

HOUSEHOLD BUILDING AND BUSINESS PREMISES DAMAGE ASSESSMENT

HBDA & BPDA IN KOSOVO FOLLOWING THE JANUARY 2023 FLOODS

APRIL 2023



ACKNOWLEDGMENTS



Prepared by:

Gentjan Çera, Economist and Data Analyst, HQ/CB, SDH, UNDP
Zana Hoxha-Edip, UNDP Local Expert for Disaster Risk Reduction

Supported by: **Mimoze Veliu** and **Xheva Berisha-Rexhepi**, UNDP Kosovo

Fatmir Belallari, ICT Associate, UNDP Kosovo
Aulona Prokshi, Grete Eshrefi and Xhastin Bojaxhiu, Data Team, UNDP Kosovo
providing the dashboard and the design of this report.

UNDP Kosovo expresses gratitude to:

Mr. Hilli Veliu, Mr. Bledian Imeri, Mr. Bashkim Kurti, Red Cross of Kosova, and NGO Domovik
for their contribution of the pictures included in this report.

Surge Data Hub, Country Support Management Team, Crisis Bureau, UNDP
for their support in rolling out this assessment

April 2023

REPORT OUTLINE

Table of Contents	
List of Tables	4
List of Figures	5
Executive summary	7
Introduction	9
Assessment objectives	11
Methodology	12
Findings for household buildings – HBDA	14
The profile of affected households	14
Impact on Buildings: damage, repairs and preparedness	19
Impact on Education and Health	33
Impact on Labor and Financial capital (household items)	37
Households Coping strategies and Recovery needs	44
Findings for Businesses – BPDA	50
Business profile	50
The Impact of Floods on Premises, Assets and Stock	52
The Impact of Floods on Business Operations	55
Conclusions	59
For households	59
For businesses	61
Annex	62

TABLE OF CONTENTS

→ TABLES

Table 1: Household size and members left the building by regions	18
Table 2: Number (share) of observations by regions	62
Table 3: The building's proximity to other structures and type of building	62
Table 4: Gender of respondent by region	62
Table 5: Building have some damage due to previous disasters by municipality, gender of the household head and household size	63
Table 6: Damage of the walls of the building by region, gender of household head and family size	64
Table 7: Damage of the floor of the building by region, gender of household head and family size	65
Table 8: Damage of the foundations of the building by region, gender of household head and family size	66
Table 9: The building been flooded by region, gender of household head and family size	67
Table 10: Need for essential/urgent repairs for the building to prevent further damage in the future	68
Table 11: The essential/urgent repairs to the building	69
Table 12: Has there been any damage to the electricity system as a result of the flood?	70
Table 13: Is there debris/ disaster waste that will require management?	71
Table 14: Are there any trees and/or tall structures near the building that could become a threat in case the event happens again?	71
Table 15: If there are school-aged children in the household, did flood impact stopped attendance?	72
Table 16: What is the estimated value of damaged household items as a result of floods (EUR)?	73
Table 17: How would you describe any changes in the level of access to health services since the flood?	74
Table 18: Is the primary water source still currently available?	75
Table 19: If the facility is connected to the water supply system, has it suffered any damage as a result of the flood?	76
Table 20: What kind of toilet facility are household members currently using?	77
Table 21: How would you describe any changes in the level of access to clean sanitation (toilet facility) as a result of the floods?	78
Table 22: Where is the damage located regarding the waste water system?	79
Table 23: Compared to 3 months before the flood how has your household's monthly income changed?	80
Table 24: Does your household have a sufficient source of income or savings to pay for your monthly expenses (rent, utilities and food)?	81
Table 25: Coping strategies	82
Table 26: What are your household top three priority needs?	82
Table 27: Does the household member belong to any of the following vulnerable	83
Table 28: What is the highest level of education achieved by individuals?	83
Table 29: Is the main respondent/head of household covered by a health insurance?	83
Table 30: Has the employment status changed after the floods?	83
Table 31: Giving consent to fill in the questionnaire – businesses	84
Table 32: Type of building and current position in the business of the respondent	84
Table 33: Business size	84
Table 34: What is the main sector of activity of this business?	85
Table 35: Business operation status	85
Table 36: For how many days has this business been closed (or was closed) due to the floods?	85
Table 37: Has the floods affected this business in any of the following ways?	86
Table 38: Has the Inventory or Assets and Walls, Floor, Foundations of the building suffered any damage?	86
Table 39: Has the building been flooded?	86
Table 40: Urgent repairs	87
Table 41: Has there been any damage to the electricity system as a result of the flood?	87
Table 42: What type of debris/ disaster waste is present?	87
Table 43: How is the building ground level in comparison to the outside ground level?	88

TABLE OF CONTENTS

→ FIGURES

Figure 1: Respondents that give consent and those who did not along with the reason	15
Figure 2: Respondents who give consent by municipalities	15
Figure 3: Household size across the municipalities	16
Figure 4: Gender of the household head across the municipalities	16
Figure 5: Individuals belong to any of the vulnerable group	16
Figure 6: The highest level of education achieved	17
Figure 7: Share of people left the building due to floods by municipalities	19
Figure 8: Type of building	21
Figure 9: Prior to the event, the building has some damage due to previous disasters or other reasons by municipalities	21
Figure 10: Prior to the event, the building has some damage due to previous disasters or other reasons by gender of household head and household size	22
Figure 11: Damage to walls, floor and foundation of the buildings	22
Figure 12: Damage in the walls of the building by municipalities	23
Figure 13: Damage in the walls of the building by gender of household head and household size	23
Figure 14: Damage in the floor of the building by municipalities	24
Figure 15: Damage in the floor of the building by gender of household head and household	24
Figure 16: Damage in the foundation of the building by municipalities	25
Figure 17: Damage in the foundation of the building by gender of the household head and household size	25
Figure 18: The flooded buildings by municipalities	26
Figure 19: The flooded buildings by gender of household head and household size	26
Figure 20: Urgent repairs for the building to prevent further damage in the future by municipalities	27
Figure 21: Urgent repairs for the building to prevent further damage in the future by gender of household head and household size	27
Figure 22: Type of the essential/urgent repairs to the building by municipalities	28
Figure 23: Type of the essential/urgent repairs to the building by municipalities by gender of household head and household size	28
Figure 24: Type of damage to the electricity system as a result of the flood by municipalities	29
Figure 25: Type damage to the electricity system as a result of the flood by gender of the household head and household size	29
Figure 26: Building hazards by municipalities	30
Figure 27: Building hazards by gender of household head and household size	30
Figure 28: Debris/ disaster waste that require management by municipalities	31
Figure 29: Debris/ disaster waste that require management by gender of household head and household size	31
Figure 30: Type of road the building is accessible by from the main town centre by municipalities	32
Figure 31: Type of road the building is accessible by from the main town centre by gender of household head and household size	32
Figure 32: Trees and/or tall structures near the building that could become a threat by municipalities	33
Figure 33: Trees and/or tall structures near the building that could become a threat by gender of household head and household size	33
Figure 34: Changes in the level of access to health services since the flood by municipalities	34
Figure 35: School-aged children stopped attendance due to floods by municipalities	34
Figure 36: Experiencing any major shift in your emotional situation in terms of feeling more afraid, anxious, sad, angry, disappointed and unsafe, by municipalities	35
Figure 37: If the facility is connected to the water supply system, has it suffered any damage as a result of the flood? By municipalities	35
Figure 38: Toilet facility that household members are currently using by municipalities	36
Figure 39: changes in the level of access to clean sanitation (toilet facility) due to the floods by municipalities	36
Figure 40: Damage located regarding the waste water system by municipalities	37

TABLE OF CONTENTS

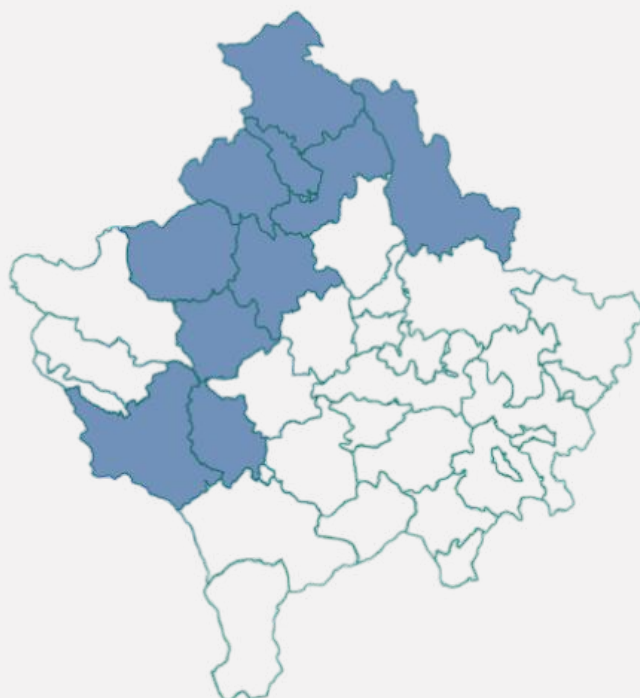
→ FIGURES

- Figure 41: The estimated value of damaged household items as a result of floods (EUR) by municipalities 37
- Figure 42: The estimated mean value of damaged household items as a result of floods (EUR) by municipalities 38
- Figure 43: The estimated value of damaged household items as a result of floods (EUR) by gender of household head and family size 38
- Figure 44: The estimated mean value of damaged household items as a result of floods (EUR) by gender of household head and family size 39
- Figure 45: Individual employment status for the main job in the 3 months before the floods 40
- Figure 46: Change of the individual employment status after the floods 40
- Figure 47: Main sector of activity of the workplace of the individuals, currently 41
- Figure 48: Individuals covered by a health insurance 41
- Figure 49: Household's monthly income changed compared to 3 months before the floods by municipalities 42
- Figure 50: household's monthly income changed compared to 3 months before the floods by gender of household head and family size 42
- Figure 51: Household's sufficient source of income or savings to pay for your monthly expenses by municipalities 43
- Figure 52: Household's sufficient source of income or savings to pay for your monthly expenses by gender of household head and family size 44
- Figure 53: Household have to engage in these activities due to lack of food 45
- Figure 54: Spent savings due to lack of food by municipalities 46
- Figure 55: Spent savings due to lack of food by gender of household head and family size 46
- Figure 56: Household top priority needs 47
- Figure 57: Household top three priority needs by municipalities 47
- Figure 58: Household top three priority needs by gender of household head and family size 48
- Figure 59: Type of assistance, that would be the most helpful for the household currently 48
- Figure 60: Top two type of assistance, that would be the most helpful for the household currently by municipalities 49
- Figure 61: Top two type of assistance, that would be the most helpful for the household currently by municipalities 49
- Figure 62: Businesses that gave the consent to fill in the questionnaire 50
- Figure 63: Surveyed businesses by municipalities 50
- Figure 64: Type of surveyed businesses 51
- Figure 65: Business size (number of employees) 51
- Figure 66: Main sector of activity of this business 52
- Figure 67: Damage to the foundations, floor, walls, assets and inventory of business premises 52
- Figure 68: Damage to the electricity system as a result of the flood 53
- Figure 69: Has the building been flooded? 53
- Figure 70: Essential or urgent repairs needed 55
- Figure 71: Building ground level in comparison to the outside ground level 55
- Figure 72: Business open, temporarily closed, or permanently closed 56
- Figure 73: Average of days a business has been closed (or was closed) due to the floods 56
- Figure 74: Top business problems due to the floods 57
- Figure 75: Institutional measures that would be most helpful as this business copes with the floods crisis 58

EXECUTIVE SUMMARY

From 17 to 22 January 2023, Kosovo¹ experienced severe flooding which had a devastating impact, particularly in 11 of its 38 municipalities

- Gjakovë/Dakovica
- Leposaviq/Leposavić
- Mitrovicë e Jugut/Južna Mitrovica²
- Skenderaj/Srbica
- Zubin Potok
- Mitrovicë e Veriut/ Severa Mitrovica³
- Zvečan/Zvečan,
- Istog/Istok
- Klinë/Klina
- Rahovec/Orahovac
- Podujevë/Podujevo.



Most municipalities, both urban and rural, were affected by a rapid increase of water levels in a short period of time, which resulted in significant damage. The floods heavily affected the local population and resulted in extensive damage to households, local businesses, agricultural land, and public infrastructure.

In response to this crisis the UNDP Office in Kosovo, in collaboration with the SURGE Data Hub (SDH), UNDP Crisis Bureau/Country Support Management Team (CSMT), has conducted a Household Building Damage Assessment (HBDA) and a Business Premises Damage Assessment (BPDA) to assess the level of damage experienced by households and businesses in the affected municipalities.

The HBDA targeted **785 households in the 11 affected municipalities**. The survey response rate was high, with **94% of the targeted households** participating in the process. As per the assessment, the floods have had a considerable impact on the livelihoods of the affected population. **A total of 2,272 people were temporarily displaced**, most in Skenderaj/Srbica. The flooding levels were significantly high, with approximately **46% of households experiencing flooding of 30-40 cm and more than 30% experiencing flooding of 80-160 cm**. This led to damage to buildings, electrical networks, and water and wastewater systems. **Most households (86%) reported damage to walls and floors** and more than half experienced damage to **critical infrastructure (electricity, water and sanitation)**. Access to education and health centres was restricted with **40% of households reporting interruptions in school attendance**.

