4%	6.5%	
urban Tavush [n = 164]	47.6%	23.2%	14.6%	7.9%	
Ijevan [n = 113]	37.2%	38.1%	8.0%		
rural Shirak [n = 287]	25.8%	31.4%	10.1%	15.0%	14.3%
Gyumri [n = 338]	35.5%	29.0%	15.7%	11.5%	5.6%
rural Lori [n = 263]	40.7%	26.6%	11.0%	14.1%	5.3%
Spitak [n = 104]	33.7%	42.3%		10.6%	
Vanadzor [n = 262]	43.5%	23.7%	11.5%	13.0%	6.5%
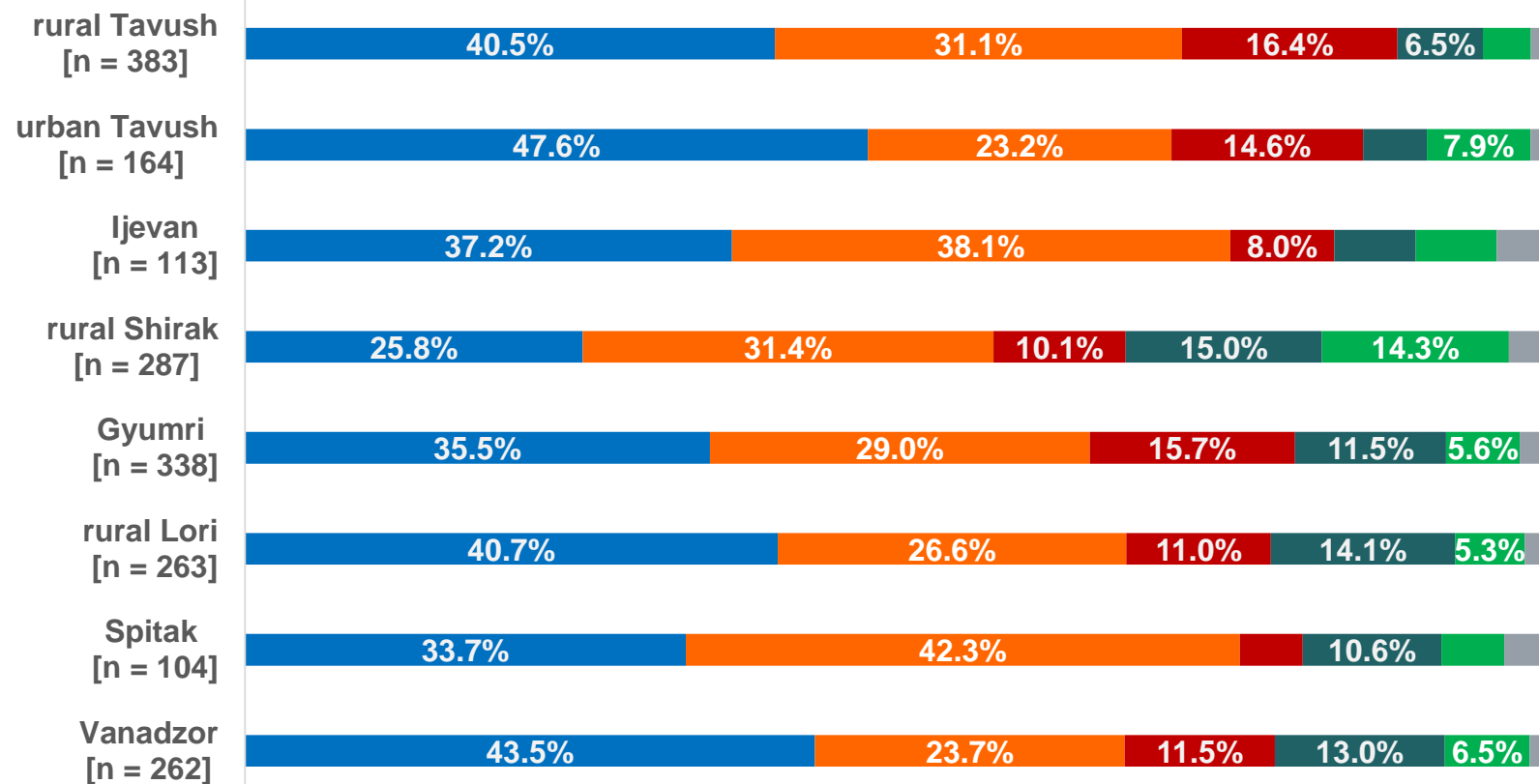
BASIC NEEDS

Humanitarian Aid

The humanitarian aid indicator referred to households that had received humanitarian aid. The household was considered deprived if it had received such aid during the preceding 12 months.
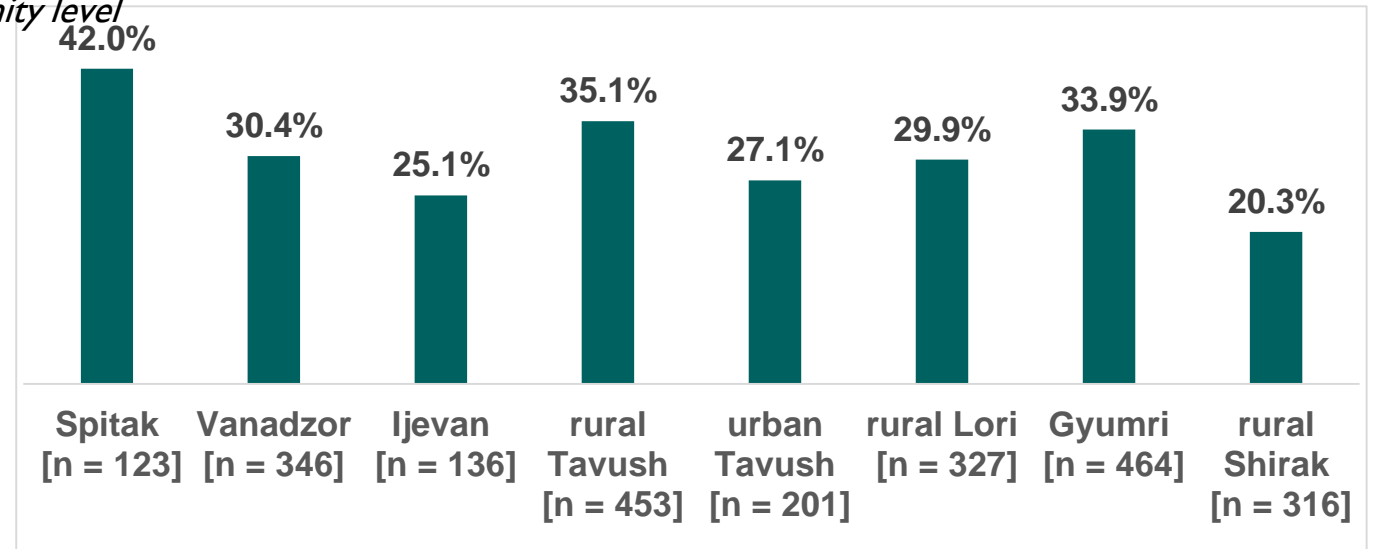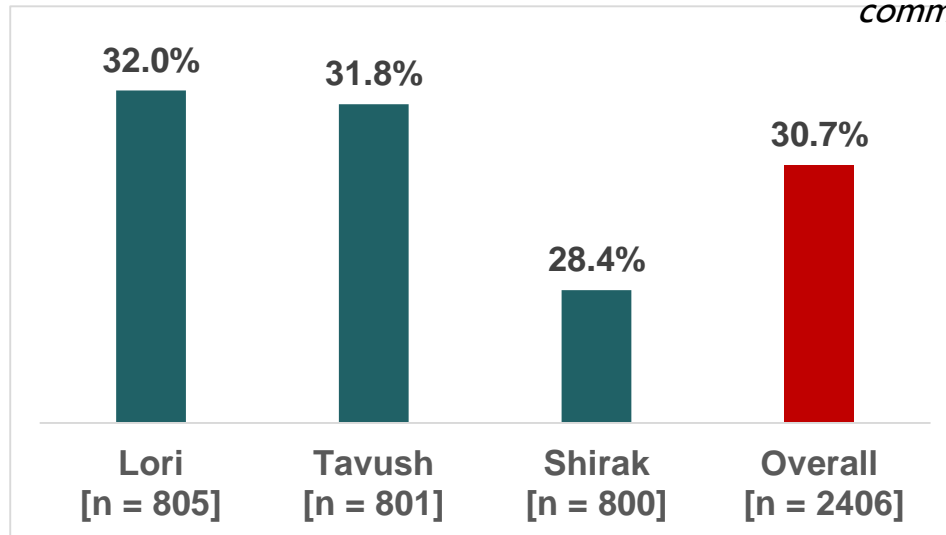
Share of deprived households on

marz level

community level

Lori [n = 805]: 32.0%	Spitak [n = 123]: 42.0%
Tavush [n = 801]: 31.8%	Vanadzor [n = 346]: 30.4%
Shirak [n = 800]: 28.4%	Ijevan [n = 136]: 25.1%
Overall [n = 2406]: 30.7%	rural Tavush [n = 453]: 35.1%
	urban Tavush [n = 201]: 27.1%
	rural Lori [n = 327]: 29.9%
	Gyumri [n = 464]: 33.9%
	rural Shirak [n = 316]: 20.3%

BASIC NEEDS

Humanitarian Aid

Is your family registered in the System of Family Poverty Benefits?
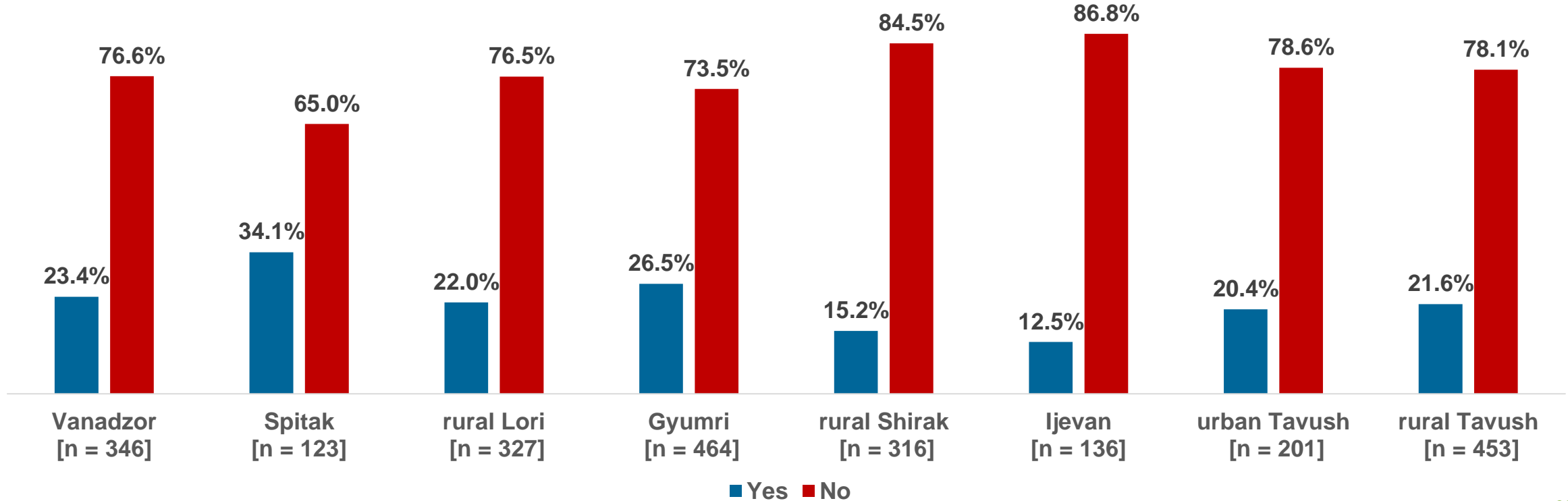
	Vanadzor [n = 346]	Spitak [n = 123]	rural Lori [n = 327]	Gyumri [n = 464]	rural Shirak [n = 316]	Ijevan [n = 136]	urban Tavush [n = 201]	rural Tavush [n = 453]
Yes	23.4%	34.1%	22.0%	26.5%	15.2%	12.5%	20.4%	21.6%
No	76.6%	65.0%	76.5%	73.5%	84.5%	86.8%	78.6%	78.1%

Humanitarian Aid

What is the main reason your family is not registered in the System of Family Poverty Benefits?
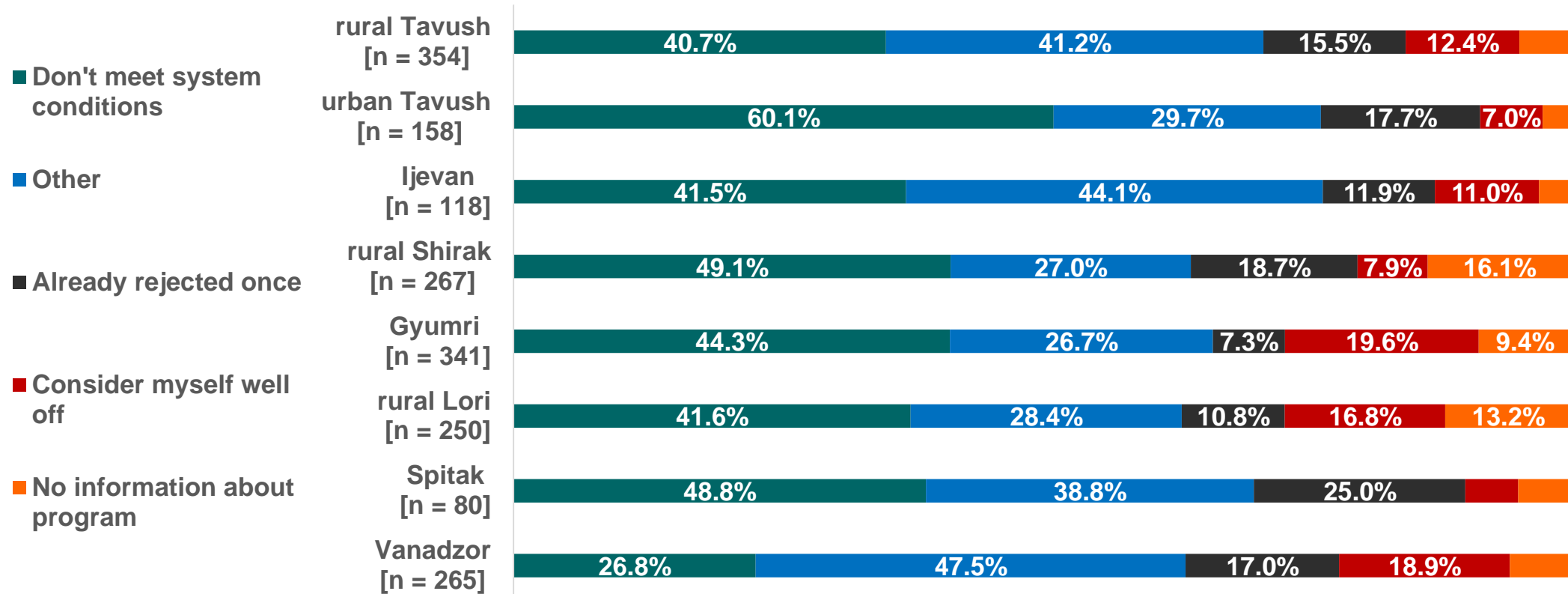
- ■ **Don't meet system conditions**
- ■ **Other**
- ■ **Already rejected once**
- ■ **Consider myself well off**
- ■ **No information about program**

Region	Don't meet system conditions	Other	Already rejected once	Consider myself well off	No information about program
rural Tavush [n = 354]	40.7%	41.2%	15.5%	12.4%	
urban Tavush [n = 158]	60.1%	29.7%	17.7%	7.0%	
Ijevan [n = 118]	41.5%	44.1%	11.9%	11.0%	
rural Shirak [n = 267]	49.1%	27.0%	18.7%	7.9%	16.1%
Gyumri [n = 341]	44.3%	26.7%	7.3%	19.6%	9.4%
rural Lori [n = 250]	41.6%	28.4%	10.8%	16.8%	13.2%
Spitak [n = 80]	48.8%	38.8%	25.0%		
Vanadzor [n = 265]	26.8%	47.5%	17.0%	18.9%	

BASIC NEEDS

Humanitarian Aid

During the last 12 months, did you receive humanitarian assistance other than the System of Family Poverty Benefits?

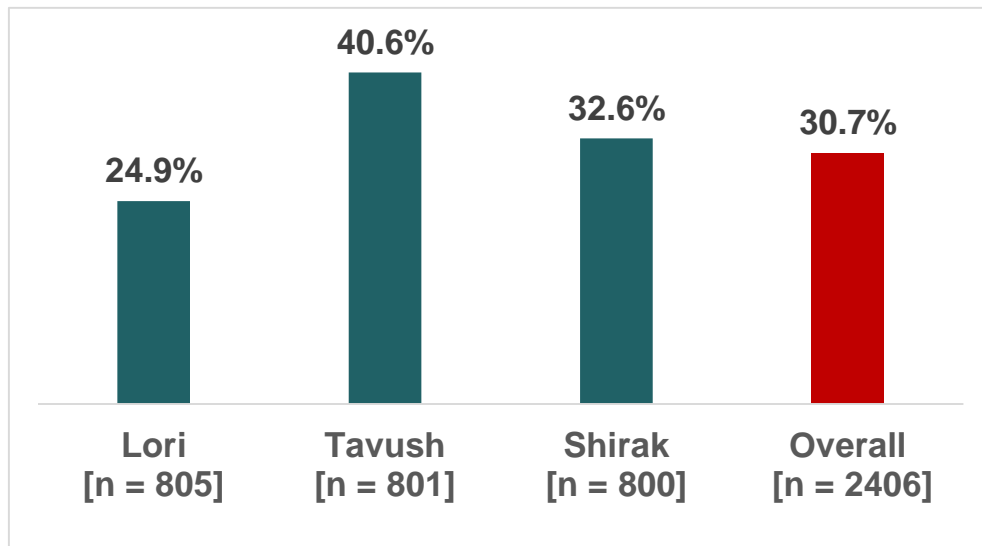| Region	Yes	No
Vanadzor [n = 346]	14.5%	85.5%
Spitak [n = 123]	13.8%	85.4%
rural Lori [n = 327]	16.8%	83.2%
Gyumri [n = 464]	25.6%	74.4%
rural Shirak [n = 316]	11.4%	88.6%
Ijevan [n = 136]	20.6%	77.9%
urban Tavush [n = 201]	14.4%	85.1%
rural Tavush [n = 453]	20.5%	79.2%

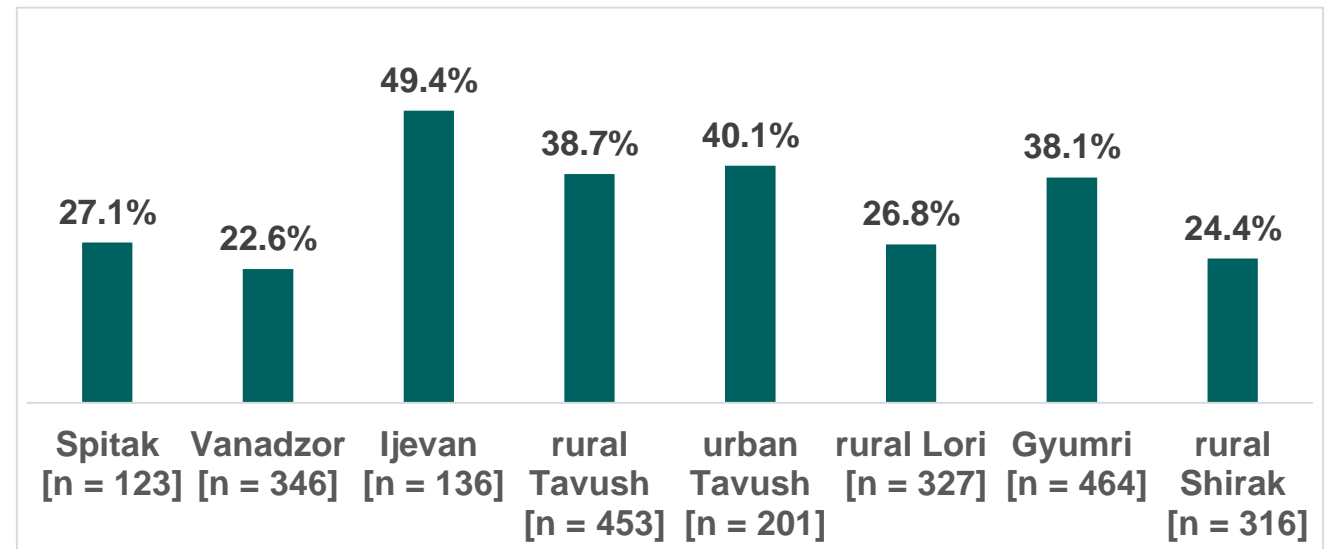■ Yes ■ No
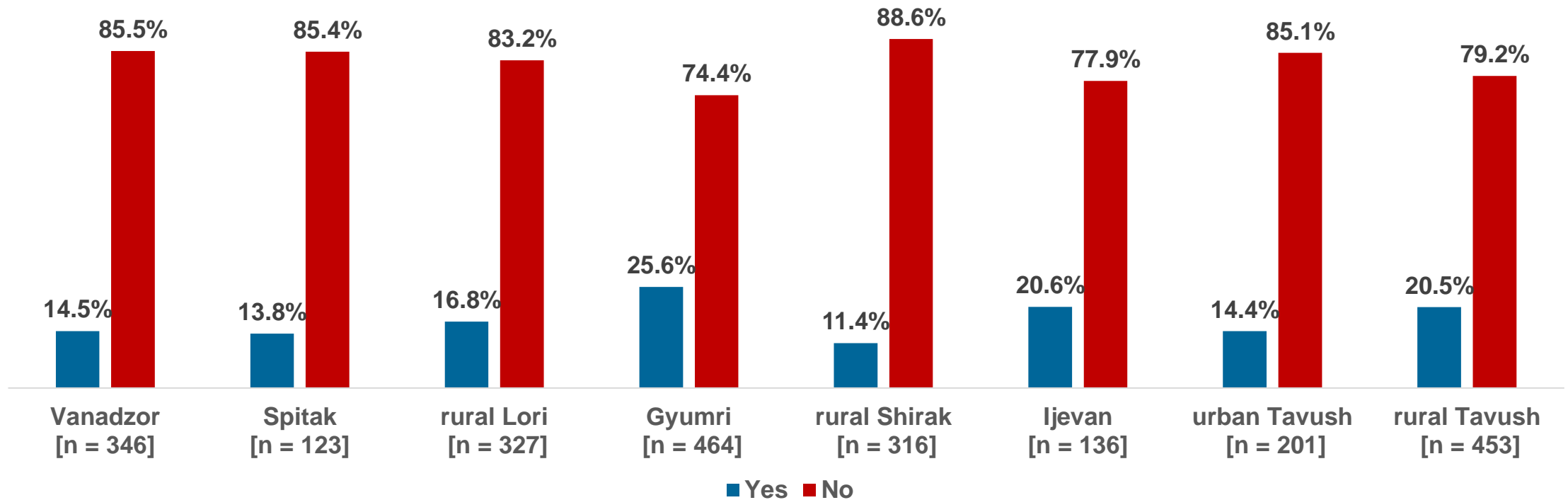
BASIC NEEDS

Remittance Dependency

The remittance dependency indicator referred to households that had consumption levels lower than the food poverty line after discounting for any remittances received; such households were considered deprived. Households that did not receive remittances but consumed less than the food poverty line were also considered deprived.

Share of deprived households on

marz level

Lori [n = 805]: 24.9%
Tavush [n = 801]: 40.6%
Shirak [n = 800]: 32.6%
Overall [n = 2406]: 30.7%

community level

Spitak [n = 123]: 27.1%
Vanadzor [n = 346]: 22.6%
Ijevan [n = 136]: 49.4%
rural Tavush [n = 453]: 38.7%
urban Tavush [n = 201]: 40.1%
rural Lori [n = 327]: 26.8%
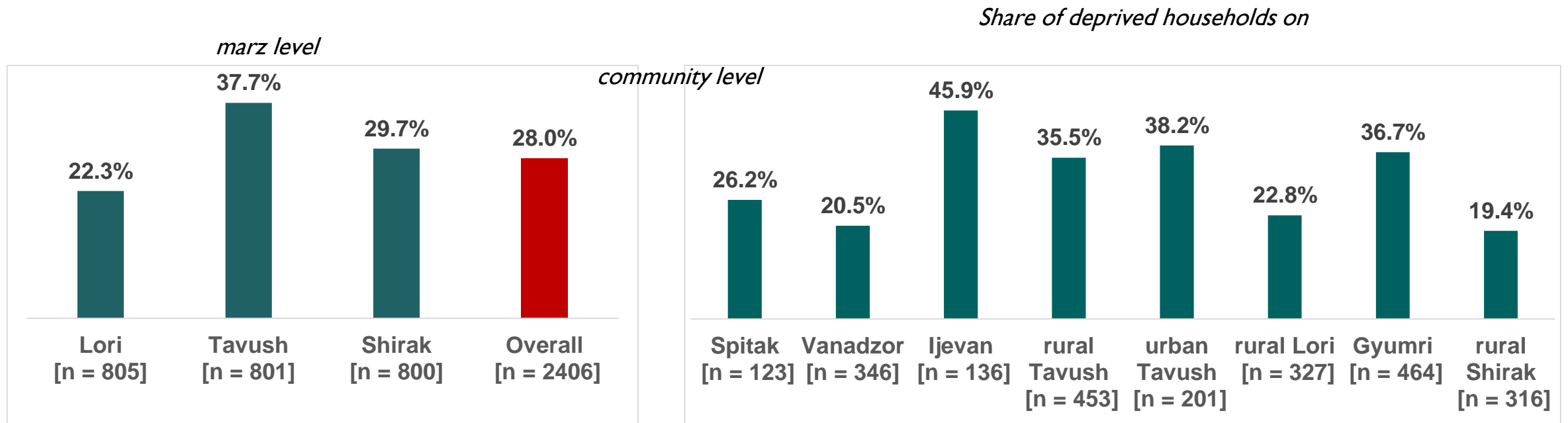Gyumri [n = 464]: 38.1%
rural Shirak [n = 316]: 24.4%

BASIC NEEDS

Extreme Food Poverty

The extreme (food) poverty indicator referred to whether adult equivalent consumption was above or below the national food poverty line. A household was considered deprived if the adult equivalent consumption was below the food poverty line (in drams).

Share of deprived households on

marz level

community level

Marz level:
- Lori [n = 805]: 22.3%
- Tavush [n = 801]: 37.7%
- Shirak [n = 800]: 29.7%
- Overall [n = 2406]: 28.0%

Community level:
- Spitak [n = 123]: 26.2%
- Vanadzor [n = 346]: 20.5%
- Ijevan [n = 136]: 45.9%
- rural Tavush [n = 453]: 35.5%
- urban Tavush [n = 201]: 38.2%
- rural Lori [n = 327]: 22.8%
- Gyumri [n = 464]: 36.7%
- rural Shirak [n = 316]: 19.4%

BASIC NEEDS

Conclusions

Lori region was the most deprived (71.3%) in respect to not having enough money for everyday meals and clothes. Spitak (80.1%) was the most deprived in respect to this indicator.

Significantly less people went without eating for a whole day due to lack of money or other resources compared to that they could afford having meal with meat or vegetarian equivalent (83.7% HHs in Spitak, 74.3% HHs in Ijevan could not afford this).

Above 80% of the HHs reported not being able to afford going for a week's annual holiday away from home (including stays in second dwelling or with friends/relatives).

Very few communities (in fact, less than 2.4%) reported being able to pay utilities "easily" or "very easily".

From around 25-30% of HHs in Spitak (28.5%), rural Lori (27.8%), Ijevan (30.9%), urban Tavush (25.9%) and rural Tavush (33.3%) reported not having two pairs of properly fitting shoes and which could be enough to wear during different seasons of the year.

Sixty-five (65%) and above HHs were not registered in the poverty benefit system and around 15.2% (in rural Shirak) and 34.1% (in Spitak) were registered in the system. Most families (usually in urban Tavush with 60.1%, and rural Shirak with 49.1%) were not registered in the system as they did not meet the system conditions.

Remittance dependency was higher in Ijevan, Tavush (both urban and rural) and Gyumri.

BASIC NEEDS

Recommendations

Although all communities of Lori, Shirak and Tavush marzes were deprived in respect to the MP dimension of "Life in Dignity", Lori marz and Spitak must be prioritized for combatting the problem of HHs not having money for everyday meals and clothes.

To help Lori, Shirak and Tavush achieve life in dignity, public health nutrition has to be prioritized as an important public policy area and social entrepreneurship domain. In particular, the UN WFP school feeding program could put more emphasis on Spitak and Ijevan schools. Meanwhile, all of the three mazes, especially Lori, could benefit from trainings for citizens on nutritional fundamentals.

Clearly, cultural life of the communities must be enhanced. Social initiatives that could offer innovative solutions for organization of holidays especially in rural Lori, Shirak and Tavush, as well as Spitak, would be important to fight multidimensional poverty. Local CSOs and LSGs should pay more attention on the issue of activating social and cultural life of the communities – in respect to celebrating holidays, community initiatives that could signify holidays and unitedness of citizens.

Although paying utilities is a matter of monetary income, non-monetary aspects of utility management (understanding how various energy, waste, and water usage metrics impact HHs/businesses) could be important to the HHs in Lori, Shirak and Tavush. This is part of financial literacy of the population, understanding their utility usage and knowing their rights in paying for their utilities. Awareness raising campaigns and training for general citizens addressing this utility issue especially in rural Lori (60.6%) and rural Shirak (62.7%), as well as Spitak (68.3%) where people pay for utilities with great difficulty shall be given appropriate attention.

Accentuate shoemaking as a business for the marzes, make sure that most successful Armenian shoe businesses know about the issue. Shoemaking/repair can also be a localized and important art-related profession which can be prioritized by TVETs in the areas. This can be a good focus for any social enterprises as well. E-marketing/e-application-based initiatives could also be important.

Multidimensional poverty and meeting of poverty benefit system conditions have to be assessed against each other, which is an objective that is already addressed by the other EU funded project "Strong CSOs and Local Partnerships for Accountable Communities and Inclusive Social Protection in Armenia".

Any migration prevention programs can focus on Ijevan, Tavush (both urban and rural) and Gyumri. This finding may be important for International Center for Migration Policy Development (ICMPD) currently considering migration prevention sub-granting schemes and other similar programs/projects through EU funding.
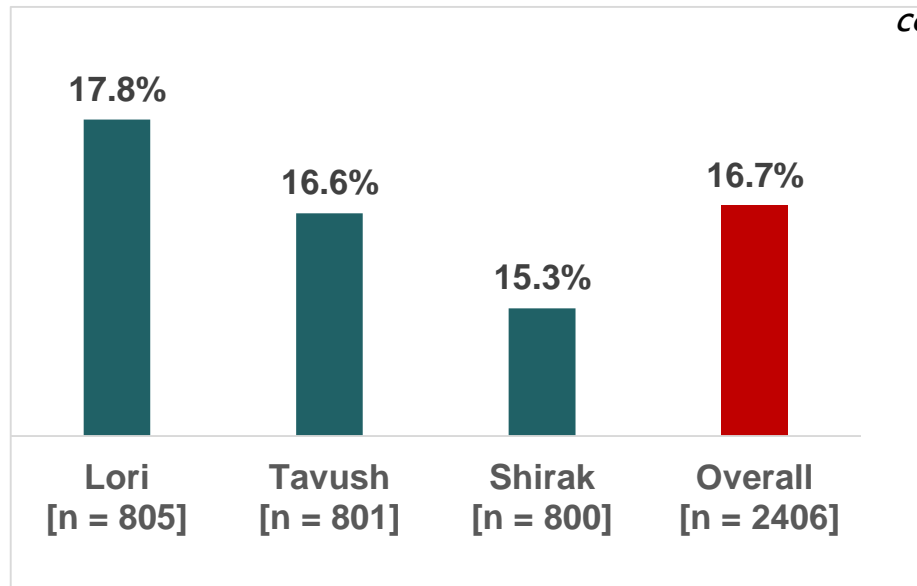
HOUSING

Subjective Housing Conditions

Under the subjective housing conditions indicator, households were considered deprived if they described their housing conditions as "bad" or "very bad".