[1] References to Kosovo shall be understood to be in the context of UN Security Council resolution 1244 (1999).

[2] "Mitrovicë e Jugut/Južna Mitrovica refers to Mitrovica South

[3] "Mitrovicë e Veriut/ Severa Mitrovica refers to Mitrovica North

EXECUTIVE SUMMARY

Floods caused damage to household items to the value of **3.75 million euros**.

The most affected municipality was Skenderaj/Srbica with more than 1 million euros of damage.

On average each household lost 5,102 euros in such items.

The affected population is highly vulnerable to natural disasters as it suffers from **high unemployment rates (28%)** and **labour inactivity rates (20%)**.

In addition, job security seems to be an issue as **only 10% of the people interviewed report having a long-term employment contract**. The floods did not lead to shifts in employment status, but household income decreased as a result. Despite this, households did not engage in strategic asset disposal as a coping mechanism. **Only 21% relied on savings as a result of the disaster**.

The BPDA targeted 110 businesses in the 11 affected municipalities. The response rate was high, with 85% of those targeted participating in the survey process. The majority of the businesses interviewed are Small to Medium Enterprises (SMEs) with up to 50 employees.

Similar to households, **most businesses experienced flooding levels of 30-40 cm** but a significant proportion **(36%) experienced flooding levels of 80-160 cm**.

This resulted in significant damage. Approximately 86% of businesses reported losses in assets and stock and **more than 70% reported damage to building structures such as walls and floors**.

Critical infrastructure was considerably affected, with power outages, restricted movement due to road blockages and restrictions in water access.

As a result, almost all businesses (97%) were forced to close temporarily. By April 2023, the majority have managed to return to business as usual, **but 15% remain closed**.



INTRODUCTION

From 17 to 22 January 2023, Kosovo¹ experienced severe flooding, which had a devastating impact, particularly in 11 of its 38 municipalities – Gjakovë/Đakovica, Leposaviq/Leposavič, Mitrovicë e Jugut/Južna Mitrovica, Skenderaj/Srbica, Zubin Potok, Mitrovicë e Veriut/ Severa Mitrovica, Zvečan/Zvečan, Istog/Istok, Klinë/Klina, Rahovec/Orahovac and Podujevë/Podujevo. In most of these municipalities, both urban and rural zones were affected by a rapid increase of water levels in a short period of time, which resulted in **significant damage**.

According to information obtained from authorities and humanitarian partners **over 855 households had their homes flooded**. Families were evacuated and hosted on public premises, or at their relatives', with some families needing to remain evacuated in hotels.

According to local authorities, **at least 80 families are likely to be unable to return to their homes** for an unpredictable period of time.

The greatest damage was seen in the municipalities of Skenderaj/Srbica (the town and 15 other settlements), where more than 400 houses were flooded, and in Mitrovicë e Jugut/Južna Mitrovica, where 230 houses were flooded – with some highly vulnerable groups being the most affected, including 65 families flooded in the Boshniak Mahalla neighbourhood and 28 families flooded in the Roma Mahalla neighbourhood.

The floods have had a major impact on the affected communities, causing displacement and disruption to the meeting of basic needs, and to the accessing of essential services and functioning of schools.

Other immediate challenges included: damage to houses, with some houses totally destroyed, hundreds in danger of collapse, and other houses still at risk of being flooded; flooded agricultural land and severe damage to farms; infrastructure damage, such as bridges, roads, sewage systems, irrigation channels, dams and river bedding, including roadblocks caused by landslides; and problems for water treatment facilities.

Many municipalities face **shortages in drinking water supply or have full water cuts**, depending on the condition of drainage systems, maintenance and the cleaning of riverbeds and sewers.

In rural areas, **940 farmers have suffered losses of productive assets, livestock, and crops**. Preliminary numbers from the Ministry of Agriculture show that **Skenderaj/Srbica has seen the highest number of farmers affected, 400 in total**, followed by **Podujevë/Podujevo**, where at least **150 farmers suffered losses**.



According to Emergency Management Agency (EMA) officials, the overall level of damage has not yet been calculated as many municipalities are still conducting damage assessment with their own local capacities; **currently it exceeds 20 million euros.**

In response to this overwhelming situation, the United Nations Kosovo Team (UNKT), in cooperation with key stakeholders from local and central institutions, drafted the Flood Response and Early Recovery Plan, composed of immediate and short-term activities. This document outlines a strategic and coordinated response to build on flood response efforts to date and to scale up the joint response to meet the residual humanitarian and early recovery needs of people affected by **the floods in January 2023.**

Based on the main humanitarian needs identified, and according to information collected from humanitarian partners and local authorities, **the UNKT agreed that the response would focus on three main sectors:**



1. Food Security and Agriculture



2. Shelter and Non-food Items and Services



3. Early Recovery and Livelihoods

In support of the early recovery of the affected municipalities and communities, the UNDP Kosovo office and the UNDP SURGE Data Hub joined efforts to initiate a **Household Building Damage Assessment (HBDA)** and Business Premises Damage Assessment (BPDA) process suitable to the Kosovo context. The HBDA and BPDA are intended to serve central and local institutions, the donor community and international organizations as an overview of the situation in the affected municipalities and enabling design of recovery plans.

The HBDA provides information on buildings affected by floods, as well as on basic socio-economic indicators in health, food security, education, as well as water, sanitation and hygiene (WASH) at the household level. The HBDA and BPDA also incorporated rapid collection of digital and georeferenced data on damage to residential and commercial buildings, household vulnerabilities, utility services and materials needed for repairs, and thence offer valuable information for supporting affected housing, community infrastructure and social sectors.

The local non-governmental organizations (NGOs) engaged in the HBDA and BPDA process were successful in covering all the heavily affected municipalities (Gjakovë/Đakovica, Leposaviq/Leposavić, Mitrovicë e Jugut/Južna Mitrovica, Skenderaj/Srbica, Zubin Potok, Mitrovicë e Veriut/Severna Mitrovica, Zvečan/Zvečan, Istog/Istok, Klinë/Klina, Rahovec/Orahovac and Podujevë/Podujevo).

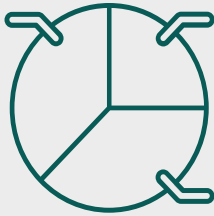
This report will by July 2023 be complemented with mapping and an assessment of environmental hazards of abandoned mines in the Mitrovica region to understand the potential environmental risks associated with future flooding events.

Finally, an Early Recovery Framework and Action Plan will be developed based on this report, field assessments and meetings with relevant DRR stakeholders. The Sendai Framework for Disaster Risk Reduction⁴ (2015-2030) has been followed throughout the conducting of this assessment.

[4] [Sendai Framework for Disaster Risk Reduction 2015-2030 \(A/CONF.224/CRP.1\) - World | ReliefWeb](#)

ASSESSMENT OBJECTIVES

1



The assessment's overall objective is **to inform the authorities about strategic planning for recovery**, as they strive to mitigate the secondary impacts of flooding.

2



Secondary impacts include **negative effects, often socio-economic, that are not direct and immediate consequences on human health** but span a longer period and affect a wider group of people with various levels of intensity, e.g. women and girls, persons with disabilities, persons with chronic diseases.

3



The assessment is expected to enable a risk-informed early recovery and **ensure that the “Building Back Better” concept can be integrated** throughout the whole process of disaster recovery.

METHODOLOGY



The assessment involved **direct contact with affected families and businesses**, gaining first-hand information about the damage caused and repairs needed, thus enabling a baseline for efficient planning of upcoming early recovery activities.

In line with the scope of the HBDA and BPDA toolkit, **primary data collection** was the preferred method for collecting **both quantitative and qualitative data**, given its efficacy for gathering information specific to the objectives at hand and its ability to use procedures that best respond to information gaps.

Moreover, specific attention was paid to key information gaps, to inform evidence-based policymaking and recovery programming, including the upcoming drafting of the local recovery plans, or to improve the effectiveness of existing programmes.

Building damage information was collected **through surveys of heads of households who resided in**, or claimed ownership of, the damaged buildings in question.

This method was also employed for gathering household information, with surveys conducted by enumerators from the CSOs Red Cross Kosova (RCK) and Domovik.



Red Cross of Kosovo volunteers trained in HBDA and BPDA collecting data in Rahovec/Orahovac municipality.
Photo Credit: Red Cross of Kosovo.



Two questionnaires were designed: one **for households** and the other for **business premises**. The questionnaires were adapted to the Kosovo context and were consulted with other international organizations present in Kosovo as well as with the main beneficiary, the Emergency Management Agency⁵ (EMA) of the Ministry of Internal Affairs (MIA).

The Assessment modules covered the profile of the building and individuals, human and social capital, physical capital, financial and productive capital, household coping strategies and recovery needs, building damage and repairs, building services and debris management, and building preparedness.

For the HBDA the geographical scope and populations of interest referred to buildings and households within the 11 impacted municipalities in Kosovo. **Potentially affected areas were identified using data about the estimated number of affected buildings and households based on the multi-sector rapid assessment by the local authorities.**

According to the information provided by municipalities, there were several hundreds of households which were affected by the flood.

The aim was to assess all these reported buildings.

Field teams travelled to the identified areas and then selected households for assessments in close cooperation with municipal authorities and village chiefs. The sample units (buildings/households to survey) were therefore identified while in the field rather than in advance.



For the BPDA, the municipalities of Istog/Istok, Rahovec/Orahovac and Klina/Klinë provided lists of registered businesses which suffered damage due to floods. Other municipalities did not provide similar lists. Nevertheless, based on their own assessments conducted after the flood, RCK and Domovik targeted all businesses which had damage to their premises. In total 110 businesses were contacted and the results are presented in this report.

[5] [Mirësevini | Agjencia e Menaxhimit të Emergjencave \(rks-gov.net\)](#)

METHODOLOGY

DATA COLLECTION AND ENUMERATORS

The data was collected using the Kobo toolbox, which is a free and open-source toolkit for data collection and analysis in humanitarian emergencies and other challenging environments to address urgent need. The toolbox enables data collection, management, and visualization; it is used globally for assessment, research and social good.

Once the questionnaire is developed, it can be put into a Kobo form. This Kobo form can be accessed online from laptops, tablets, smart phones etc. While collecting the data, there is no need to have access to the Internet. The Kobo toolbox allows checking of the progress of data collection in real time.

The enumerators were individuals nominated by RCK and Domovik. In total, RCK engaged 32 enumerators (17 men and 15 women) of various age groups and Domovik engaged 12 enumerators (6 women and 6 men). Two separate training sessions for the enumerators were conducted in person in Kosovo, in collaboration with the CSOs and delivered by SDH.

A critical step of the assessment process was piloting the questionnaire in the field, which contributed to improving the overall questionnaire and addressing any issues regarding its composition and logical ordering. Next was the data collection phase, which was monitored in the field and remotely by the means provided by the Kobo toolbox (location, start and end time etc. per enumerator).

The whole process of data collection lasted three weeks.



HBDA Workshop training for RCK volunteers held in Prishtinë/Priština, 7 March 2023

DATA VISUALIZATION

The collected data was represented using PowerBI, an interactive data visualization software product developed by Microsoft with a primary focus on business intelligence, and different dashboards were designed.

ANALYSIS

Three types of data analysis were applied: basic statistics, univariate and bi-variate analyses. Basic statistics are ensured by the Kobo toolbox. Univariate and bi-variate analysis were performed by the local consultant supported by SDH.

LIMITATIONS

Limitations should be kept in mind when engaging with the findings outlined in this report.



Around 200 houses in the municipality of Skenderaj/Srbica were **locked**, as the owners were identified as belonging to the Kosovo diaspora and were not present at the time of the assessment.



Some families in 4 northern municipalities affected by the current political situation some families **hesitated to respond to the questionnaire**.



Only 3 out of 11 municipalities Istog/Istok, Rahovec/Orahovac and Klinë/Klina, provided the list of registered businesses which suffered damage due to floods. The other municipalities did not provide such lists.



Only 95 businesses out of 110 have responded to the survey

As a final outcome, 735 HBDA, and 95 BPDA were collected.

It is assumed that this number is sufficient for developing a comprehensive report on the impact of the floods on the local population. Given these figures, we would strongly suggest reading and interpreting the results with caution, since disaggregation of the data may lead to response rate insufficient for interpretation.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

Floods as a natural disaster affect household buildings and assets and have a direct impact on livelihoods within the affected communities. Floods also impact food security, health, education, water, sanitation, and hygiene. Rehabilitation of household buildings and provision of humanitarian assistance are crucial elements of the disaster recovery process.

The HBDA is designed to capture information about several aspects of the affected households and individuals. This information is organized in thematic modules and is presented in the pages below. The report starts with a description of the main characteristics of the affected households and household members. This includes **information on household size**, geographic location, gender structure, employment status and vulnerabilities of the household members. The report then **provides a detailed snapshot of building damage, among other things including information on flooding levels. Information on access to health and education is also provided**, including key data on access to water and sanitation.