Share of deprived households on

marz level

community level

marz level chart:
- Lori [n = 805]: 17.8%
- Tavush [n = 801]: 16.6%
- Shirak [n = 800]: 15.3%
- Overall [n = 2406]: 16.7%

community level chart:
- Spitak [n = 123]: 28.0%
- Vanadzor [n = 346]: 14.0%
- Ijevan [n = 136]: 16.3%
- rural Tavush [n = 453]: 18.9%
- urban Tavush [n = 201]: 10.1%
- rural Lori [n = 327]: 18.2%
- Gyumri [n = 464]: 13.1%
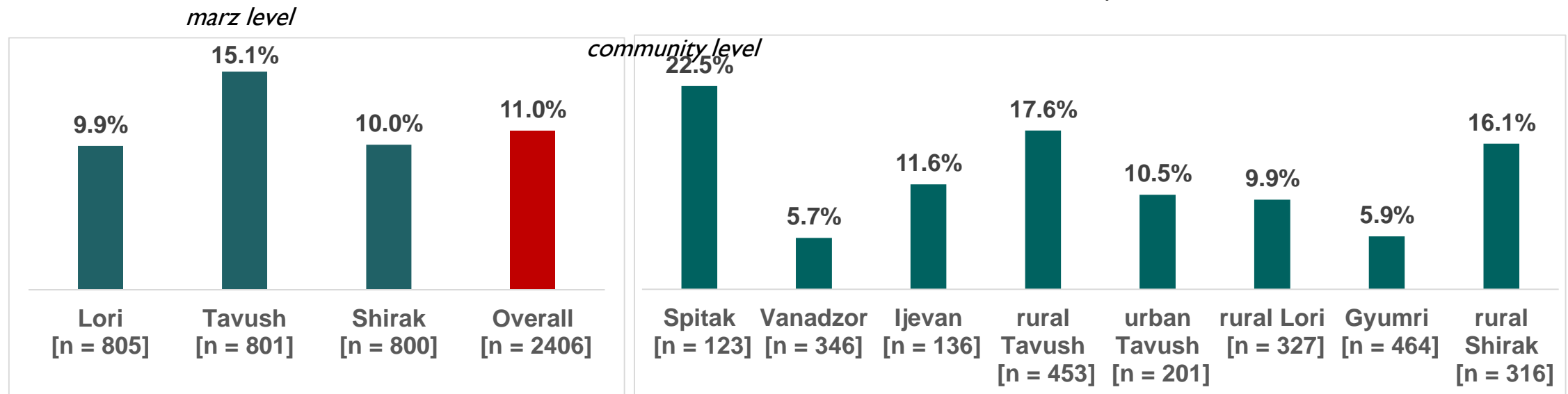- rural Shirak [n = 316]: 18.5%
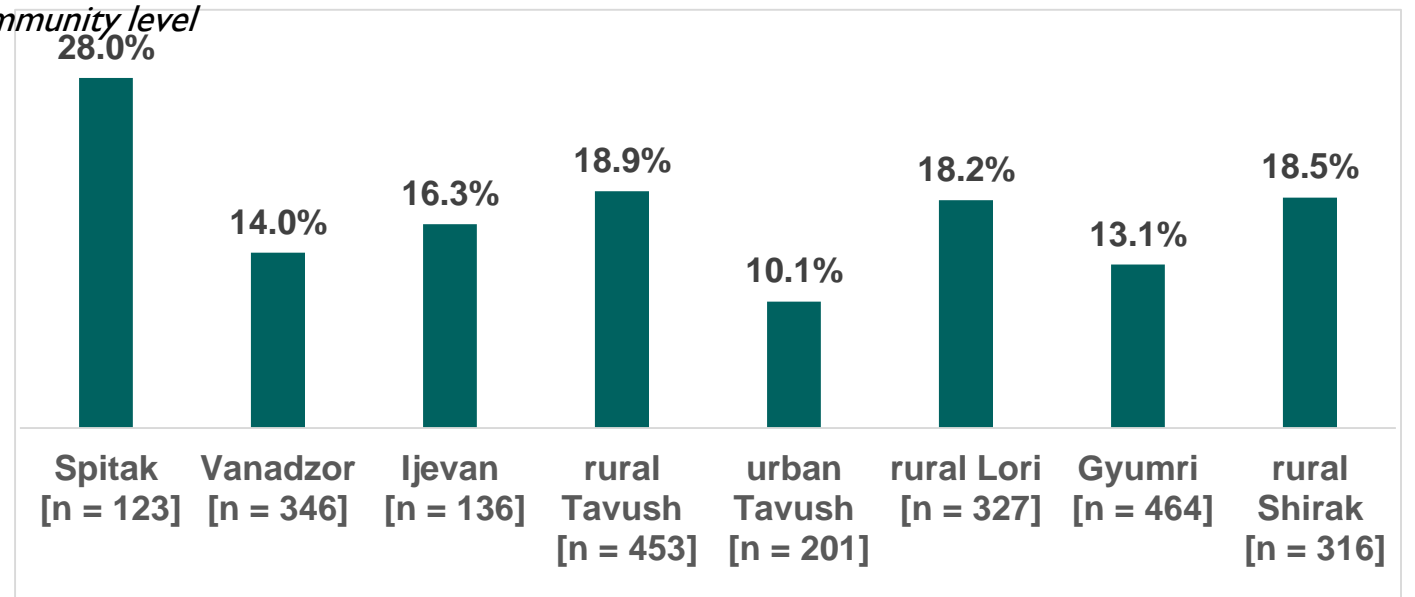
HOUSING

Adequate Housing

Under the adequate housing indicator, households were considered deprived if they expressed complaints about at least a third of the following issues regarding their housing and immediate environment: floor area, noise from neighbors or outside, lighting, heating, humidity, leaking roof, dilapidated walls and floors, dilapidated window frames and doors, heavy traffic, industrial pollution, elevator functionality, water quality, garbage removal, and services for common areas and yards.

Share of deprived households on

marz level

community level

Lori [n = 805]	Tavush [n = 801]	Shirak [n = 800]	Overall [n = 2406]
9.9%	15.1%	10.0%	11.0%

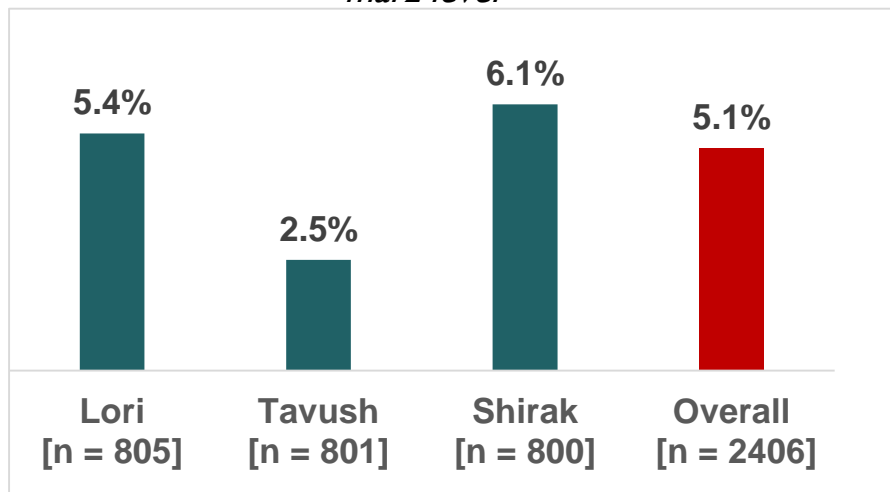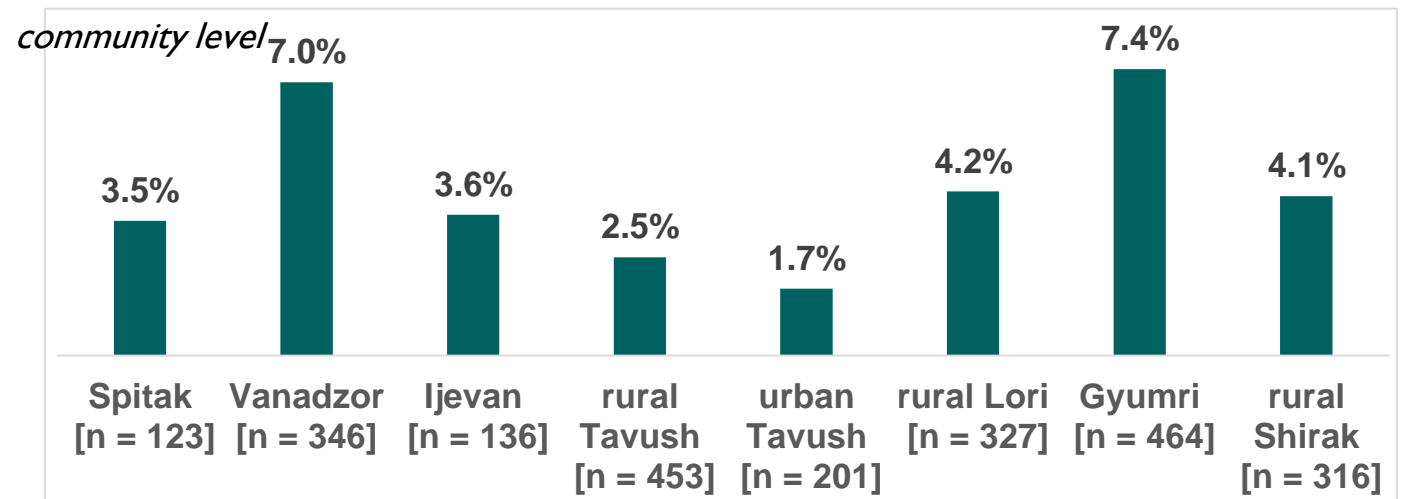| Spitak [n = 123]	Vanadzor [n = 346]	Ijevan [n = 136]	rural Tavush [n = 453]	urban Tavush [n = 201]	rural Lori [n = 327]	Gyumri [n = 464]	rural Shirak [n = 316]
22.5%	5.7%	11.6%	17.6%	10.5%	9.9%	5.9%	16.1%

HOUSING

Overcrowding

This indicator referred to households whose members resided in overcrowded conditions according to the Eurostat definition. The household was considered to be overcrowded if any of the following conditions were not met: (1) one room for the household; (2) one room per couple in the household; (3) one room for each single person aged 18 or more; (4) one room per pair of single people of the same gender between 12 and 17 years of age; (5) one room for each single person between 12 and 17 not included in the previous category; (6) one room per pair of children under 12. The rooms did not include bathrooms, toilets, or kitchens.

Share of deprived households on

marz level

Lori [n = 805]	Tavush [n = 801]	Shirak [n = 800]	Overall [n = 2406]
5.4%	2.5%	6.1%	5.1%

community level

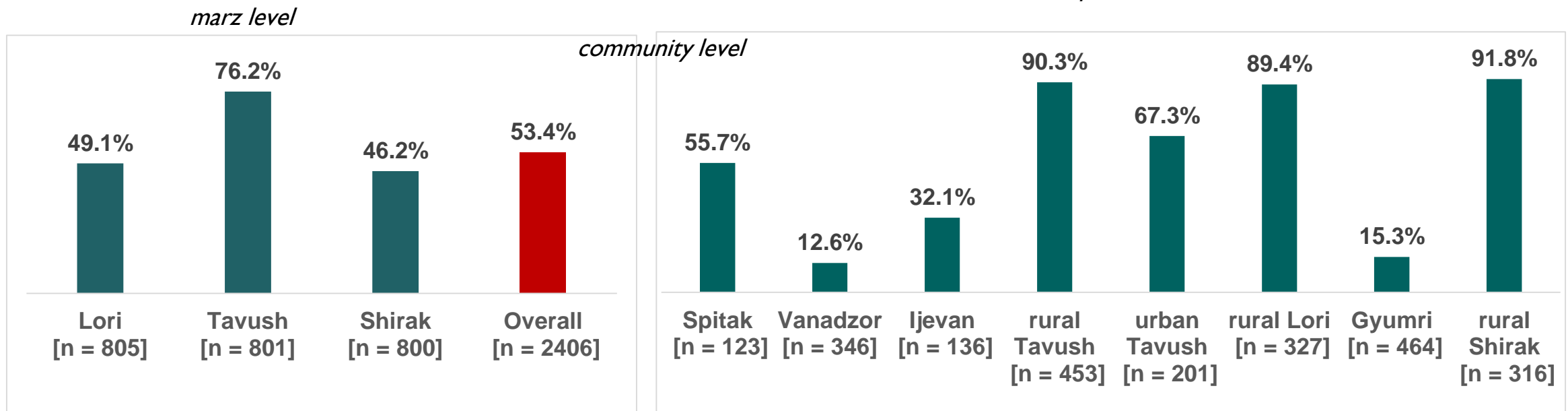|							
Spitak [n = 123]	Vanadzor [n = 346]	Ijevan [n = 136]	rural Tavush [n = 453]	urban Tavush [n = 201]	rural Lori [n = 327]	Gyumri [n = 464]	rural Shirak [n = 316]
3.5%	7.0%	3.6%	2.5%	1.7%	4.2%	7.4%	4.1%

HOUSING

Healthy Heating

The healthy heating indicator referred to households whose main source of heating was considered to be detrimental to health. Households that were heated with oil and diesel, wood, or any source other than central heating, electricity, natural gas, or liquefied gas were considered deprived.

Share of deprived households on

marz level

community level

Marz level chart:
- Lori [n = 805]: 49.1%
- Tavush [n = 801]: 76.2%
- Shirak [n = 800]: 46.2%
- Overall [n = 2406]: 53.4%

Community level chart:
- Spitak [n = 123]: 55.7%
- Vanadzor [n = 346]: 12.6%
- Ijevan [n = 136]: 32.1%
- rural Tavush [n = 453]: 90.3%
- urban Tavush [n = 201]: 67.3%
- rural Lori [n = 327]: 89.4%
- Gyumri [n = 464]: 15.3%
- rural Shirak [n = 316]: 91.8%

HOUSING

Healthy Heating

What is the primary method used to heat the dwelling?

Legend:
- Self-made heater running on wood
- Local-individual boiler (BAXI, etc.)
- Manufactured heater (Iranian, European, etc.)
- Electric stove
- Self-made heater running on wood (central heating system)
- Other

Region	Self-made wood	Local boiler	Manufactured	Electric stove	Self-made wood (central)	Other
rural Tavush [n = 453]	75.5%				13.0%	
urban Tavush [n = 201]	55.7%	12.9%				7.0%
Ijevan [n = 136]	28.7%	12.5%	14.7%	22.8%		19.9%
rural Shirak [n = 316]	9.8%					71.2%
Gyumri [n = 464]	12.1%	49.4%	26.7%			
rural Lori [n = 327]	61.5%				13.8%	15.3%
Spitak [n = 123]	44.7%	13.0%	21.1%	8.1%		11.4%
Vanadzor [n = 346]	9.0%	25.7%	22.5%	31.2%		10.4%

The "other" category included electric heater, gas stove, self-made heater running on coal, self-made heater running on coal (central heating), self-made heater running on cow dung, local collective block boiler, solar accumulator, and not heating the dwelling.
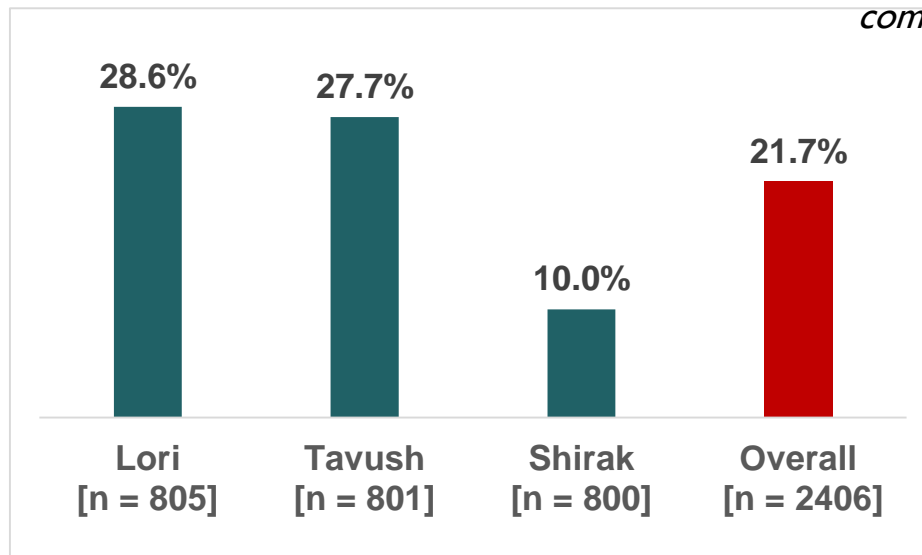
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HOUSING

**Continuous Access to a Centralized Water System**

This indicator focused on identifying households lacking access to centralized water systems and the quality of access. Households that did not have access to centralized water for every day of the month and each hour of the day were considered deprived.

Share of deprived households on
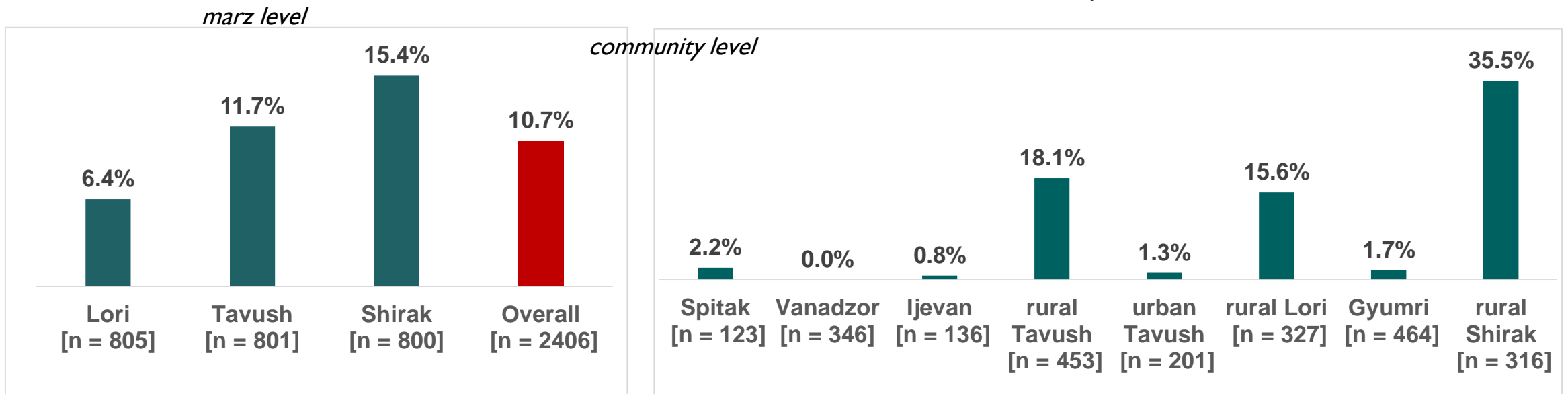
marz level

community level
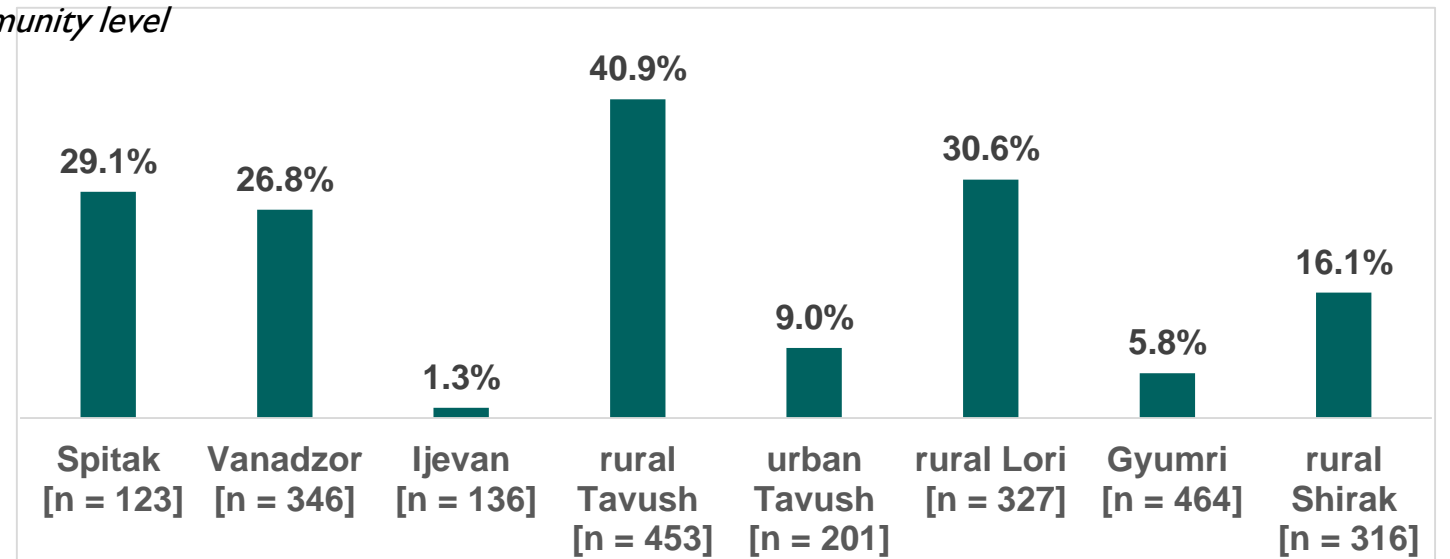
HOUSING

Centralized Sanitation and Garbage Disposal

The centralized sanitation and garbage disposal indicator referred to households that did not have access to a centralized sanitation compound or household garbage disposal using either a rubbish evacuation system or dust-cart collection. Households that used other means of garbage disposal or did not have a functioning centralized sanitation compound were considered deprived.

Share of deprived households on

marz level

- Lori [n = 805]: 6.4%
- Tavush [n = 801]: 11.7%
- Shirak [n = 800]: 15.4%
- Overall [n = 2406]: 10.7%

community level

- Spitak [n = 123]: 2.2%
- Vanadzor [n = 346]: 0.0%
- Ijevan [n = 136]: 0.8%
- rural Tavush [n = 453]: 18.1%
- urban Tavush [n = 201]: 1.3%
- rural Lori [n = 327]: 15.6%
- Gyumri [n = 464]: 1.7%
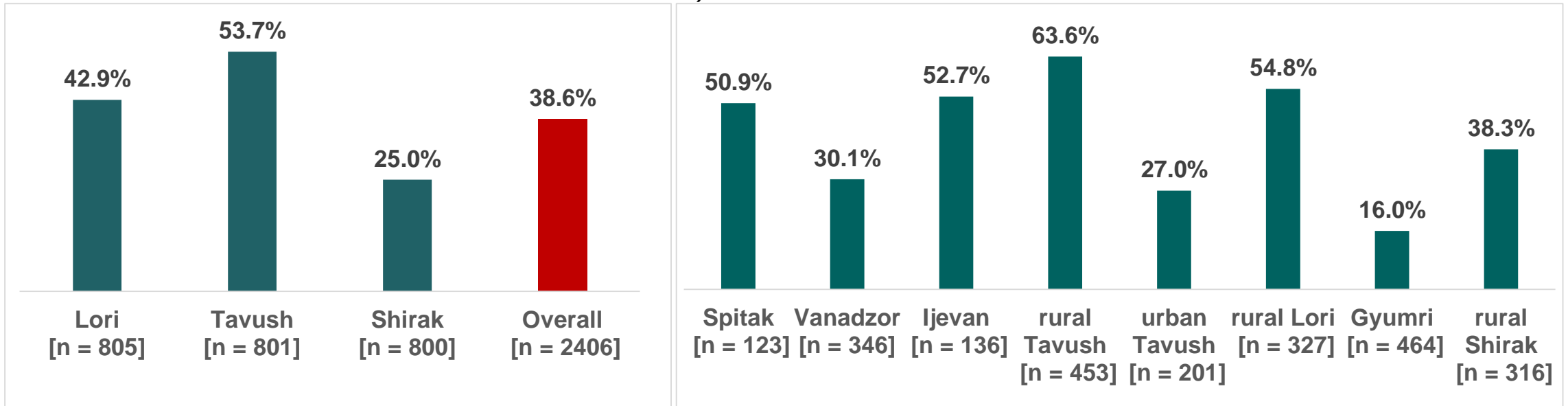- rural Shirak [n = 316]: 35.5%

HOUSING

Hot Running Water

The hot running water indicator identified households that did not have access to functioning hot running water.

Share of deprived households on

marz level

community level

marz level			
Lori [n = 805]	Tavush [n = 801]	Shirak [n = 800]	Overall [n = 2406]
42.9%	53.7%	25.0%	38.6%

| community level							
Spitak [n = 123]	Vanadzor [n = 346]	Ijevan [n = 136]	rural Tavush [n = 453]	urban Tavush [n = 201]	rural Lori [n = 327]	Gyumri [n = 464]	rural Shirak [n = 316]
50.9%	30.1%	52.7%	63.6%	27.0%	54.8%	16.0%	38.3%

HOUSING

Quality of Public Services

This indicator measures how satisfied households were with nine different public services: water supply, sanitation, garbage collection, telephone, electricity supply, post, banking, irrigation, and public transportation. Households that were not satisfied with more than a third of the public services they rated were considered deprived.

Share of deprived households on
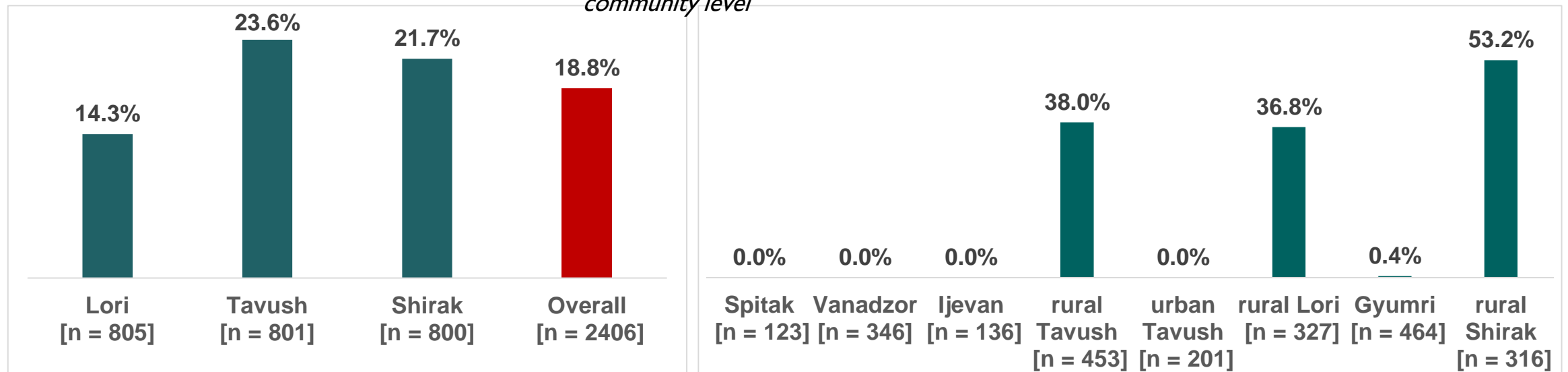

marz level

community level
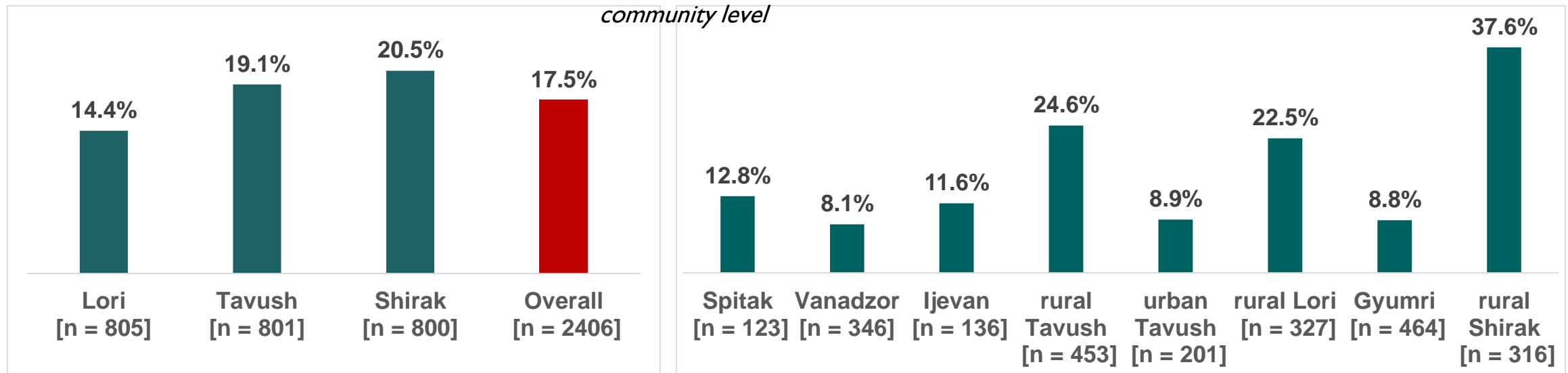
HOUSING

Access to Transportation

This indicator identified households that described the roads within their settlements or to regional towns or markets as poor. Households in urban areas were not asked this question and were not considered deprived.

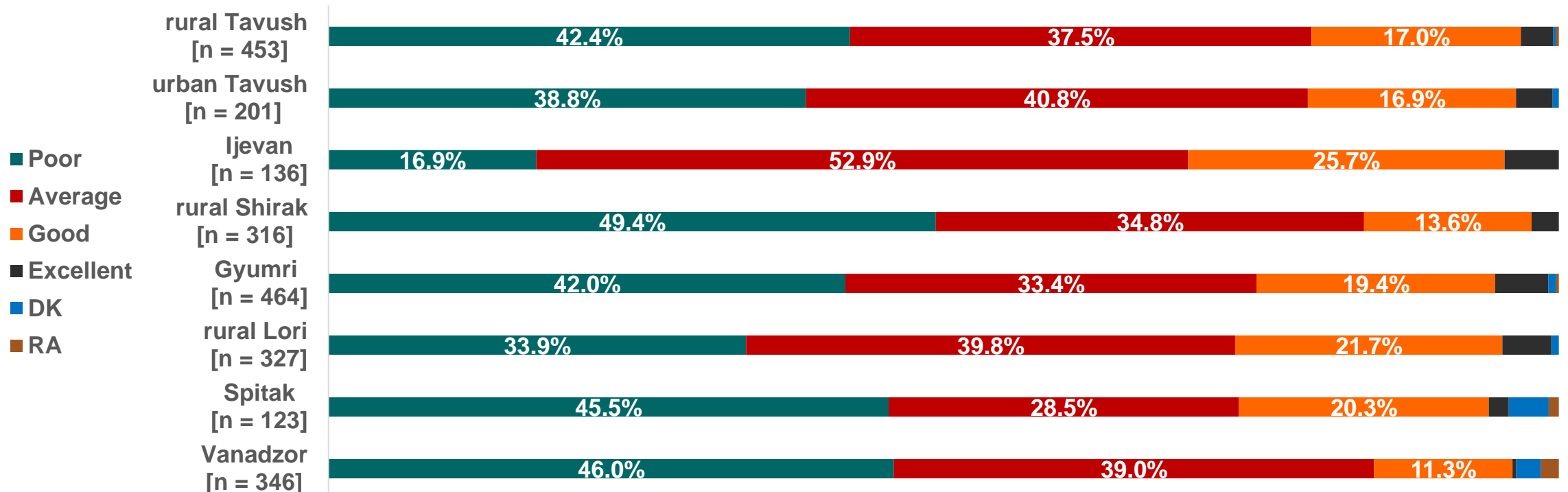*Share of deprived households on*

marz level

community level

Left chart (marz level):
- Lori [n = 805]: 14.3%
- Tavush [n = 801]: 23.6%
- Shirak [n = 800]: 21.7%
- Overall [n = 2406]: 18.8%

Right chart (community level):
- Spitak [n = 123]: 0.0%
- Vanadzor [n = 346]: 0.0%
- Ijevan [n = 136]: 0.0%
- rural Tavush [n = 453]: 38.0%
- urban Tavush [n = 201]: 0.0%
- rural Lori [n = 327]: 36.8%
- Gyumri [n = 464]: 0.4%
- rural Shirak [n = 316]: 53.2%

HOUSING

Access to Transportation

How would you rate the quality of roads within your settlement or community?