The Impact on Labour and Financial Capital Module provides details on shifts in income and employment, as well as information on the reported damage to household items. The HBDA concludes with a depiction of coping strategies and recovery needs, which reports how the affected households coped with the crisis financially and indicates the most suitable financial assistance to be deployed by the relevant authorities.



THE PROFILE OF AFFECTED HOUSEHOLDS

While natural hazards and disasters have the potential to strike any region and affect all individuals within that area, they affect certain groups in society disproportionately. The severity of the consequences of a disaster varies according to exposure to natural disasters, vulnerability, and socio-economic resilience⁶.

As such, individuals living in areas which have a high exposure to natural disasters (i.e. areas prone to floods, heatwaves or earthquakes) tend to also struggle economically⁷.

This makes them more vulnerable to shocks and less able to bounce back in the aftermath of the event. Experience suggests that poor people lose larger shares of wealth in disasters (i.e. are more vulnerable): this impacts their current levels of income but also increases the risk of households falling into poverty in the medium and long term⁸.

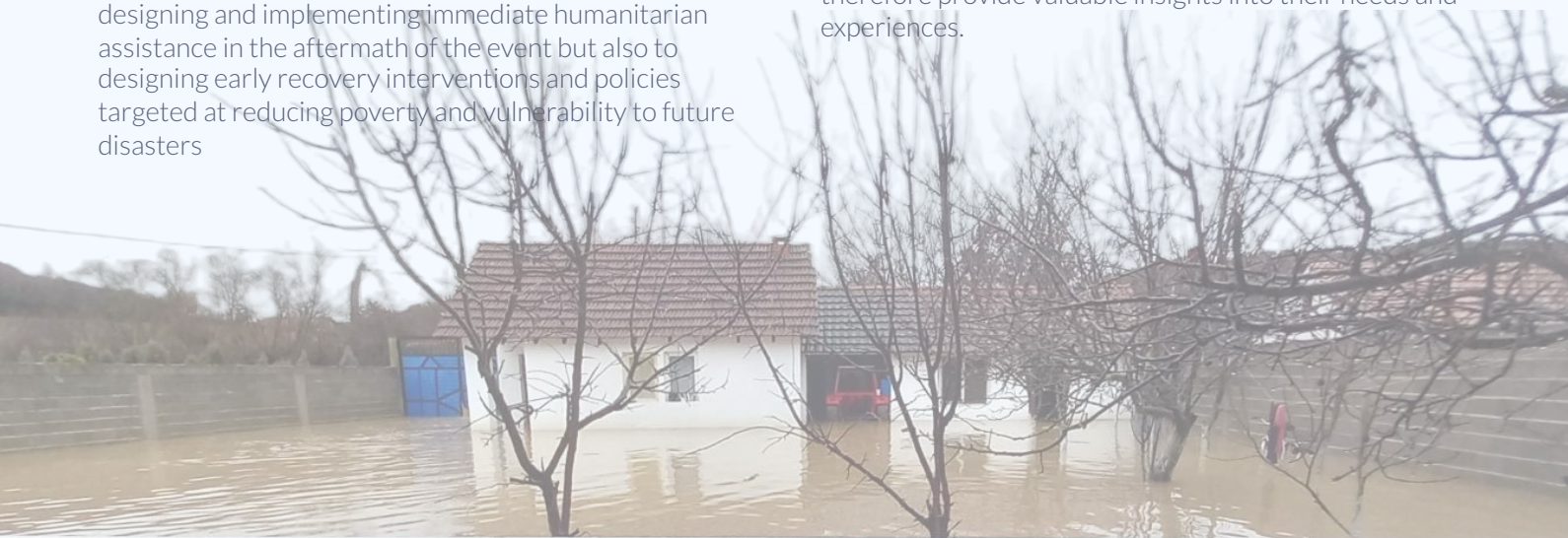
Understanding the individual characteristics of the affected population is of crucial importance not only to designing and implementing immediate humanitarian assistance in the aftermath of the event but also to designing early recovery interventions and policies targeted at reducing poverty and vulnerability to future disasters

The HBDA has been conducted with households in the 11 affected municipalities and was designed to retrieve information at the household level, meaning that individual data was gathered for all **members of a household** who at the time of the interview were **16 years old and above**.

The interviewing process reached a total of 783 households and 3,592 household members. Out of all household members, there were 2,355 aged 16 and above for whom detailed data has been collected

The survey response rate was high, with 94% of the targeted households participating in the assessment process. This indicates a high level of engagement and interest among the population.

The 6.1% that did not participate is mainly a result of buildings being abandoned due to the family living abroad. A high response rate suggests that the survey results are likely to be representative of the affected population, and therefore provide valuable insights into their needs and experiences.



[6] Hallegatte, S., Vogt-Schilb, A., Rozenberg, J. et al. From Poverty to Disaster and Back: a Review of the Literature. *Econ Dis Cli Cha* 4, 223–247 (2020). <https://doi.org/10.1007/s41885-020-00060-5>

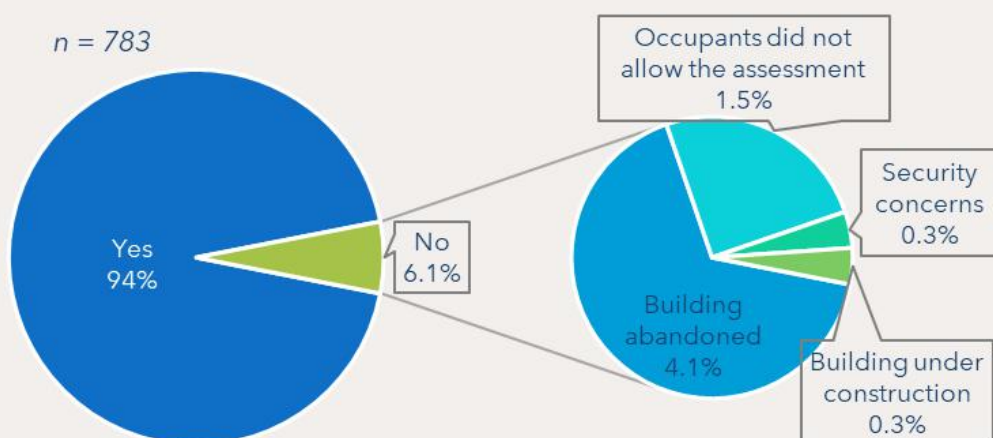
[7] Ibid.

[8] Ibid.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

Figure 1: Illustrates the share of respondents that gave consent and those who did not along with the respective reason.



The highest proportion of interviewed households (27%) were from the municipality of Skenderaj/Srbica followed by 18% from the municipality of Klinë/Klina, 14% from the municipality of Rahovec/Orahovac, and 8% from the municipality of Mitrovicë e Jugut/Južna Mitrovica (see Figure 2). The representation of respondents per municipality is also an indication of the severity of the floods in these locations.

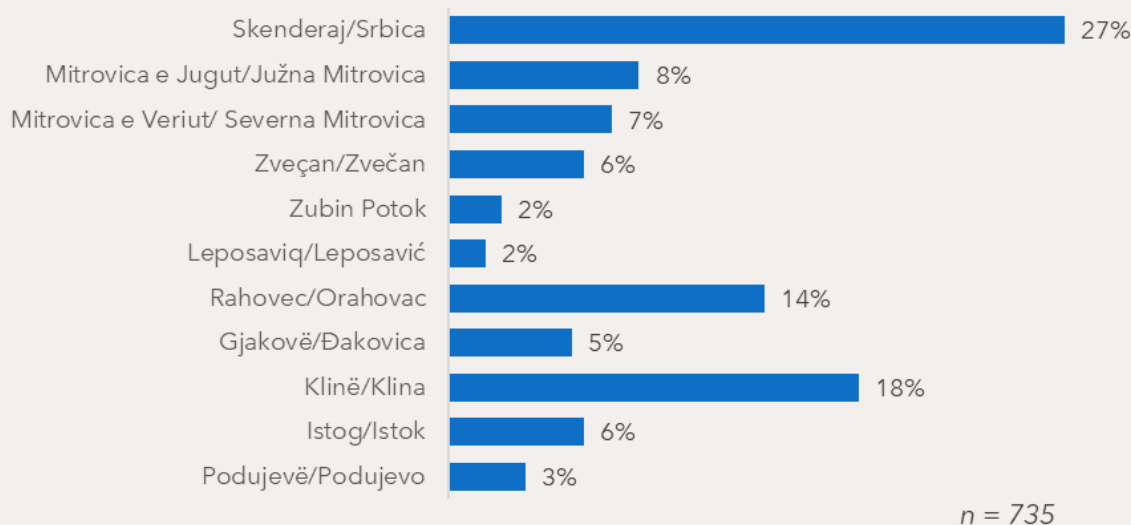


Figure 2: Respondents who gave consent by municipality

The interviewed households were medium to large with more than 50% of them consisting of 3-5 members and 36% consisting of 6+ members. The average size of the households is 5 members. Variations per municipality are depicted Figure 3. In terms of gender, the majority of households (85%) are headed by males, with 15% of households are headed by females. The highest share of female-headed households is in Leposaviq/Leposavić at 42%, followed by Mitrovicë e Veriut/Severna Mitrovica at 38%, Mitrovicë e Jugut/Južna Mitrovica at 23% and Gjakovë/Đakovica at 23%; the lowest is in the municipality of Rahovec/Orahovac at 7%.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

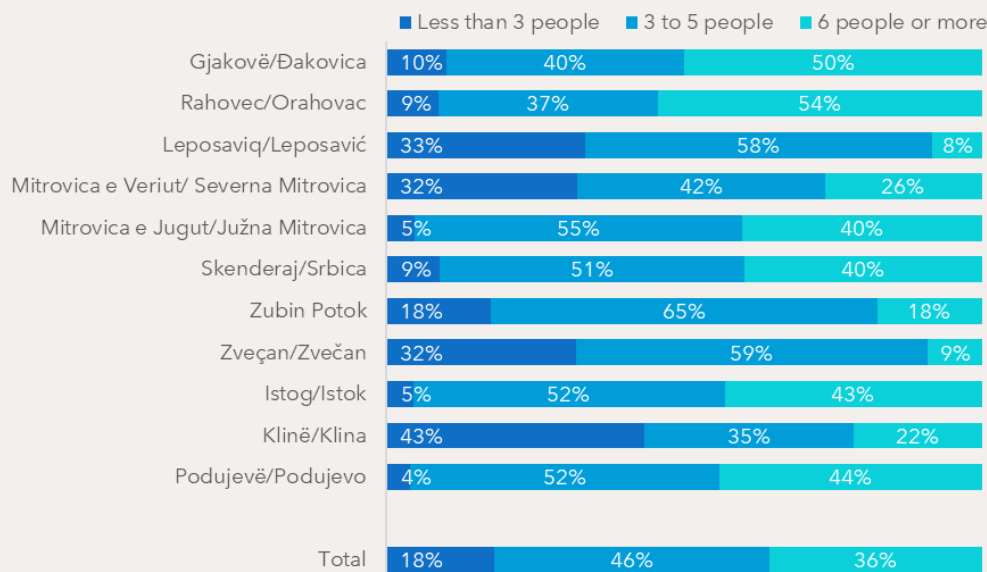


Figure 3: Household size across the municipalities

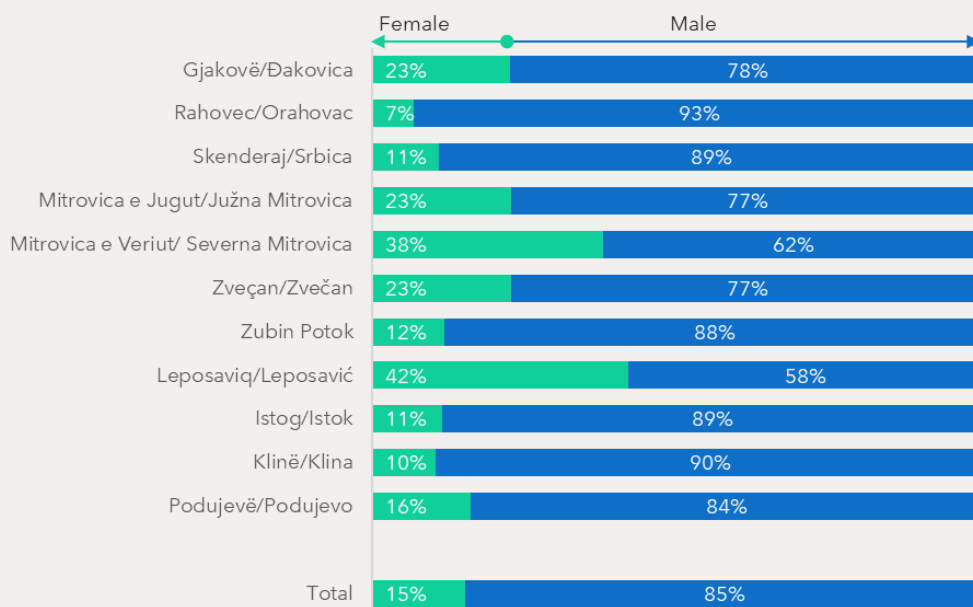


Figure 4: Gender of the household head across the municipalities

Looking at the individual characteristics of the impacted individuals, only a small fraction of respondents declared themselves as belonging to a vulnerable group: 11% of the respondents declared themselves chronically ill, 8% as belonging to an ethnic minority, and 8% as elderly. The share of single parents is only 5% (see Figure 5). These vulnerabilities are often indicators of poor economic conditions.