- **Poor**
- **Average**
- **Good**
- **Excellent**
- **DK**
- **RA**

Settlement	Poor	Average	Good
rural Tavush [n = 453]	42.4%	37.5%	17.0%
urban Tavush [n = 201]	38.8%	40.8%	16.9%
Ijevan [n = 136]	16.9%	52.9%	25.7%
rural Shirak [n = 316]	49.4%	34.8%	13.6%
Gyumri [n = 464]	42.0%	33.4%	19.4%
rural Lori [n = 327]	33.9%	39.8%	21.7%
Spitak [n = 123]	45.5%	28.5%	20.3%
Vanadzor [n = 346]	46.0%	39.0%	11.3%

HOUSING

Access to Transportation

How would you rate the quality of roads to regional towns or markets?

Legend: Good, Average, Excellent, Poor, DK, RA

Region	Good	Average	Excellent	Poor	DK	RA
rural Tavush [n = 453]	51.0%	33.8%	8.2%	6.6%		
urban Tavush [n = 201]	40.3%	41.8%		10.0%		
Ijevan [n = 136]	53.7%	32.4%	10.3%			
rural Shirak [n = 316]	34.8%	31.3%	10.8%	21.8%		
Gyumri [n = 464]	34.1%	42.7%		15.1%		
rural Lori [n = 327]	38.5%	38.2%		15.0%		
Spitak [n = 123]	43.9%	30.1%		9.8%	10.6%	
Vanadzor [n = 346]	23.4%	40.5%		19.4%	13.9%	
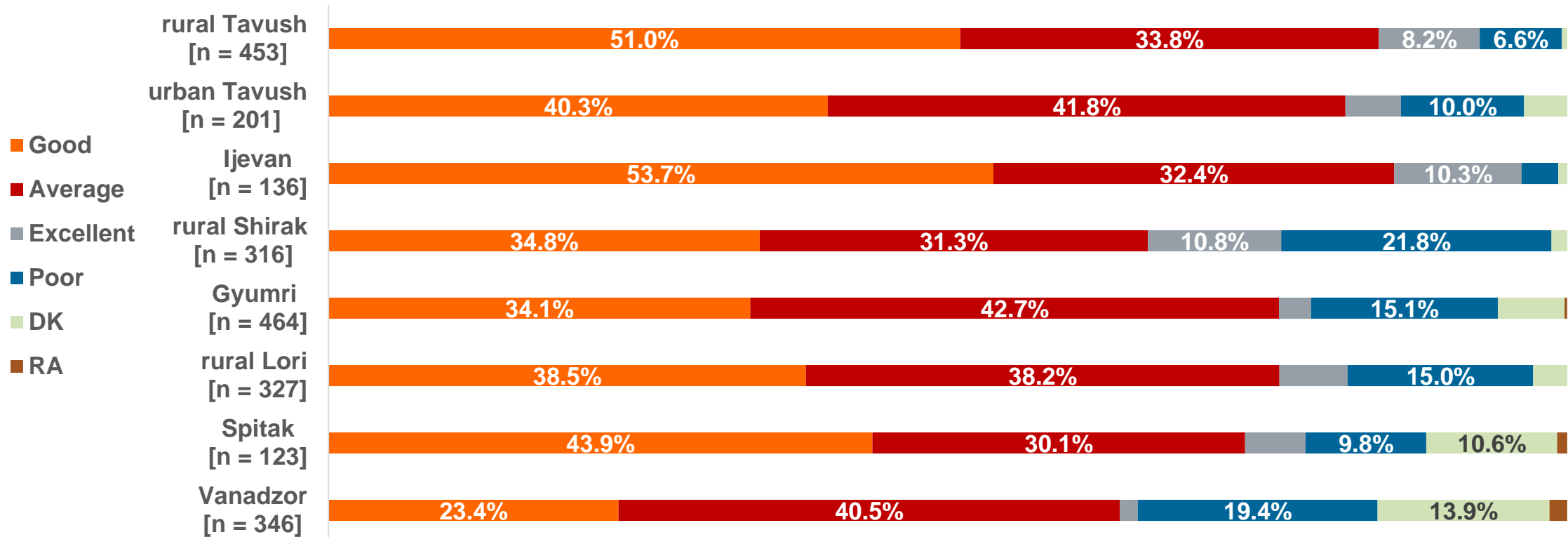
HOUSING

Conclusions

Issues with Housing prevail as main problems in the HHs across the marzes. Continuous access to centralized water system was revealed to be more problematic for Lori (28.6%, with 30.6% for rural Lori) and Tavush (27.7%, with 40.9% for rural Tavush) than for Shirak (10%). For urban areas, Spitak (29.1%) and Vanadzor (26.8%) HHs reported issues with continuous access to centralized water systems. For Shirak, garbage removal was reported as an important issue (35.5% deprivation for rural Shirak). Rural Shirak HHs reported most deprivation (37.6%) with quality of public services (water supply, sanitation, garbage removal, electricity supply etc.).

Recommendations

Healthy Heating and Hot Running Water are two of the most important housing issues to be prioritized across the marzes. As it is a case with nutrition, healthy heating can be yet another topic for public awareness raising, as well as an area for policies for the Ministry of Energy Infrastructures and Natural Resources of Armenia.

EDUCATION

Secondary Education

The secondary education indicator identified households in which no member aged 15 or older had completed secondary education.
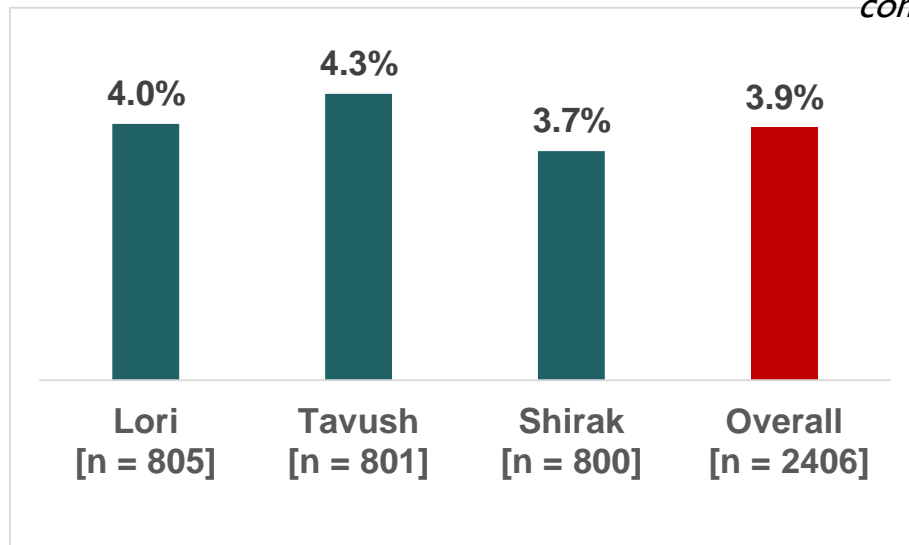

marz level

community level

Share of deprived households on
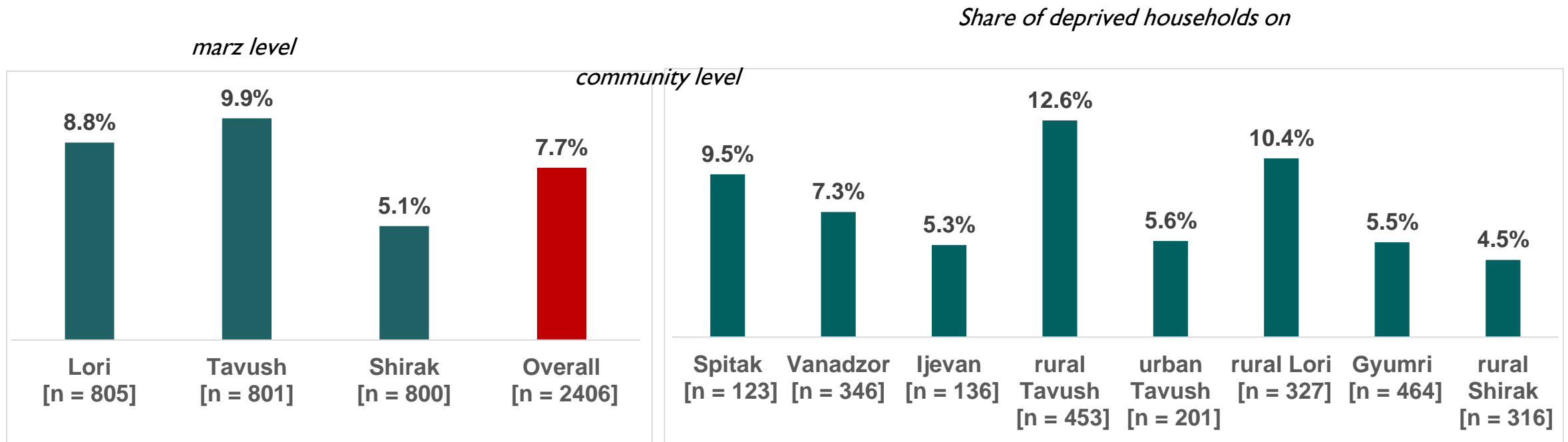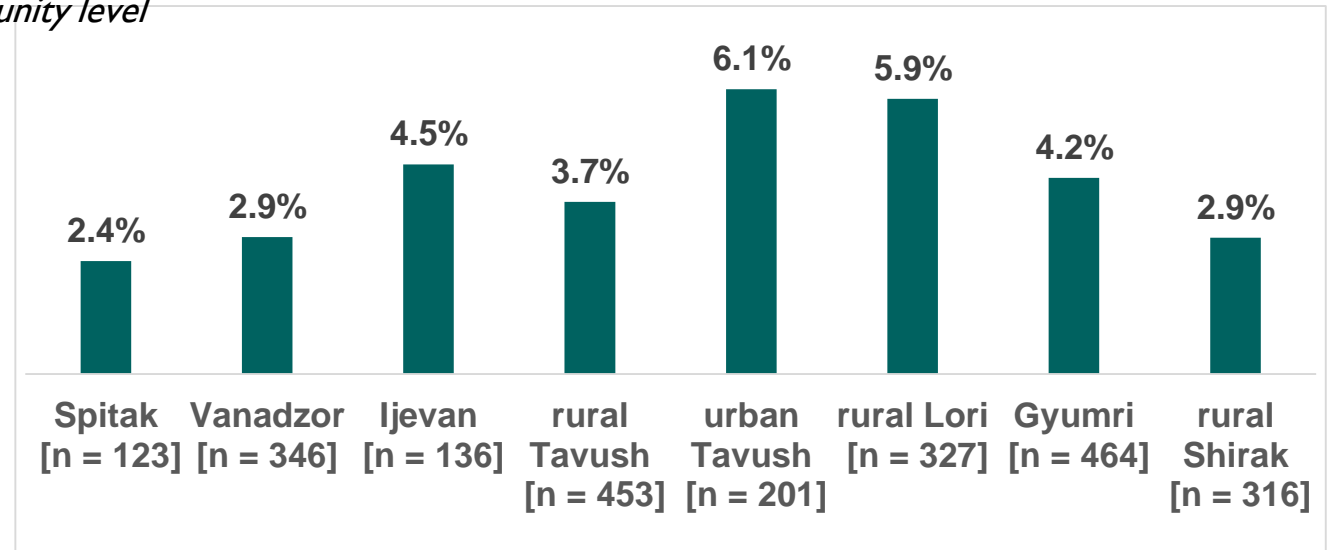
EDUCATION

Compulsory Schooling

The compulsory schooling indicator identified households that had at least one child of compulsory schooling age (6–17 years) who had not been attending school. Households with no children of that age were not considered deprived.
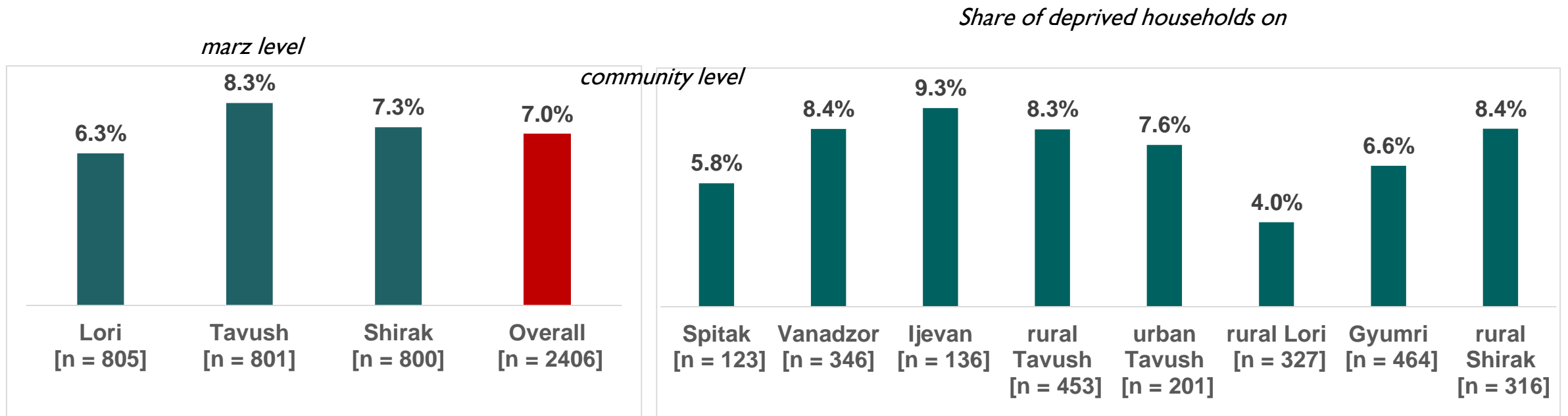
Share of deprived households on

marz level

	Lori [n = 805]	Tavush [n = 801]	Shirak [n = 800]	Overall [n = 2406]
	4.0%	4.3%	3.7%	3.9%

community level

	Spitak [n = 123]	Vanadzor [n = 346]	Ijevan [n = 136]	rural Tavush [n = 453]	urban Tavush [n = 201]	rural Lori [n = 327]	Gyumri [n = 464]	rural Shirak [n = 316]
	2.4%	2.9%	4.5%	3.7%	6.1%	5.9%	4.2%	2.9%

EDUCATION

Quality of Education Services

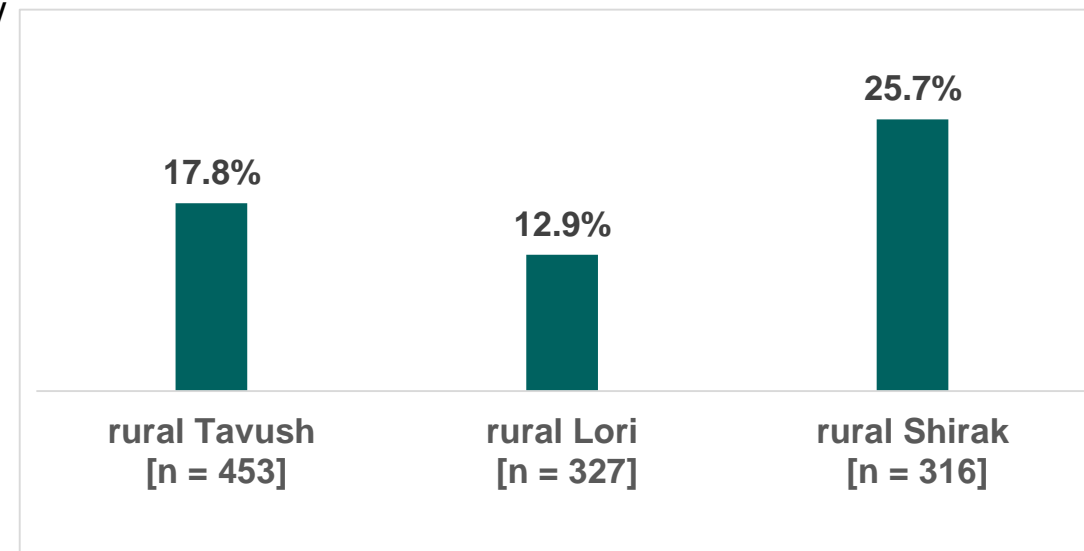This indicator identified households that were not satisfied with education services.