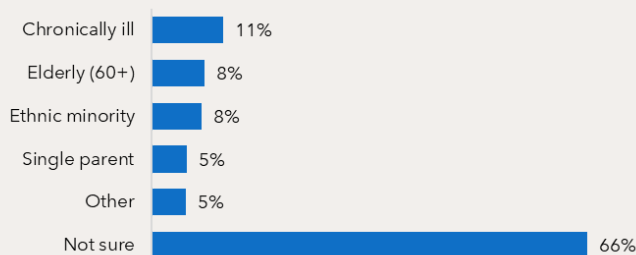


Figure 5: Individuals belong to a vulnerable group

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

A slight majority of the affected individuals have completed secondary schooling or a university degree (38% and 15% respectively); the rest have either completed some level of primary or secondary schooling or have no educational attainment at all (see Figure 6).

The level of educational attainment is directly linked to disaster preparedness and vulnerability: **people who are more educated tend to respond better and to cope with the crisis⁹**. The relatively high share (46%) of the respondents with lower than secondary schooling may also indicate an increased vulnerability of this group to future disasters.

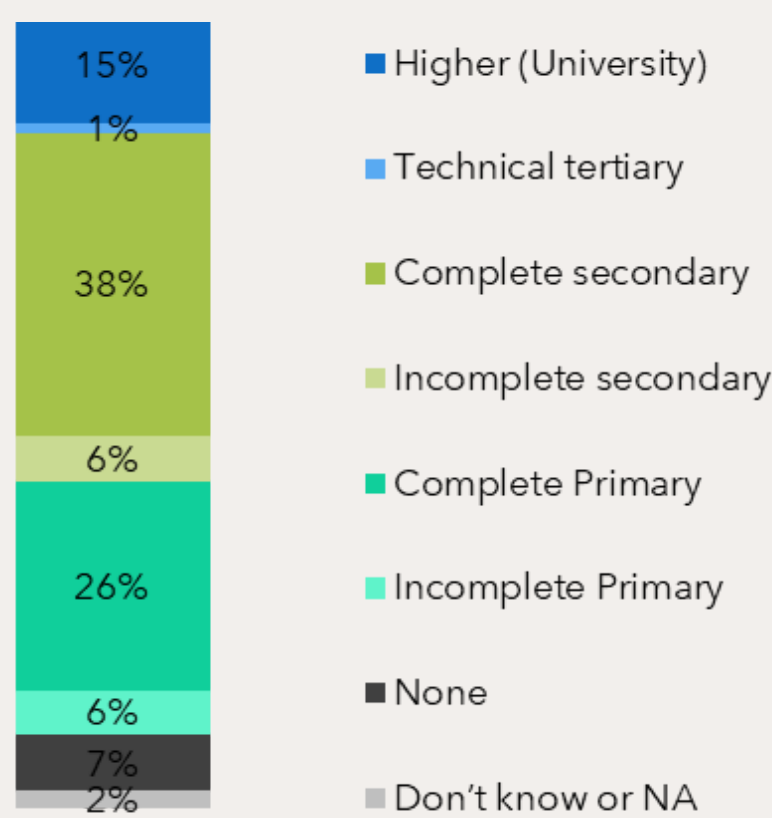


Figure 6: The highest level of education achieved

The flooding caused major disruptions in the daily lives of the affected population and led to the displacement of 2,274 individuals – some 63% of those interviewed (see Table 1).

The municipality of Skenderaj/Srbica was affected the most: 40% of respondents reported leaving their buildings after the flooding.

The municipalities of Klinë/Klina and Mitrovicë e Jugut/Južna Mitrovica were also affected, with approximately 13% of respondents declaring that they left their buildings. On the other hand, the municipalities of Podujevë/Podujevo and Leposaviq/Leposavić were the least affected in terms of people leaving their buildings (see Figure 7).

^[9] Muttarak, R., & Pothisiri, W. (2013), The Role of Education on Disaster Preparedness: Case Study of 2012 Indian Ocean Earthquakes on Thailand's Andaman Coast, *Ecology and Society*, 18(4). <http://www.jstor.org/stable/26269420>

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

Table 1: Household size and members leaving their building by region

		Household			Household members, 16 years old and above		Household members left the building	
		Average size	Members (sum)	Column Sum %	Sum	Column Sum %	Sum	Column Sum %
Gjakovë/ Đakovica	Gjakovë/Đakovica	6.1	628	17.50%	353	15.00%	180	7.90%
	Rahovec/Orahovac	5.9	236	6.60%	136	5.80%	146	6.40%
Mitrovicë/ Mitrovica	Skenderaj/Srbica	5.2	1044	29.10%	742	31.50%	919	40.40%
	Mitrovicë e Jugut/ Južna Mitrovica	5.6	345	9.60%	211	9.00%	316	13.90%
	Mitrovicë e Veriut/ Severna Mitrovica	3.9	208	5.80%	159	6.80%	164	7.20%
	Zvečan/Zvečan	3.6	158	4.40%	112	4.80%	49	2.20%
	Zubin Potok	3.9	66	1.80%	50	2.10%	25	1.10%
	Leposaviq/Leposavić	3.5	42	1.20%	34	1.40%	8	0.40%
Pejë/Peć	Istog/Istok	5.3	235	6.50%	143	6.10%	142	6.20%
	Klinë/Klina	3.7	494	13.80%	321	13.60%	313	13.80%
Prishtinë/ Pristina	Podujevë/Podujevo	5.4	136	3.80%	94	4.00%	12	0.50%
Total		4.9	3592	100%	2355	100%	2274	100%

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

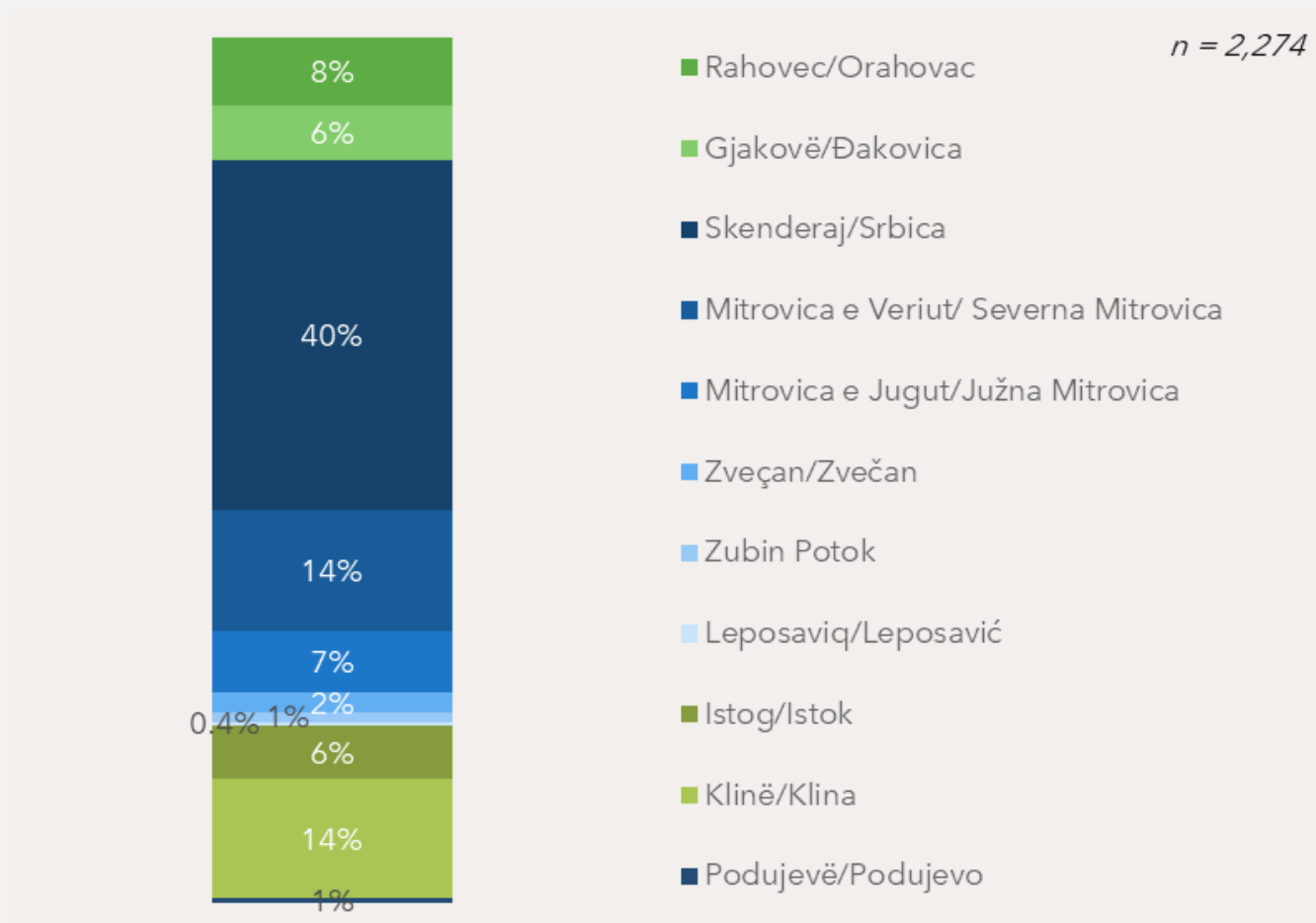


Figure 7: Share of people leaving their building due to floods, by municipalities

IMPACT ON BUILDINGS: DAMAGE, REPAIRS AND PREPAREDNESS

Overall, the building elements most affected by the flood event are reported to have been walls and floors. The severity of the damage to the foundations and walls varied between municipalities, gender of the household head, and household size. The assessment emphasizes the need for immediate attention from municipality inspectors to evaluate and repair the damaged buildings.



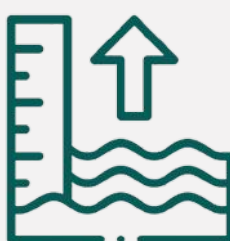
>86%

interviewed households
claimed to have some
level of floor and wall
damage



>46%

interviewed households
reported some level of
damage to the
foundations



The flood level was quite high, with a
quarter of respondents being
flooded from

80-160 cm

It should be taken into account that foundation damage is not easily
evaluated by non-professionals.

In general, almost all of the assessed buildings (96.5%) were residential buildings with only 3.5% being commercial, commercial/residential buildings and other buildings (see Figure 8).

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

→ Red Cross volunteer displaying flood levels in Tushilë/Tušilje village, Skenderaj/Srbica municipality.
Photo credit: UNDP Kosovo.



FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

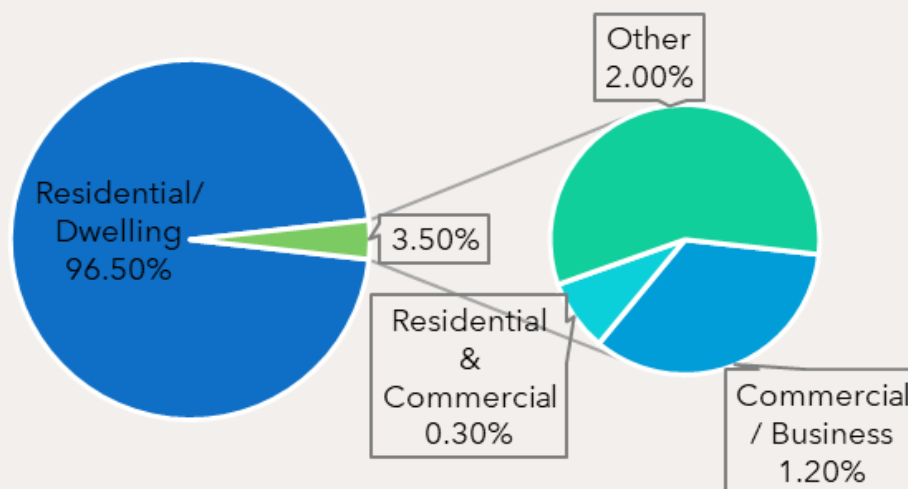


Figure 8: Type of building

Most of the assessed buildings (79%) did not have any damage prior to the flood event (see Figure 9). However, in the municipalities of Zvečan/Zvečan and Zubin Potok, a high percentage of houses were already damaged: 73% of houses in Zvečan/Zvečan and 47% of houses in Zubin Potok were reported to have experienced previous damage from other natural disasters.