Share of deprived households on

marz level

community level

6.3% **Lori** **[n = 805]**	8.3% **Tavush** **[n = 801]**

Marz level chart:
- Lori [n = 805]: 6.3%
- Tavush [n = 801]: 8.3%
- Shirak [n = 800]: 7.3%
- Overall [n = 2406]: 7.0%

Community level chart:
- Spitak [n = 123]: 5.8%
- Vanadzor [n = 346]: 8.4%
- Ijevan [n = 136]: 9.3%
- rural Tavush [n = 453]: 8.3%
- urban Tavush [n = 201]: 7.6%
- rural Lori [n = 327]: 4.0%
- Gyumri [n = 464]: 6.6%
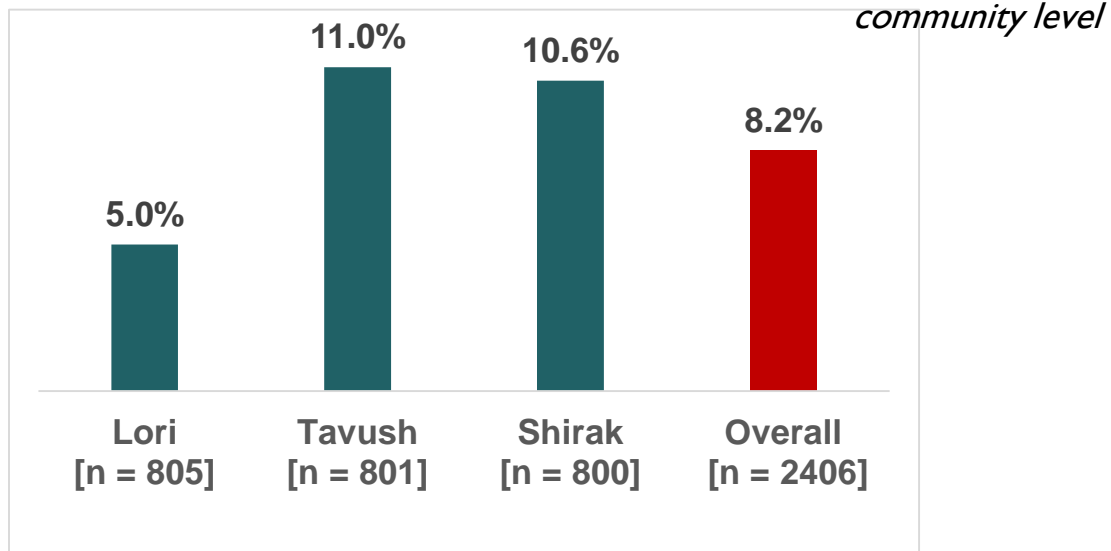- rural Shirak [n = 316]: 8.4%

EDUCATION

Access to Education

The access to education indicator referred to households that did not have adequate access to educational services. If any child spent more than 20 minutes walking or riding a bicycle to attend kindergarten, primary, or secondary school, the household was considered deprived. Households were also considered deprived if any child spent more than an hour using other modes of transportation to commute to school. Urban households were not asked this question, and not considered deprived.

marz level

Share of deprived households on

community level

Lori [n = 805]	Tavush [n = 801]	Shirak [n = 800]	Overall [n = 2406]
5.0%	11.0%	10.6%	8.2%

rural Tavush [n = 453]	rural Lori [n = 327]	rural Shirak [n = 316]
17.8%	12.9%	25.7%

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EDUCATION

Conclusions

Education is the domain that showed the least deprivation. One important finding was that rural Shirak HHs (25.7%) mentioned their children spending more than 20 minutes to arrive at educational institutions, while the figure for rural Tavush was 17.8% and 12.9% for rural Lori.
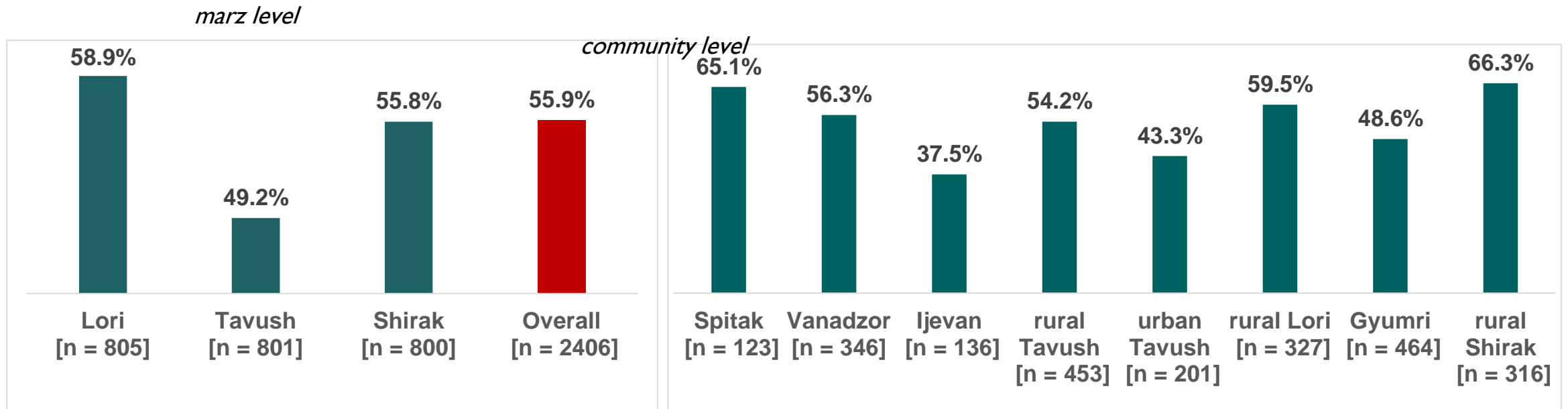
Recommendations

Ministry of Education, Science, Culture and Sports should pay attention on the rural Shirak problem for access to education. Generally, the problem is worth attention for all the three marzes, rural areas.

LABOR

Labor Market Participation

The labor market participation indicator refers to households in which more than half of working age (15-75) individuals were not in the labor force. Households that did not have any person of working age were not considered deprived.

Share of deprived households on

marz level

community level

58.9%	49.2%	55.8%	55.9%	
Lori [n = 805]	Tavush [n = 801]	Shirak [n = 800]	Overall [n = 2406]	

65.1%	56.3%	37.5%	54.2%	43.3%	59.5%	48.6%	66.3%
Spitak [n = 123]	Vanadzor [n = 346]	Ijevan [n = 136]	rural Tavush [n = 453]	urban Tavush [n = 201]	rural Lori [n = 327]	Gyumri [n = 464]	rural Shirak [n = 316]

LABOR
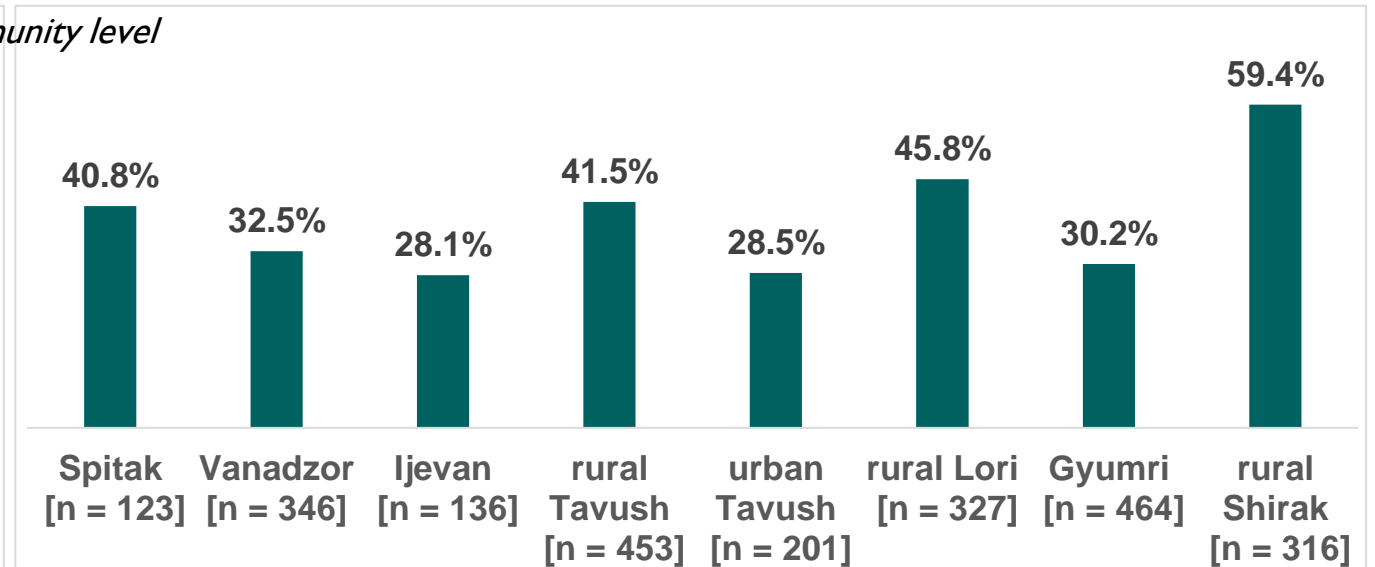
Long-term Unemployment

Under the long-term unemployment indicator, a household was considered deprived if any working-age member had been unemployed for one year or more and was actively looking for a job. Households that had no members of working age were not considered deprived.

Share of deprived households on
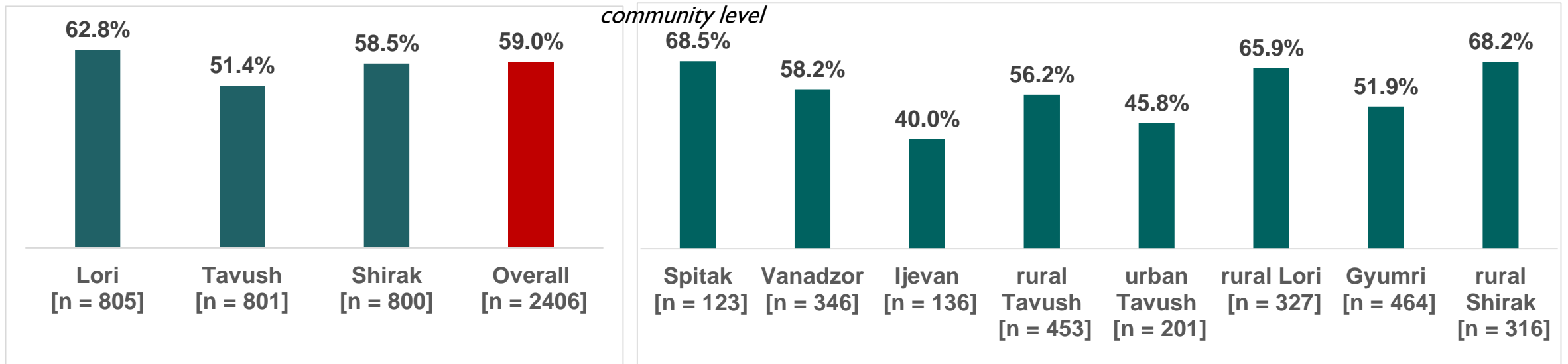
marz level
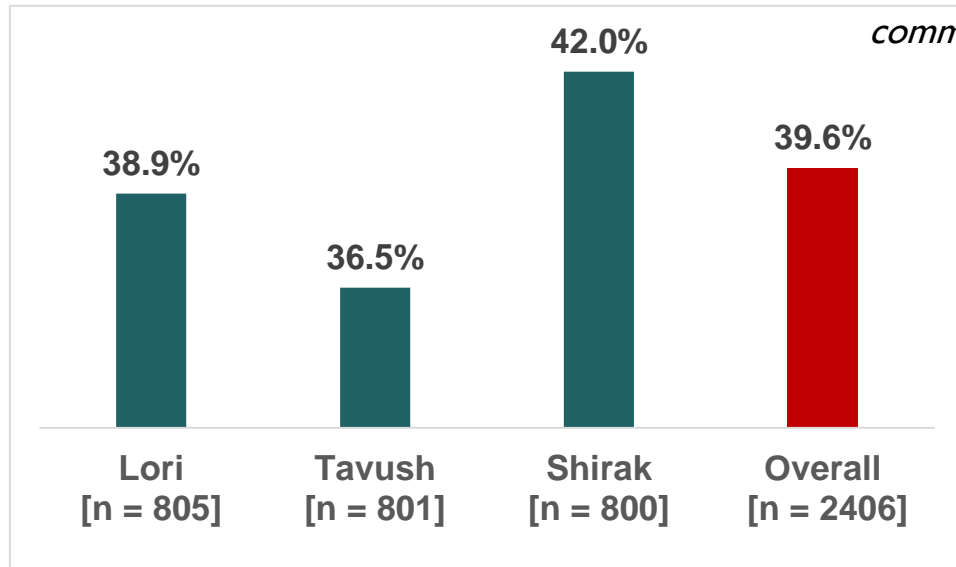
community level

Decent jobs

The decent jobs indicator, the household was considered deprived if all employed members were either self-employed or contributed to a family business. Households that were deprived in the previous two labor indicators were also automatically considered deprived under this indicator. Households with no members of working age were not considered deprived.

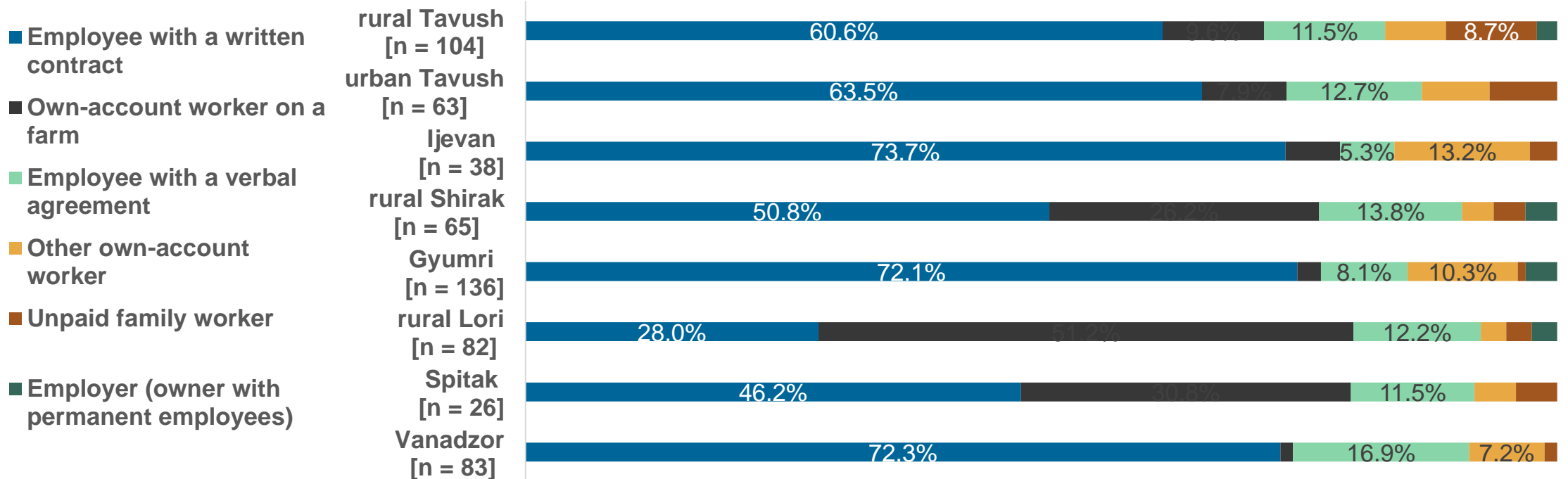*Share of deprived households on*

marz level

62.8%	51.4%	58.5%	59.0%
Lori [n = 805]	Tavush [n = 801]	Shirak [n = 800]	Overall [n = 2406]

community level

68.5%	58.2%	40.0%	56.2%	45.8%	65.9%	51.9%	68.2%
Spitak [n = 123]	Vanadzor [n = 346]	Ijevan [n = 136]	rural Tavush [n = 453]	urban Tavush [n = 201]	rural Lori [n = 327]	Gyumri [n = 464]	rural Shirak [n = 316]

LABOR

Decent jobs

Which of the following best describes your employment status?