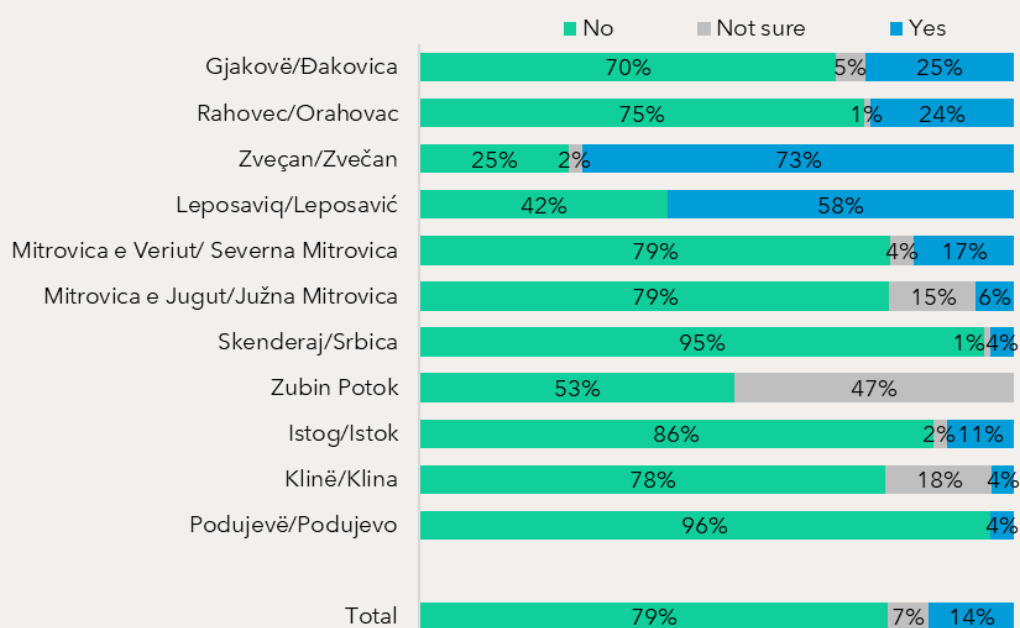


Figure 9: Prior to the event, the building has had some damage due to previous disasters or other reason, by municipalities

When considering the gender of the head of household, there were only minor differences: 19% of female-headed households were living in buildings damaged by previous disasters and 14% of male-headed households.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

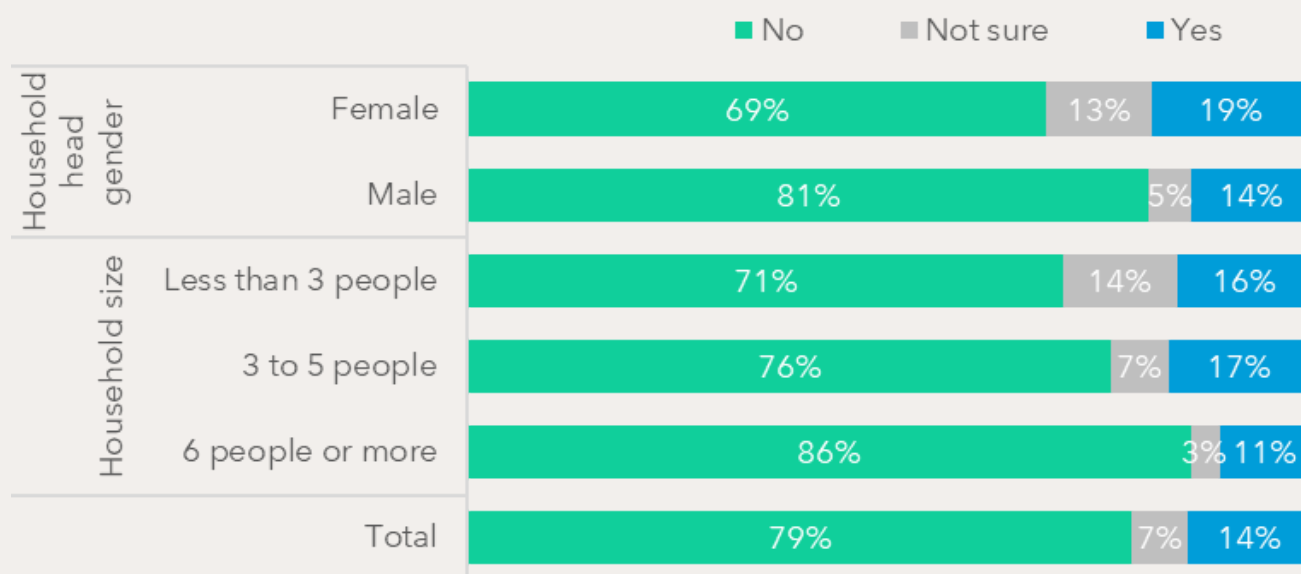


Figure 10: Prior to the event, the building has had some damage due to previous disasters or other reason, by gender of household head and household size

Given the type of disaster (floods), the HBDA toolkit considers three main building aspects for assessment: walls, floors, and foundations.

As illustrated in Figure 11, the walls and floors of the assessed buildings are damaged more than the foundations. More than four out of every five households reported damage to the walls and floors, while fewer than one in two households reported damage to the foundations. These figures are interpreted in detail below, considering other possible data disaggregation factors (municipalities, family size or gender of the head of household).

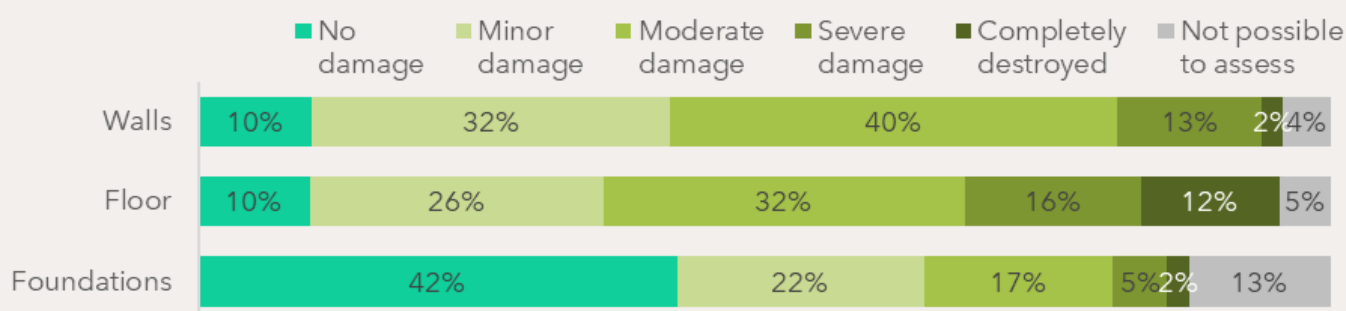


Figure 11: Damage to walls, floors and foundations of the buildings

Most households (87%) reported some level of damage to walls as a result of the flooding. The damage was reported to be moderate in 40% of the households, minor in 32% of the households, severe in 13% of the households, and completely destructive in 2% of the households. Even though the percentage of severely damaged and completely damaged walls is low, when considering the size of the households the number of affected people is substantial.

Therefore, immediate attention from municipality inspectors is needed. In terms of geographic location, Zubin Potok is the area most affected by wall damage, with all of the households interviewed reporting some level of destruction. It is important to consider that the high levels of wall damage in Zubin Potok could be attributed to the fact that the households in that area have experienced other natural disasters in the past. This is a reminder that the effects of natural disasters can be long-lasting and that previous events can have an impact on the severity of damage caused by subsequent disasters.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

Approximately 4% of respondents were not able to assess if their walls were damaged. Therefore, municipal authorities need to go into the field to conduct a proper assessment. In terms of geographic differences, the municipality of Klinë/Klina had the highest share of respondents (21%) who were not able to assess the damage (see Figure 12).

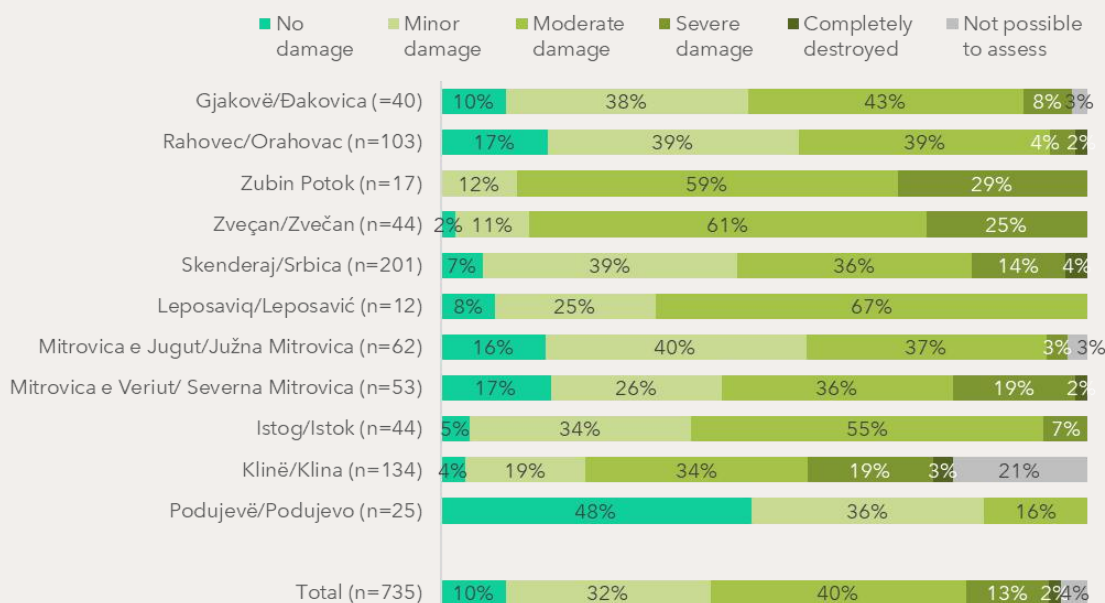


Figure 12: Damage to the walls of the building by municipalities

Even though the percentage of severely damaged and completely damaged walls is low, when considering the size of the household the number of affected people is substantial. **Therefore, immediate attention from municipal inspectors is needed.** Based on the analysis, it can be said that male-headed households report a higher level of severe damage to walls (14%) than female-headed households (9%) – see Figure 13.

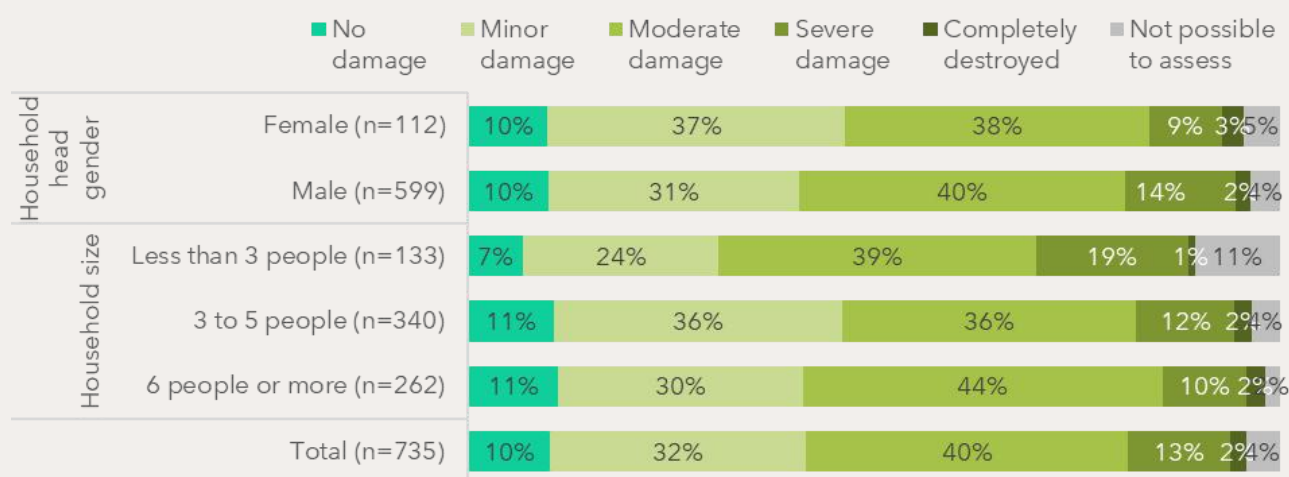


Figure 13: Damage to the walls of the building by gender of household head and household size

The floor, which is usually first to be flooded, is also a structural element which provides horizontal strength to the building and in case of severe damage it can be impossible to repair.

Approximately 85% of the interviewed households experienced some level of floor damage due to the flooding (see Figure 14). **In total, 28% of the assessed households declared severe damage or complete destruction of the floor, which can potentially make repair impossible;** 32 % had moderate damage, 26% minor damage and 10% none.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

The severity of floor damage was found to be higher in municipalities that experienced high flooding levels (see Figure 18). Approximately 95% of the affected households in Mitrovicë e Jugut/Južna Mitrovica reported some level of floor damage, followed by 93% of the affected households in the municipality of Rahovec/Orahovac and 91% in the municipality of Istog/Istok. **The municipality of Skenderaj/Srbica was found to be the most affected area in terms of floor damage severity**, with 47% of the affected households reporting either severe floor damage or complete floor destruction.

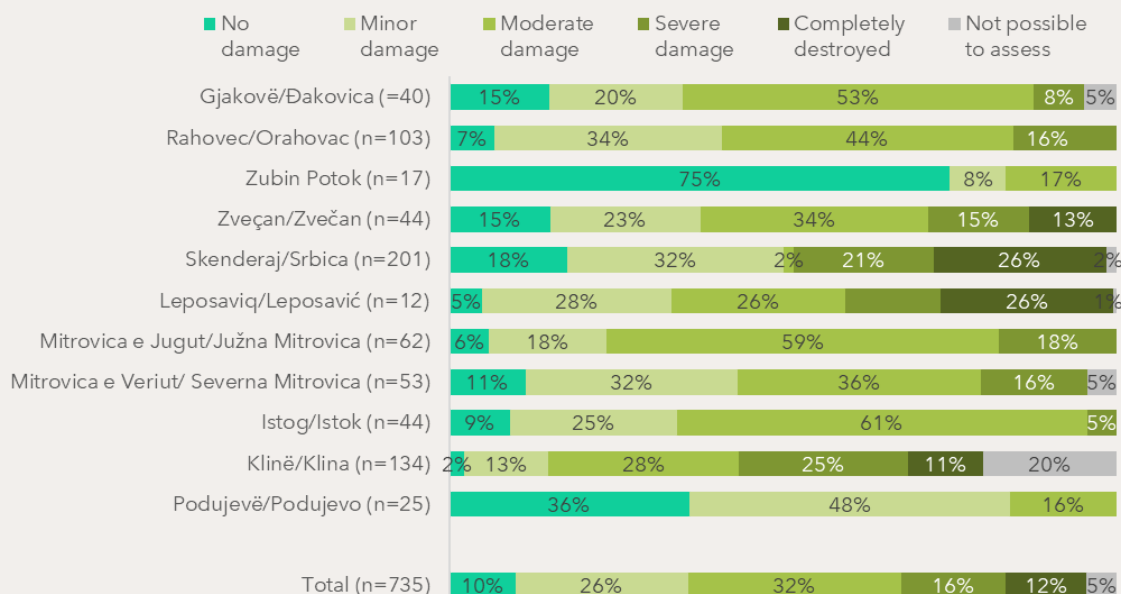


Figure 14: Damage to the floor of the building, by municipalities

As with damage to the walls, a greater proportion of male-headed households reported severe and complete floor destruction. Large household size translates into a higher share of the population living in at-risk premises which need to be evaluated by professionals (see Figure 15).

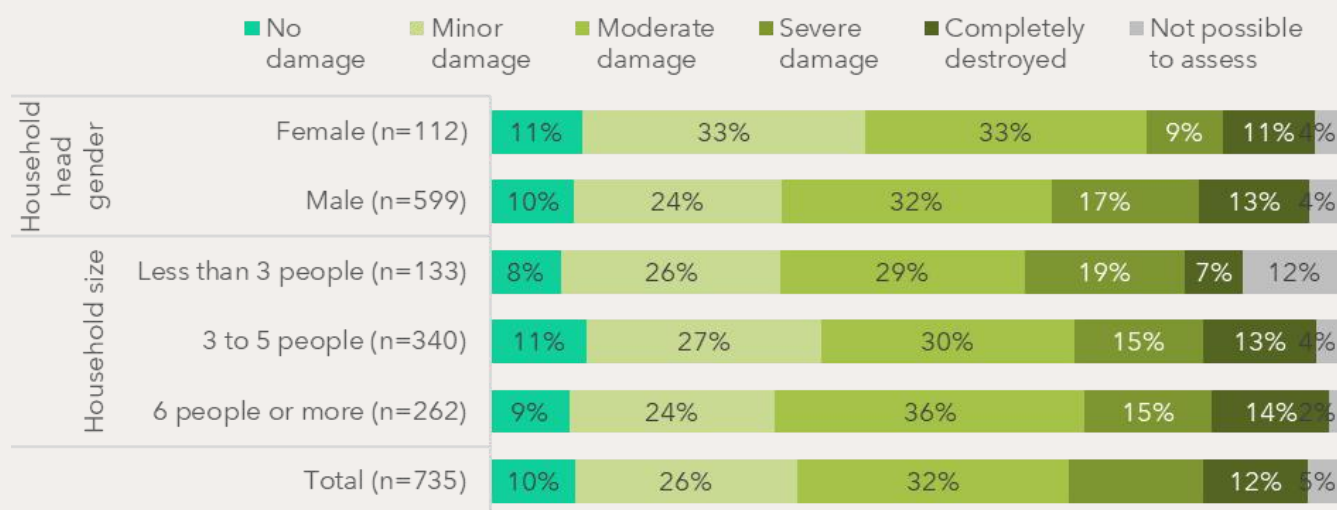


Figure 15: Damage to the floor of the building by gender of household head and household

Only 46% of the affected households reported some level of damage to the foundations as a result of the flooding (see Figure 16). 42% of the assessed households had no damage to the foundations, whereas 13% were not able to assess the damage at the foundation level.

In Mitrovicë e Veriut/Severna Mitrovica, 48% of households reported severe foundation damage and 9% completely destroyed foundations. In the municipality of Zvečan/Zvečan 13% reported completely destroyed foundations.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

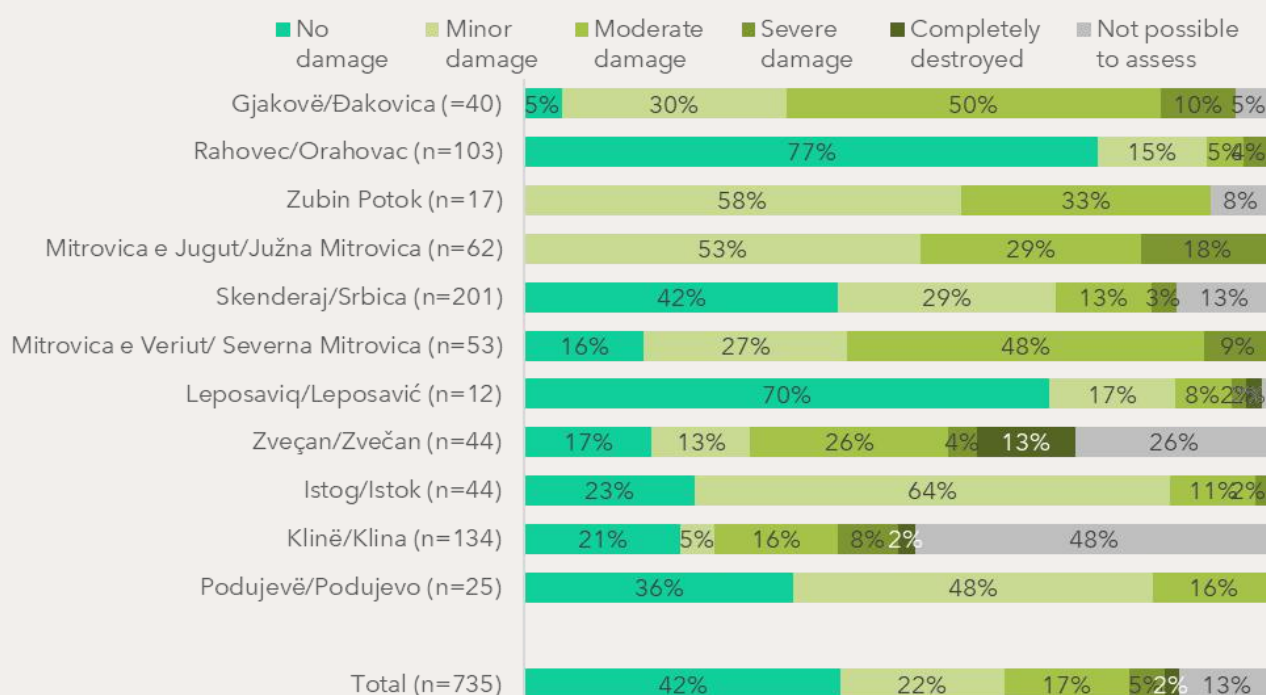


Figure 16: Damage in the foundation of the building by municipalities

A higher proportion of households headed by males reported no damage to the foundation of the buildings (refer to Figure 17). **One out of every four households with fewer than 3 members reported being unable to assess the damage to the foundations**, indicating the need for professional assessment.

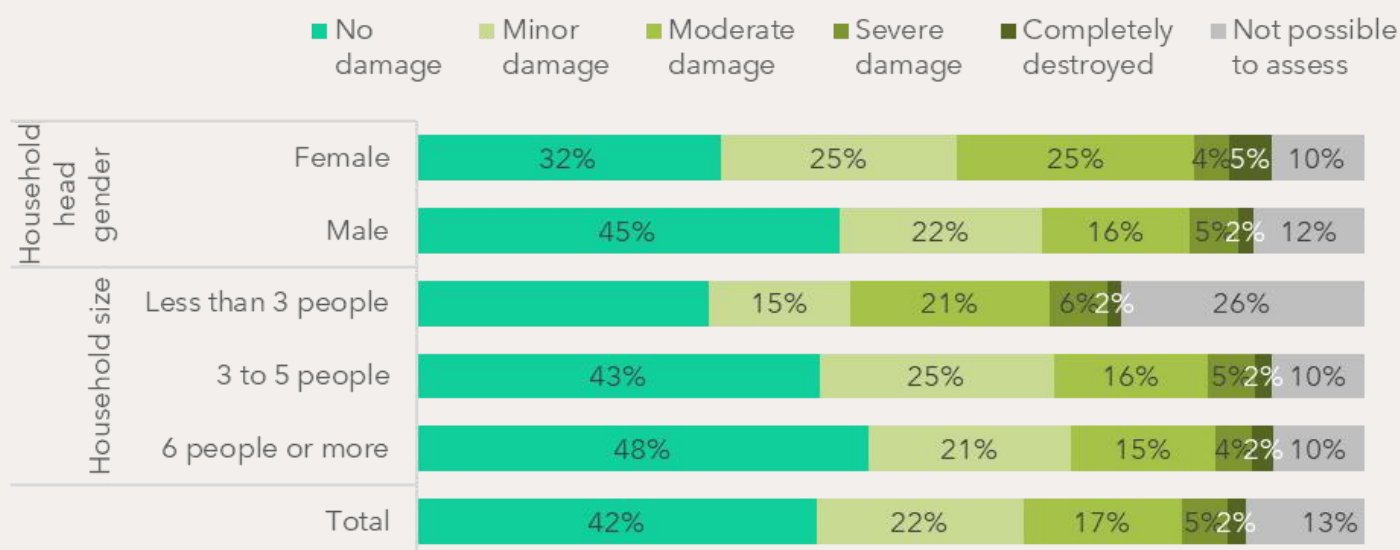


Figure 17: Damage in the foundation of the building by gender of the household head and household size

The extent of flooding experienced by households reveals that more than 30% of the households interviewed experienced high levels of flooding, from 80-160 cm, while 43% reported flooding of 30-40 cm, 16% experienced flooding up to ankle level (see Figure 18) and only 4% of the households assessed reported no flooding at all (see Figure 18). In Mitrovicë e Jugut/Južna Mitrovica, 21% of the assessed households experienced a flooding level of 130-160 cm. The municipality of Podujevë/Podujevo reported 36% of households unaffected by flooding.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

This information provides valuable insights into the areas most vulnerable to flood damage and those that require targeted interventions to mitigate future risks.

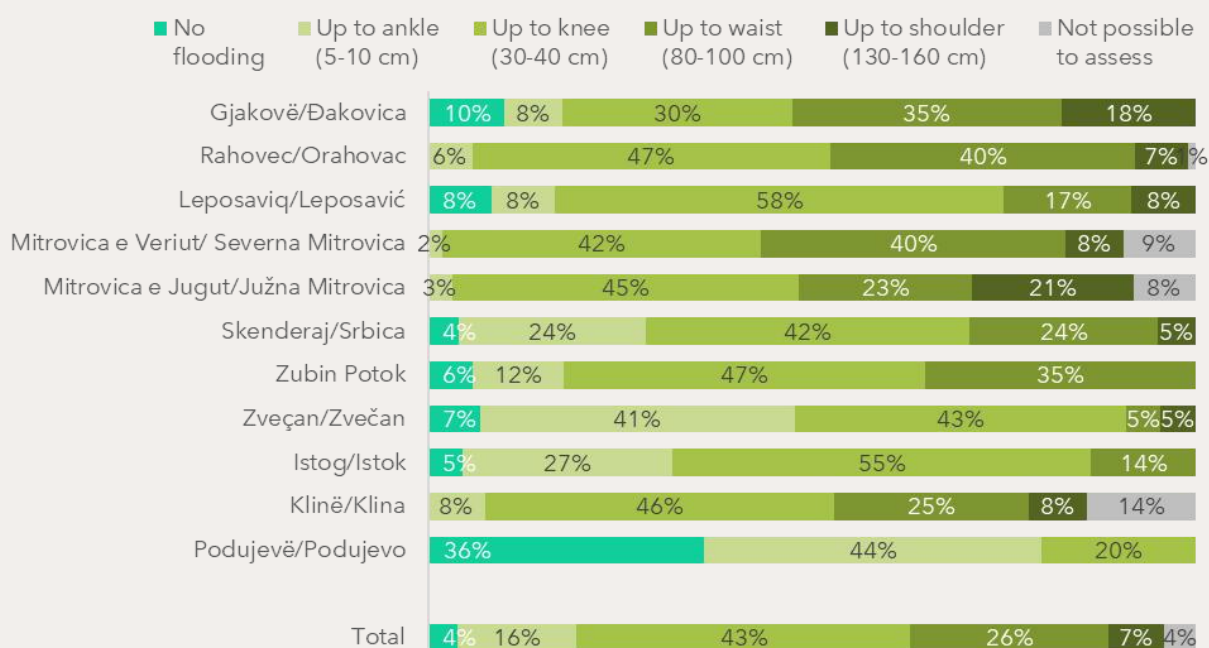


Figure 18: The flooded buildings by municipalities

The assessment did not reveal a significant difference between the height of water/flood level and the gender of the household head or household size (refer to Figure 19).