- ■ **Employee with a written contract**
- ■ **Own-account worker on a farm**
- ■ **Employee with a verbal agreement**
- ■ **Other own-account worker**
- ■ **Unpaid family worker**

- ■ **Employer (owner with permanent employees)**

rural Tavush [n = 104]	60.6% ... 9.6% ... 11.5% ... 8.7%	
urban Tavush [n = 63]	63.5% ... 7.9% ... 12.7%	
Ijevan [n = 38]	73.7% ... 5.3% ... 13.2%	
rural Shirak [n = 65]	50.8% ... 26.2% ... 13.8%	
Gyumri [n = 136]	72.1% ... 8.1% ... 10.3%	
rural Lori [n = 82]	28.0% ... 51.2% ... 12.2%	
Spitak [n = 26]	46.2% ... 30.8% ... 11.5%	
Vanadzor [n = 83]	72.3% ... 16.9% ... 7.2%	

LABOR

Conclusions

Labor market participation is one of the most important deprivation indicators for the three marzes. More than half of working age (15-75) individuals were not in the labor force (55.9%) and 39.6% were long-term unemployed.

More own-account workers on farms were from rural Lori (51.2%), Spitak (30.8%), and rural Shirak (26.2%).
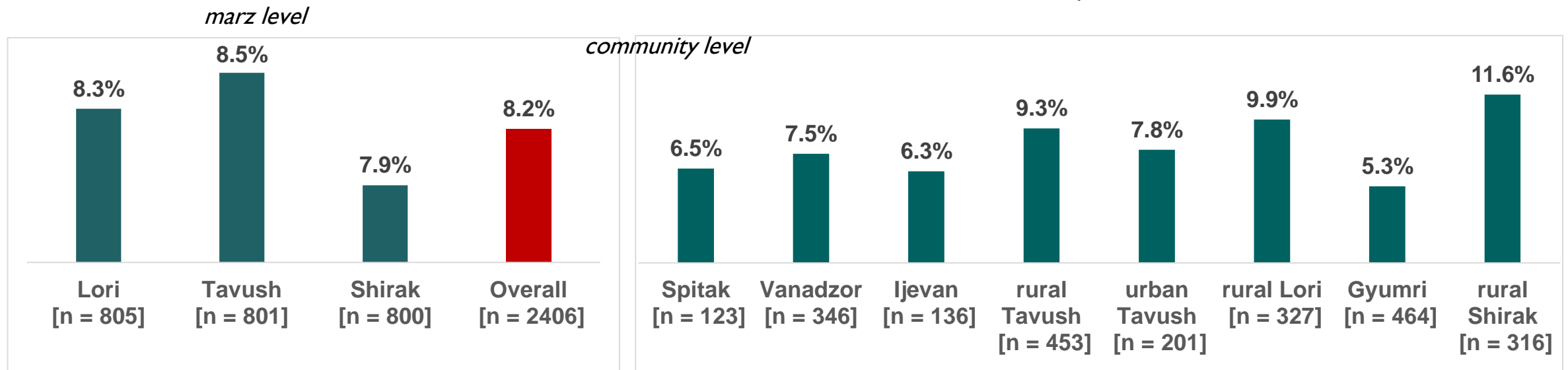
Recommendations

Labor is the main issue for the three marzes. Achieving labor participation would also help mitigate multidimensional poverty and poverty at large, hence it is recommended to the Ministry of Labor and Social Affairs to concentrate efforts on the three marzes of Lori, Shirak and Tavush for job creation and enhancement of decent jobs. Further, as there were many HHs with own-account workers on farms in rural Lori, Shirak and Spitak, they can be a specific cohort for targeted support creating better farming opportunities (this is also a potential recommendation for the United Nations Food and Agriculture Organization - UN FAO).

ԵՎՐՈՊԱԿԱՆ ՄԻՈՒԹՅՈՒՆԸ ՀԱՅԱՍՏԱՆԻ ՀԱՄԱՐ
EUROPEAN UNION FOR ARMENIA

HEALTH

Affordability of Health Services

The affordability of health services indicator identifies households that lacked the funds to pay for required health services (excluding dentist) in a health care facility, such as tests, examinations, and procedures prescribed by a doctor. Households were deprived if any members were not able to afford such services in the preceding 30 days; those with no member who recently sought medical attention were not considered deprived.

Share of deprived households on

marz level

community level

Bar chart – marz level:
- Lori [n = 805]: 8.3%
- Tavush [n = 801]: 8.5%
- Shirak [n = 800]: 7.9%
- Overall [n = 2406]: 8.2%

Bar chart – community level:
- Spitak [n = 123]: 6.5%
- Vanadzor [n = 346]: 7.5%
- Ijevan [n = 136]: 6.3%
- rural Tavush [n = 453]: 9.3%
- urban Tavush [n = 201]: 7.8%
- rural Lori [n = 327]: 9.9%
- Gyumri [n = 464]: 5.3%
- rural Shirak [n = 316]: 11.6%
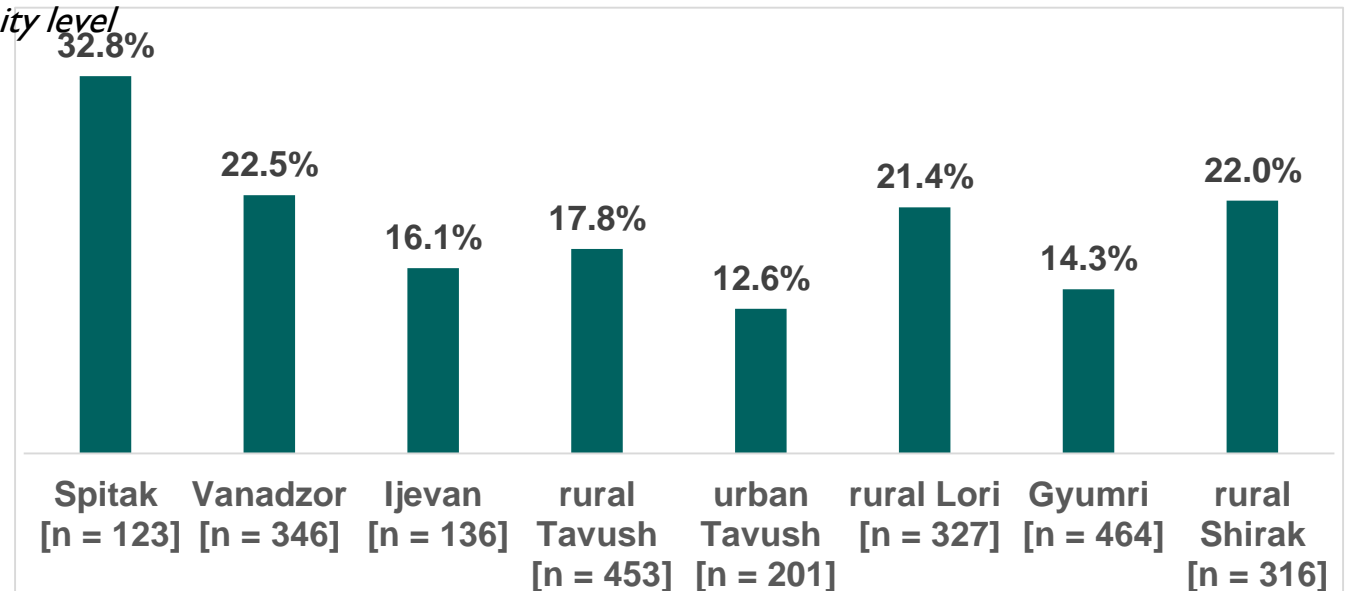
HEALTH

Termination of Usual Activities

The termination of usual household activities indicator referred to households with at least one member who terminated usual activities due to illness, injury, or bad health.
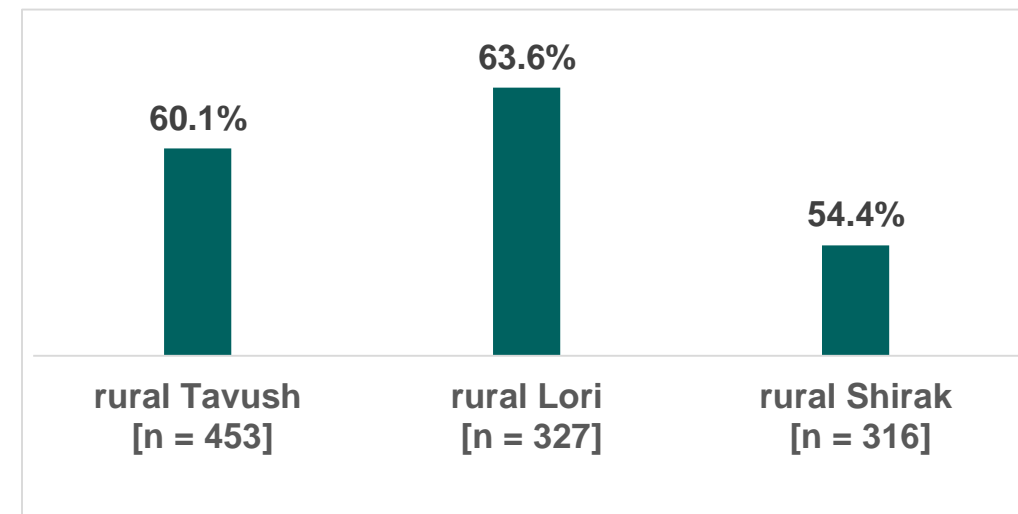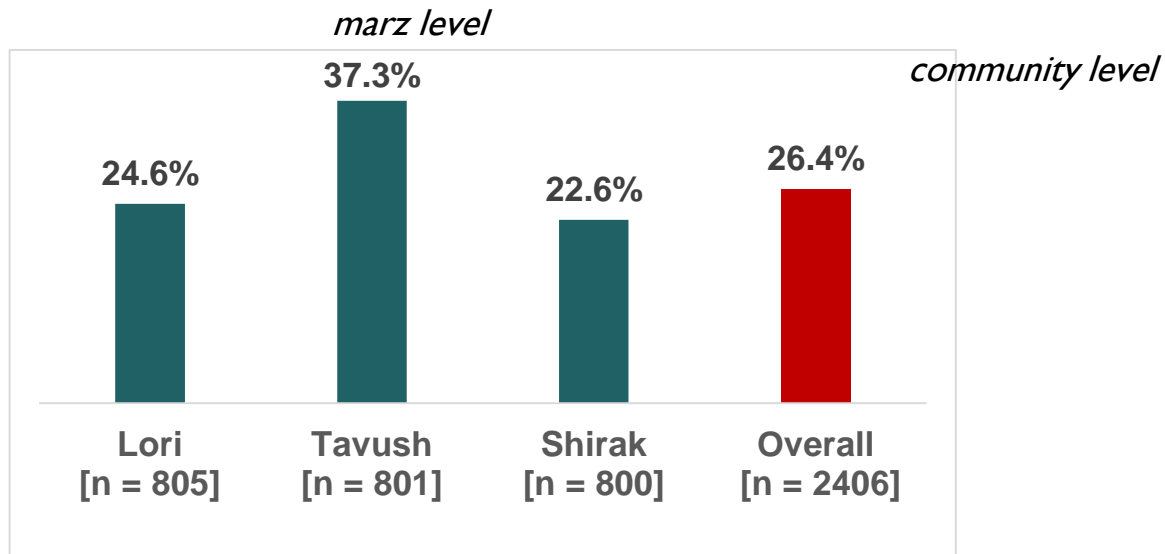
Share of deprived households on

marz level

community level

marz level chart:
- Lori [n = 805]: 23.7%
- Tavush [n = 801]: 16.4%
- Shirak [n = 800]: 17.4%
- Overall [n = 2406]: 20.0%

community level chart:
- Spitak [n = 123]: 32.8%
- Vanadzor [n = 346]: 22.5%
- Ijevan [n = 136]: 16.1%
- rural Tavush [n = 453]: 17.8%
- urban Tavush [n = 201]: 12.6%
- rural Lori [n = 327]: 21.4%
- Gyumri [n = 464]: 14.3%
- rural Shirak [n = 316]: 22.0%
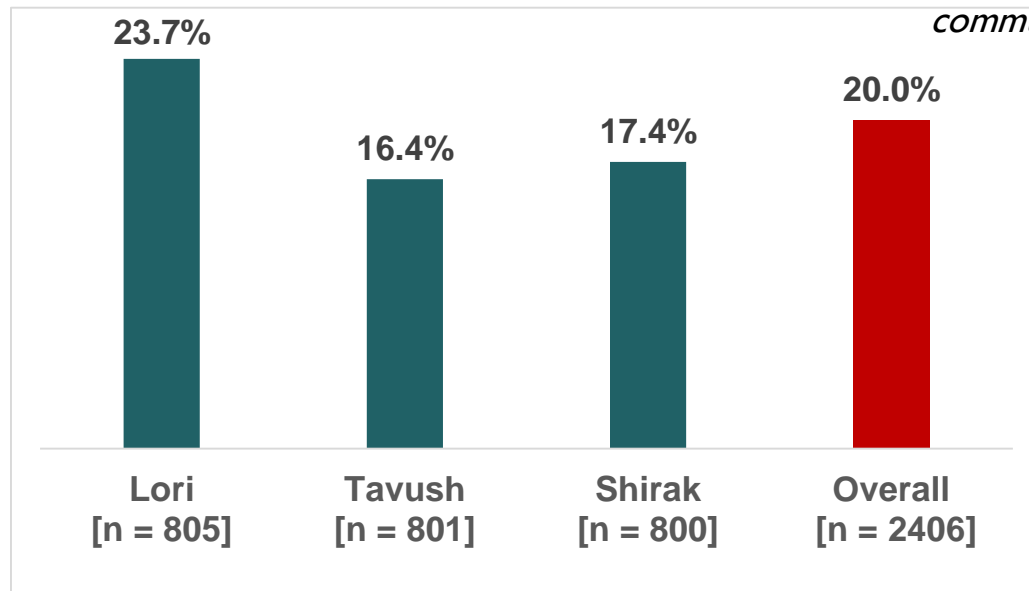
HEALTH

Access to Health Services

The access to health services indicator referred to households in rural areas that had no access to health care facilities, emergency ambulance services, or pharmacies in their neighborhoods. Households that cannot reach the closest of these within 20 minutes or less by any available means of transportation were considered deprived. Urban households were not considered deprived.

marz level

community level

Share of deprived households on

marz level chart:
- Lori [n = 805]: 24.6%
- Tavush [n = 801]: 37.3%
- Shirak [n = 800]: 22.6%
- Overall [n = 2406]: 26.4%

community level chart:
- rural Tavush [n = 453]: 60.1%
- rural Lori [n = 327]: 63.6%
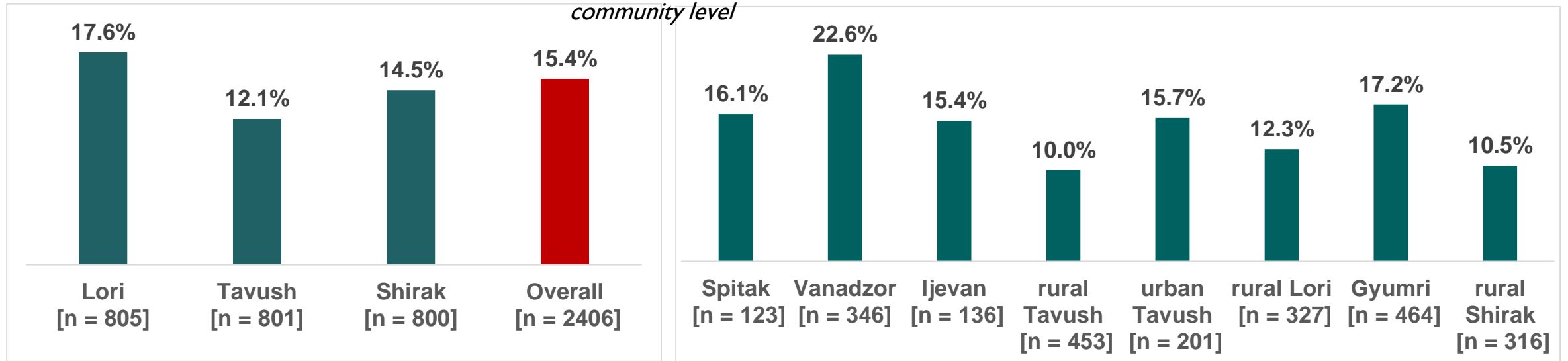- rural Shirak [n = 316]: 54.4%

HEALTH

Quality of Health Services

This indicator measured households that were not satisfied with health services.