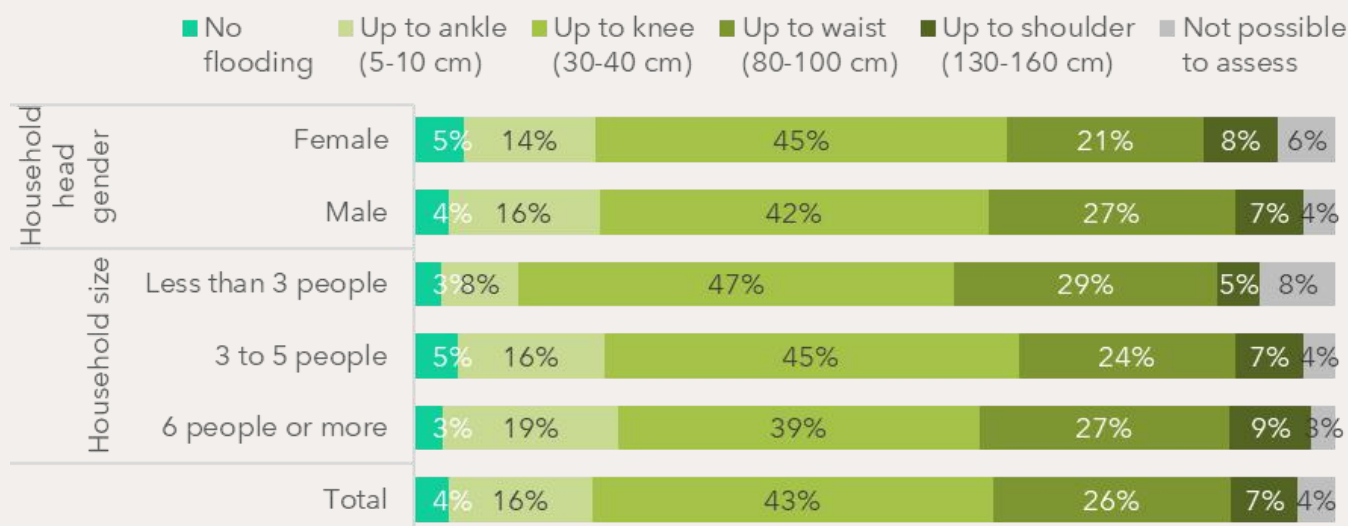


Figure 19: The flooded buildings by gender of household head and household size

In total 29% of the households assessed reported a need for urgent repair to their buildings, while 57% reported no need for such repairs. A further 14% were uncertain about whether or not repairs were necessary (refer to Figure 20).

The municipalities of Zvečan/Zvečan (50%), Klinë/Klina (40%) and Skenderaj/Srbica (44%) have the highest percentages in need of urgent repairs. In contrast, the municipality of Podujevë/Podujevo reported no need for urgent repairs.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

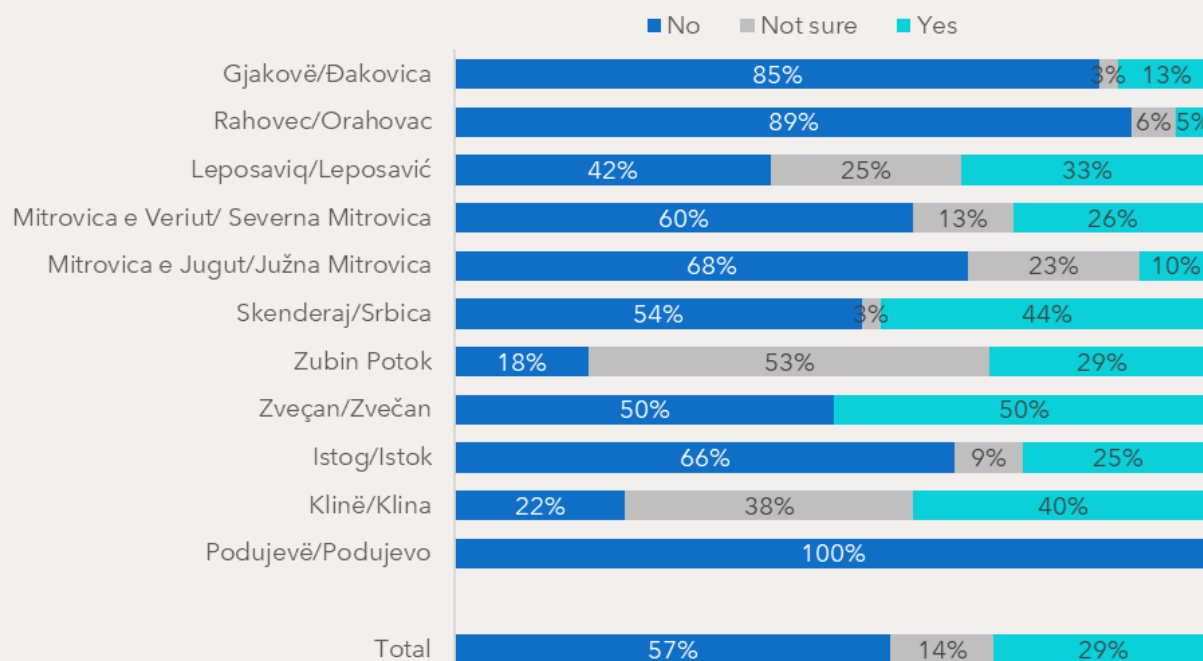


Figure 20: Urgent repairs for the building to prevent further damage in the future, by municipalities

The need for urgent repairs to prevent further damage to buildings was analyzed by gender of the household head and family size (illustrated in Figure 21). The results indicate that there is no significant difference between male- and female-headed households in terms of the need for urgent repairs.

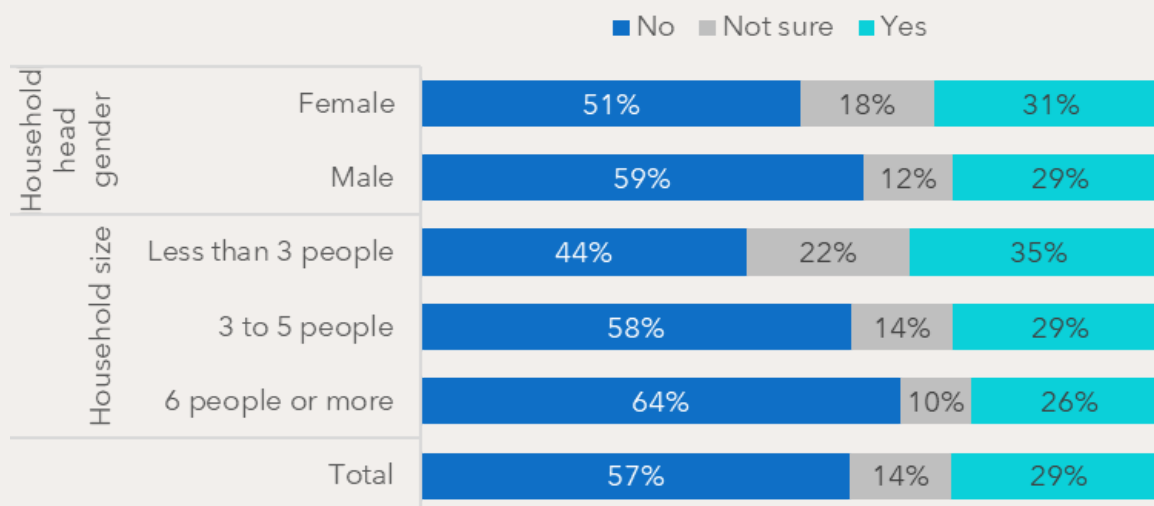


Figure 21: Urgent repairs for the building to prevent further damage in the future, by gender of household head and household size

According to the assessment, 57% of the households interviewed reported the need to secure dangerous structural elements in their homes (see Figure 22). In addition, 13% of the households identified the need for temporary roofing or shelter solutions, while 10% reported the hazards posed by utilities. Only 2% of the households reported the need to restore access to utilities, while the remaining 18% of the households reported other repair needs.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

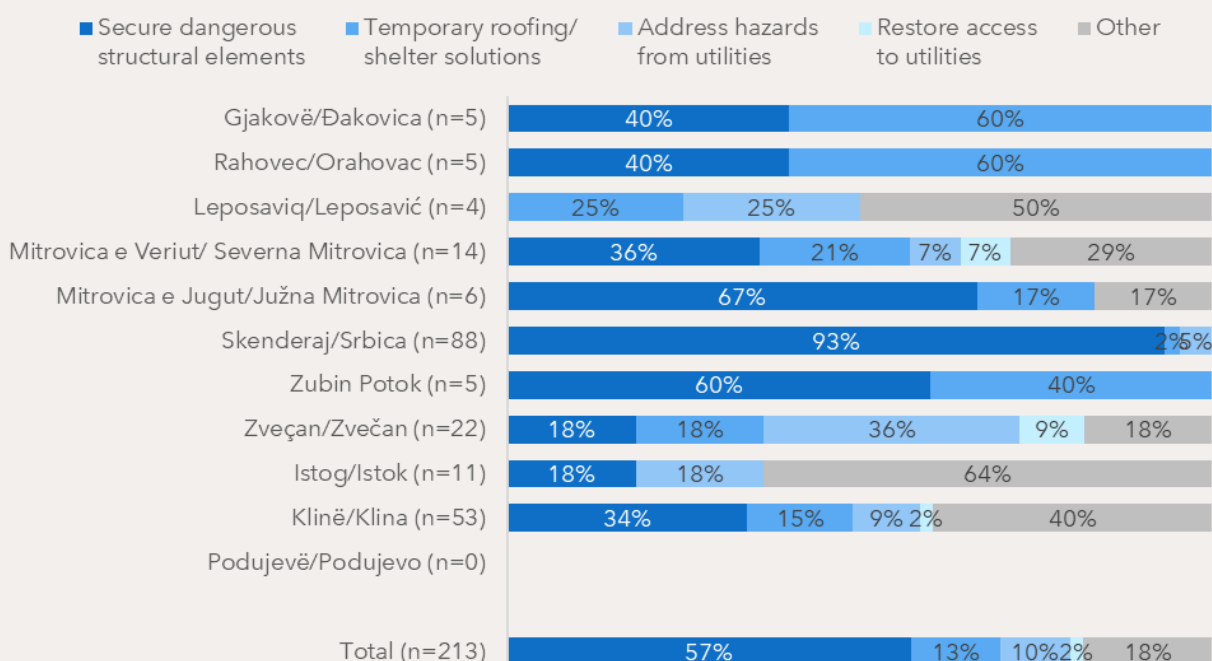


Figure 22: Type of the essential/urgent repairs to the building by municipalities

Figure 23 illustrates the type of essential/urgent repairs needed for buildings disaggregated by the gender of the household head and family size.

The data shows that 62% of male-headed households report the need to secure dangerous structural elements, while only 37% of female-headed households report the same need. In contrast, more females (26%) than males (10%) report the need for temporary roofing/shelter solutions. Additionally, 17% of female headed households report hazards from utilities, while only 9% of male-headed households report the same need.