Share of deprived households on

marz level

community level

HEALTH

Conclusions

Deprivation in respect to access to health services is bolded within rural areas (60.1% for rural Tavush, 63.6% for rural Lori and 54.4% for rural Shirak). Interestingly, rural Lori, Shirak and Tavush were the most vulnerable in terms of the CVI (Covid-19 Vulnerability index).

Recommendations

It is highly recommended that the Ministry of Health pay attention to the issue of access to health services in rural Lori, rural Shirak and rural Tavush, which not surprisingly were also the most deprived communities in respect to COVID-19 vulnerability.
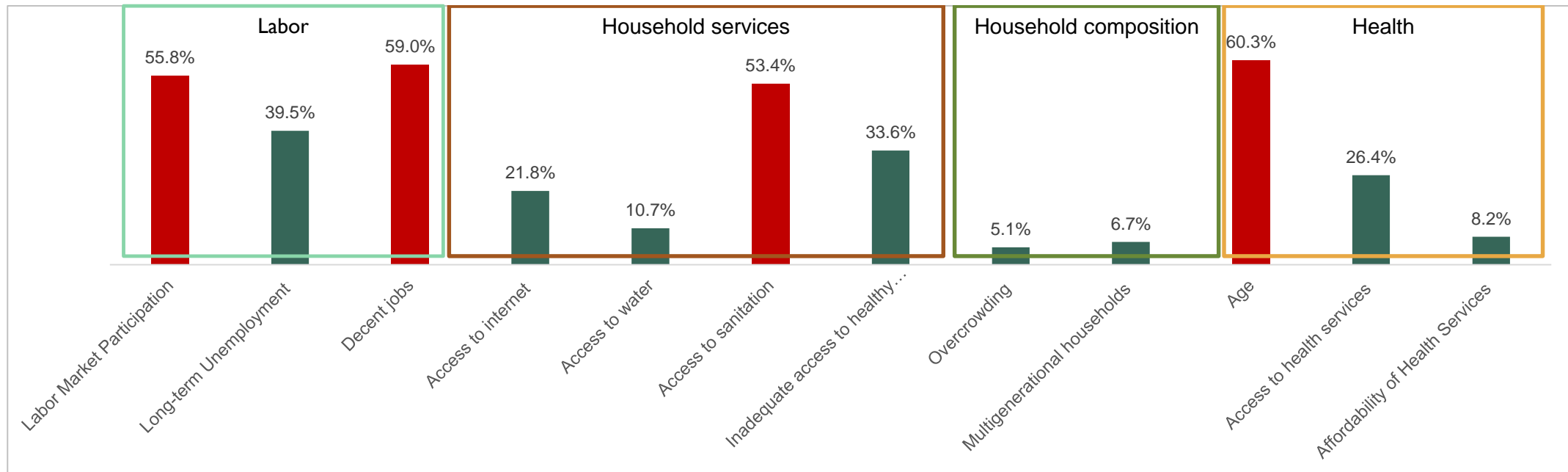
MEASURING COVID-19 VULNERABILITY INDEX (CVI)

- Four dimensions were included in the calculation of our CVI (based on Statistics South Africa's approach). Each dimension had its own set of indicators and associated questions for each indicator based on the context of vulnerability in Armenia.

  - **Labor**
    - *Indicators*: (1) Labor Market Participation ; (2) Long-term unemployment; (3) Decent jobs;

  - **Household services**
    - *Indicators*: (1) Access to internet ; (2) Continuous access to a centralized water system; (3) Centralized sanitation and garbage disposal; (4) Healthy heating;

  - **Household composition**
    - *Indicators*: (1) Overcrowding; (2) Multigenerational household;

  - **Health**
    - *Indicators*: (1) Age; (2) Access to health services; (3) Affordability of health services;

- All of these indicators were simultaneously used for the calculation of the MPI except for three: internet access, multigenerational household, and age.

COVID-19 VULNERABILITY INDEX (CVI) BY INDICATOR

CVI Dimensions by Indicators

Among the 12 indicators, vulnerability is highest in age, decent jobs, labor market participation, and access to sanitation.
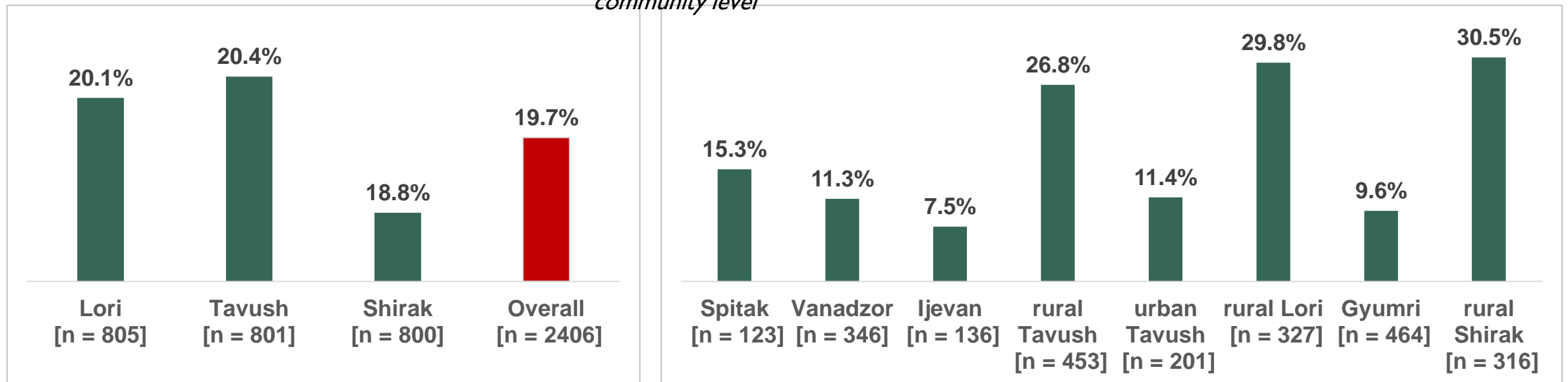

Labor	Household services	Household composition	Health
Labor Market Participation: 55.8%	Access to internet: 21.8%	Overcrowding: 5.1%	Age: 60.3%
Long-term Unemployment: 39.5%	Access to water: 10.7%	Multigenerational households: 6.7%	Access to health services: 26.4%
Decent jobs: 59.0%	Access to sanitation: 53.4%		Affordability of Health Services: 8.2%
	Inadequate access to healthy...: 33.6%		

Share of vulnerable households on overall three marz level

MEASURING COVID-19 VULNERABILITY INDEX (CVI)

Overall CVI

marz level

Share of vulnerable households on

community level

Chart 1 — marz level:
- Lori [n = 805]: 20.1%
- Tavush [n = 801]: 20.4%
- Shirak [n = 800]: 18.8%
- Overall [n = 2406]: 19.7%

Chart 2 — community level:
- Spitak [n = 123]: 15.3%
- Vanadzor [n = 346]: 11.3%
- Ijevan [n = 136]: 7.5%
- rural Tavush [n = 453]: 26.8%
- urban Tavush [n = 201]: 11.4%
- rural Lori [n = 327]: 29.8%
- Gyumri [n = 464]: 9.6%
- rural Shirak [n = 316]: 30.5%

HOUSEHOLD SERVICES

Internet

Households with no internet connection from an internet service provider were considered deprived. Mobile phone service providers were not considered household internet service providers.

Share of vulnerable households on

marz level

community level

marz level			
40.5%	35.5%	24.1%	33.6%
Lori [n = 805]	Tavush [n = 802]	Shirak [n = 793]	Overall [n = 2400]

community level							
38.4%	40.8%	27.7%	39.2%	30.7%	41.1%	23.3%	25.1%
Spitak [n = 123]	Vanadzor [n = 346]	Ijevan [n = 136]	rural Tavush [n = 453]	urban Tavush [n = 201]	rural Lori [n = 327]	Gyumri [n = 464]	rural Shirak [n = 316]
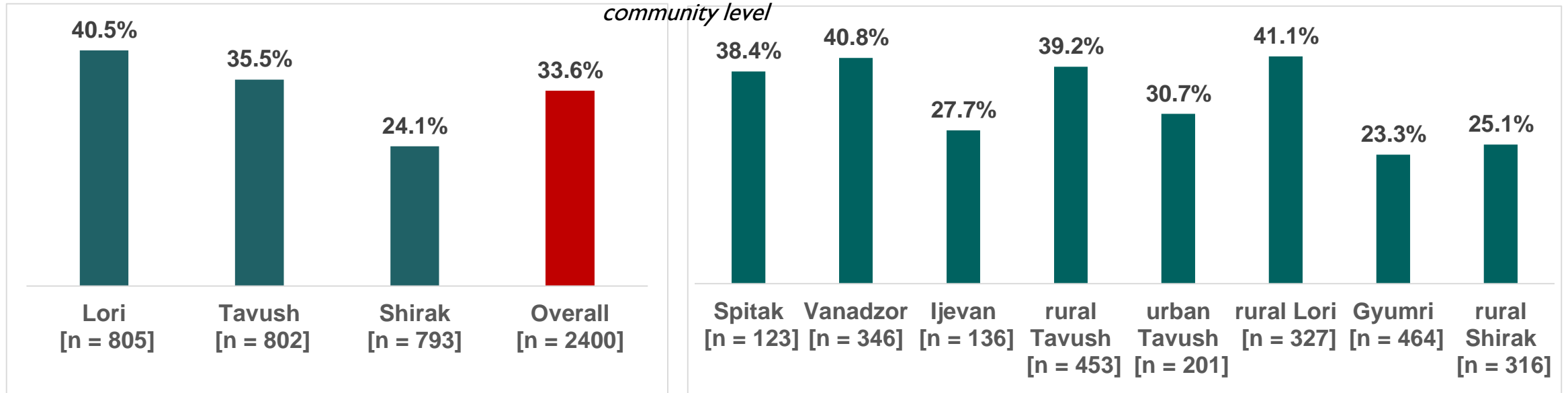
HOUSEHOLD COMPOSITION

Multigenerational Households

Households were considered multigenerational and vulnerable if they contained both children (0-15 years old) and elderly (aged 65+).

marz level

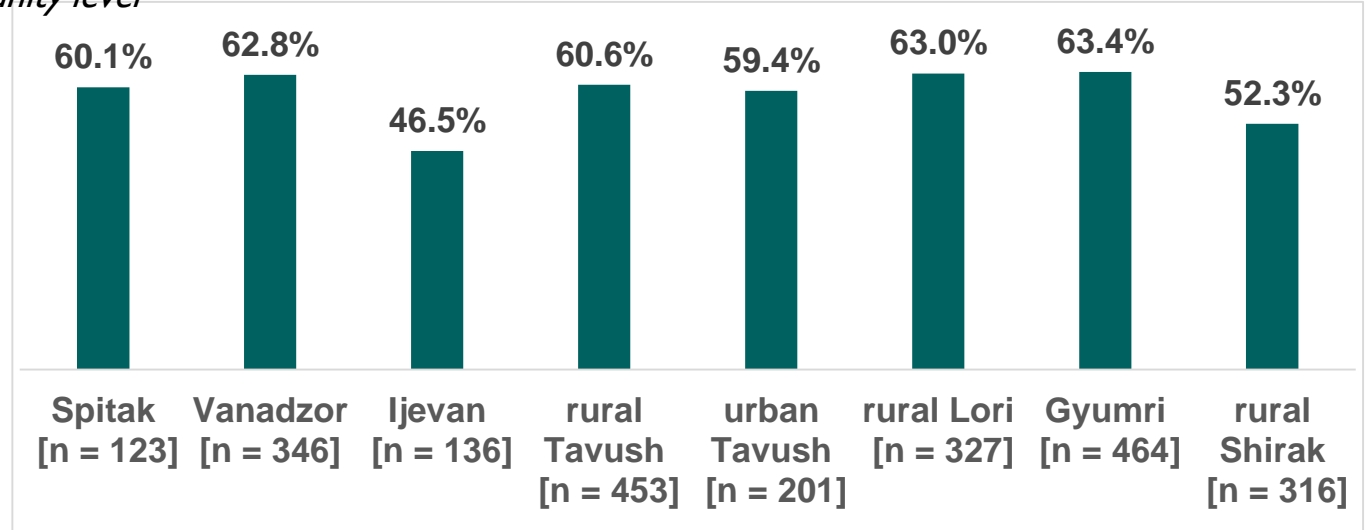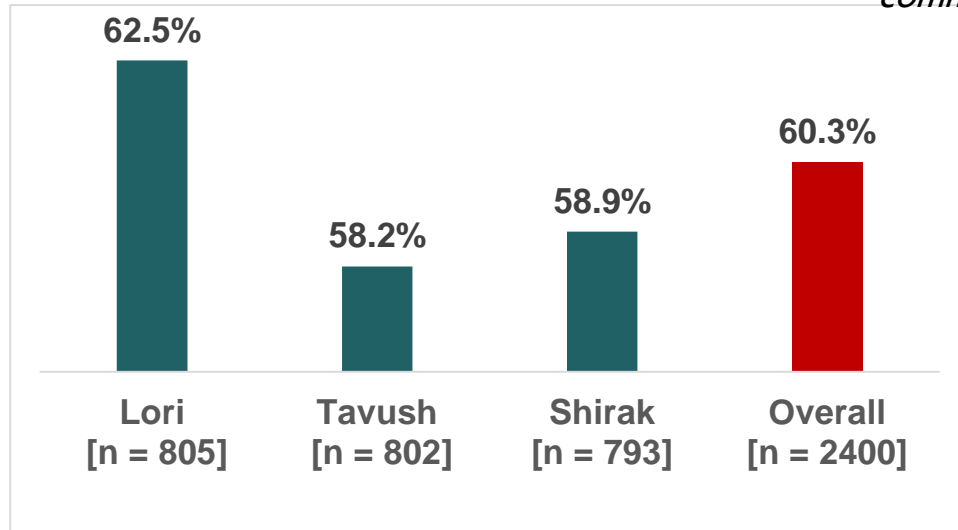*Share of vulnerable households on*

community level

HEALTH

Age
Households were considered vulnerable if any household member was 60 years old or older.

marz level

Share of vulnerable households on community level

Lori [n = 805]: 62.5%	Spitak [n = 123]: 60.1%
Tavush [n = 802]: 58.2%	Vanadzor [n = 346]: 62.8%
Shirak [n = 793]: 58.9%	Ijevan [n = 136]: 46.5%
Overall [n = 2400]: 60.3%	rural Tavush [n = 453]: 60.6%
	urban Tavush [n = 201]: 59.4%
	rural Lori [n = 327]: 63.0%
	Gyumri [n = 464]: 63.4%
	rural Shirak [n = 316]: 52.3%

LOOKING FORWARD

Important to acknowledge the value for sub-national MPI and Multidimensional COVID-19 Vulnerability Indices for Armenia.

- It showed the importance of prioritizing rural communities in the three marzes; and the urban community of Spitak.
- More specifically, Lori marz and Spitak have to be prioritized for combatting the problem of not having money for everyday meals and clothes
- The three marzes, especially Lori, could benefit from trainings for citizens on nutritional fundamentals;
- Cultural life of the communities has to be enhanced
- Awareness raising on the non-monetary aspects of utility management (understanding how various energy, waste, and water usage metrics impact HHs/businesses) could be important to the HHs in the three marzes;
- Healthy heating and hot running water are two most important housing issues to be prioritized across the three marzes
- Access to health service in the rural Lori, rural Shirak and rural Tavush, also the most deprived communities in respect to COVID-19 vulnerability, is of priority
- Labor is the main issue for the three marzes. Achieving labor participation would as well help fight multidimensional poverty and poverty at large.

Coordinated collaboration between policy-makers united to combat multidimensional poverty is of utmost importance to utilization of the research findings and its basic aim that is multidimensional poverty reduction in the three poorest marzes of Armenia.

THANK YOU