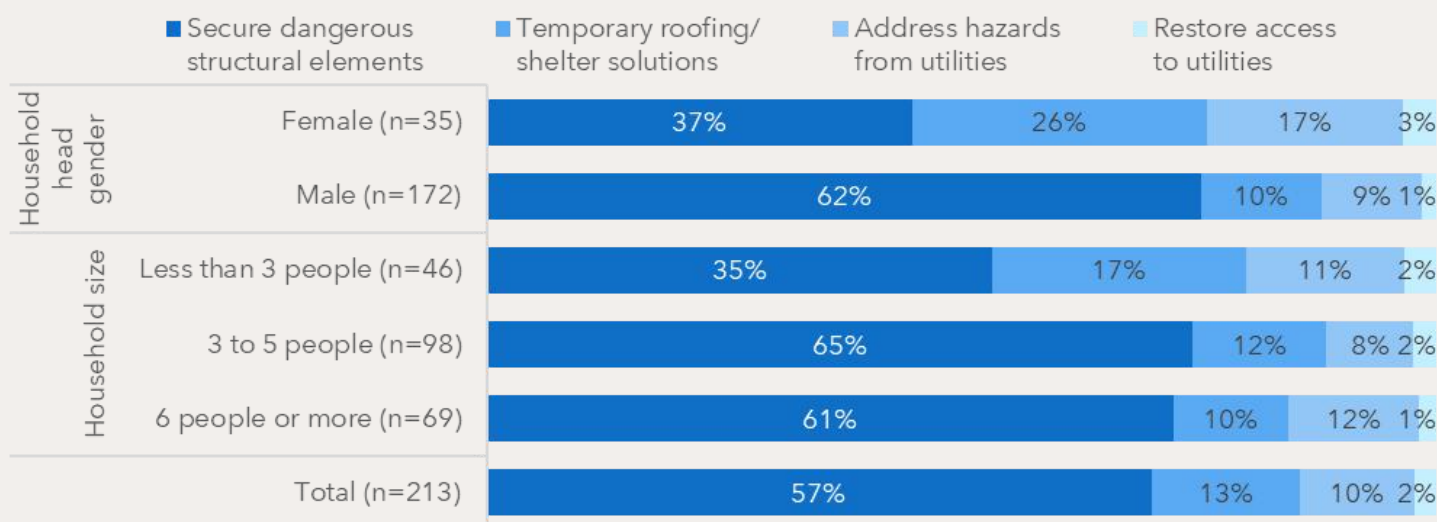


Figure 23: Type of the essential/urgent repairs to the building by gender of household head and household size

More than half (54%) of the assessed households reported damage to either or both the internal and public electricity network supply (refer to Figure 24). The majority of this damage (40%) was in the internal network; 10% of households reported damage to the public electricity network, while 4% reported damage to both their internal and public networks.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

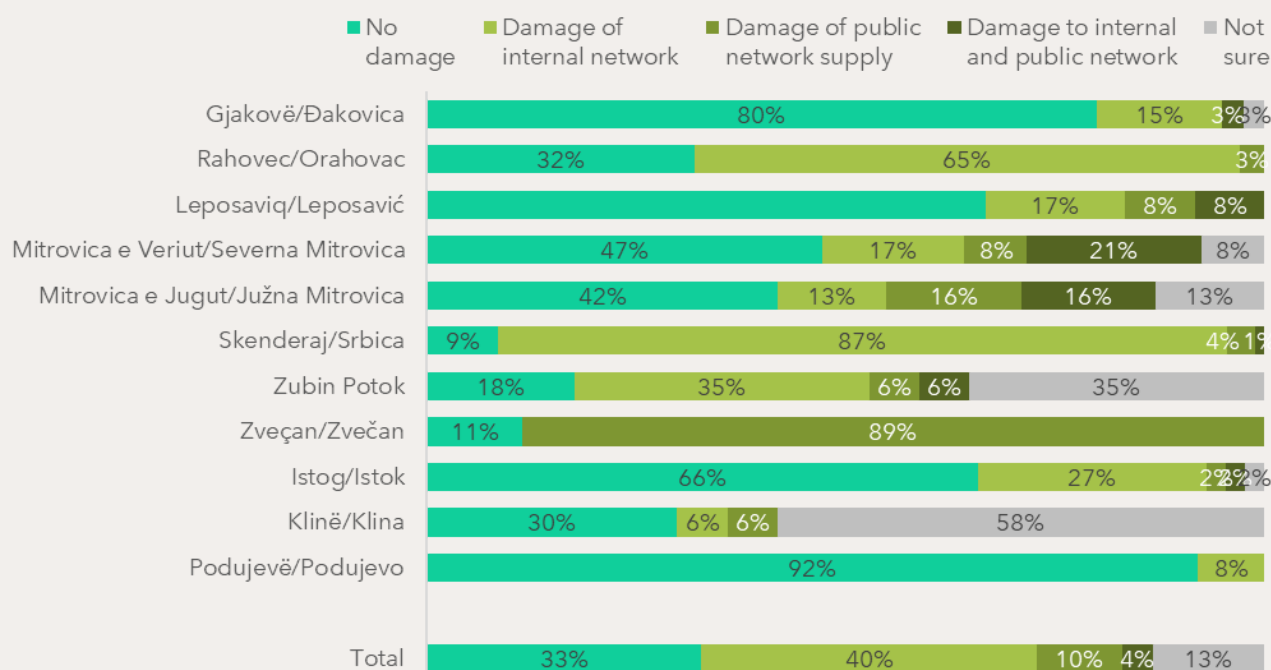


Figure 24: Type of damage to the electricity system as a result of flood by municipalities

A relatively large share of households experiencing electricity problems, combined with a relatively large household size, indicates that a considerable number of people were left without a source of electricity during mid-January. The potential impact of cold weather can thus increase flood impacts on population health.

Figure 25 provides disaggregated data on the damage with respect to gender and family size. 40% reported no damage; 31% of those with male heads reported no damage. 44% of families with 6 or more members reported damage to the internal network, while 36% reported no damage to the electricity supply.

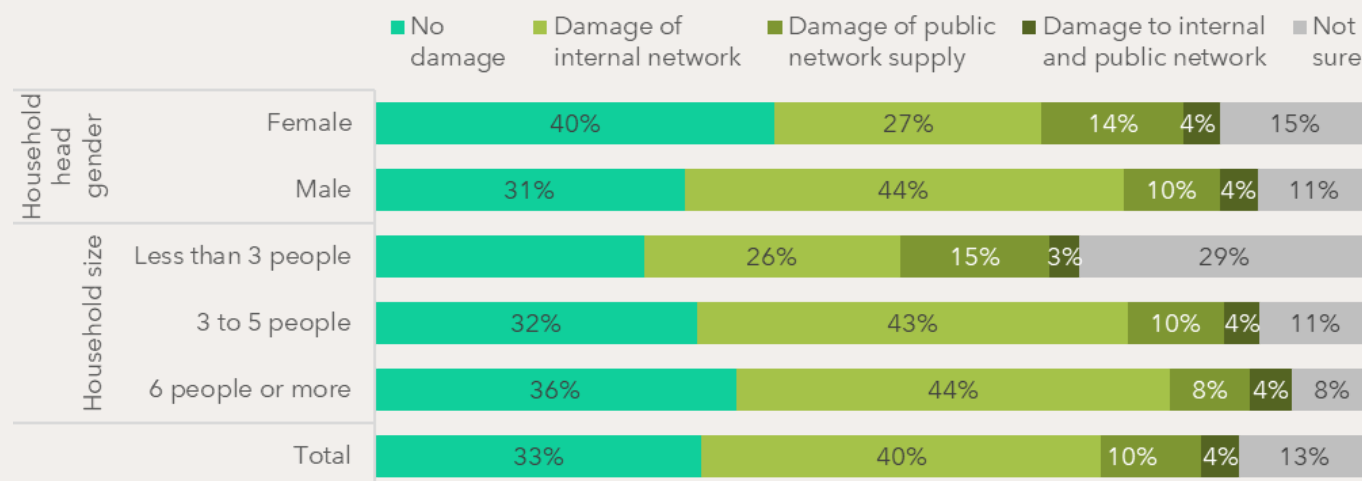


Figure 25: Type of damage to the electricity system as a result of flood by gender of the household head and household size

In terms of hazard exposure, in total 69% of assessed buildings are exposed to water hazards, followed by electrical hazards (6%) and asbestos hazards (1%).

Figure 26 illustrates the proportions of different building hazards by municipalities. The huge incidence of water as a building hazard across municipalities is due to the fact that the assessed households are those that have been affected by the floods. Flooding is a natural disaster accounted within the water type of building hazard.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

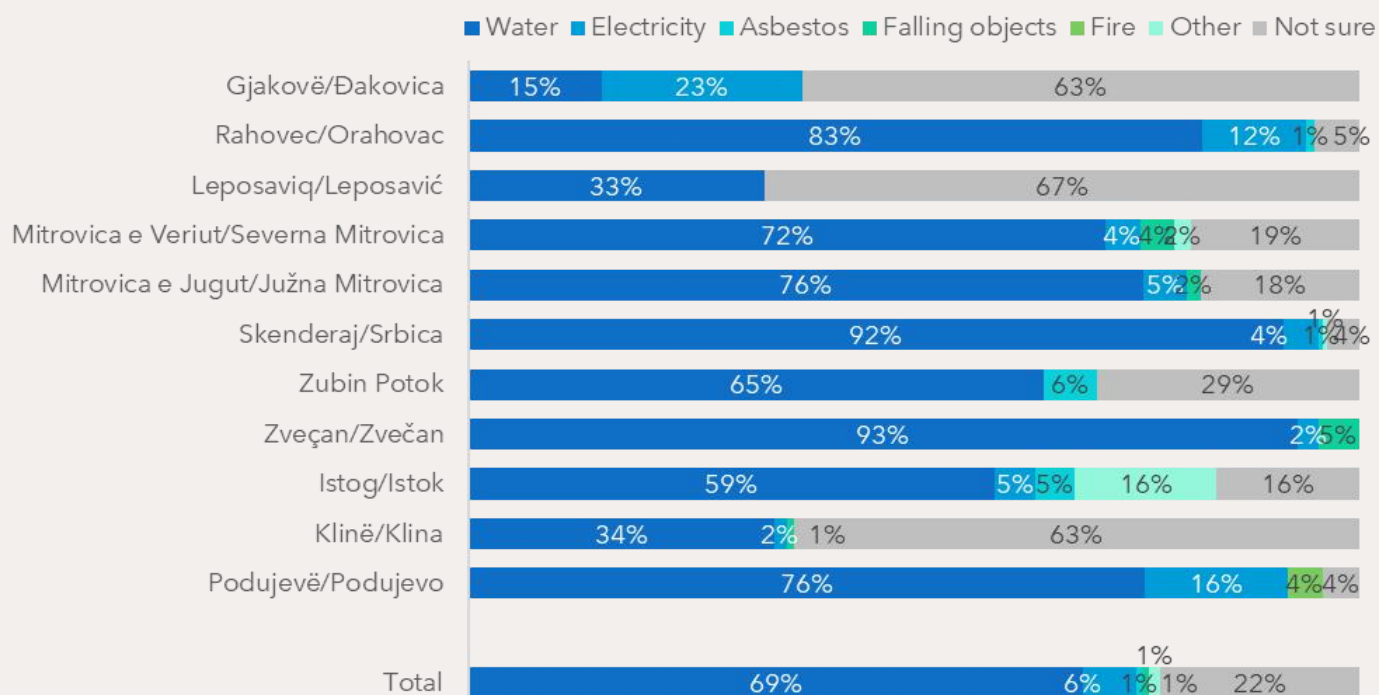


Figure 26: Building hazards by municipalities

No significant gender differences are observed in the responses related to building hazard exposure. 66% of female headed households face water building hazards, and 71% of male-headed households (see Figure 27).

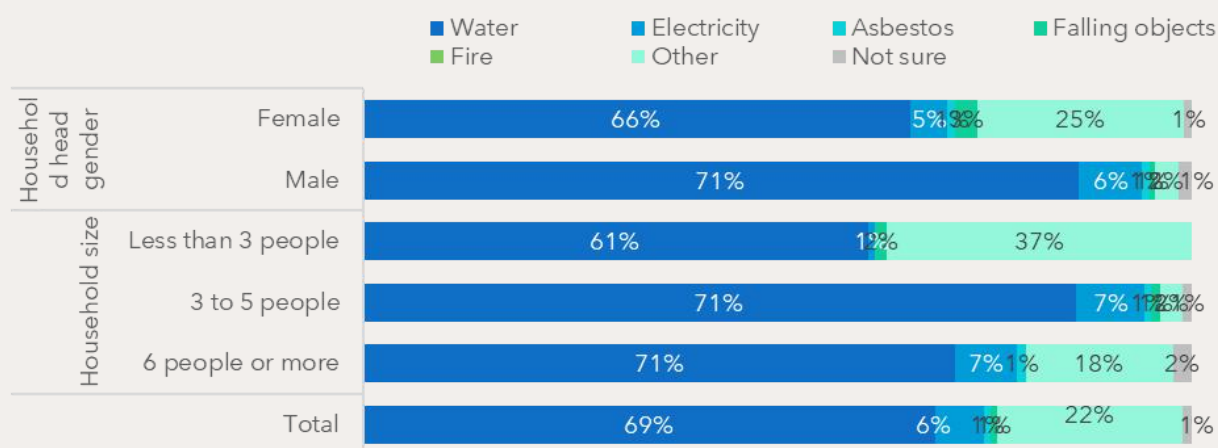


Figure 27: Building hazards by gender of household head and household size

The recent floods have generated quantities of debris or waste that require proper management by the respective municipalities. However, only a small percentage (9%) of all interviewed households reported the need for debris removal from their area.

The results presented in Figure 28 further show that some municipalities, such as Leposaviq/Leposavić, Mitrovicë e Veriut/Severna Mitrovica, and Zubin Potok have a higher demand for disaster-related waste management by their local authorities, with percentages of 17%, 21% and 35% respectively.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

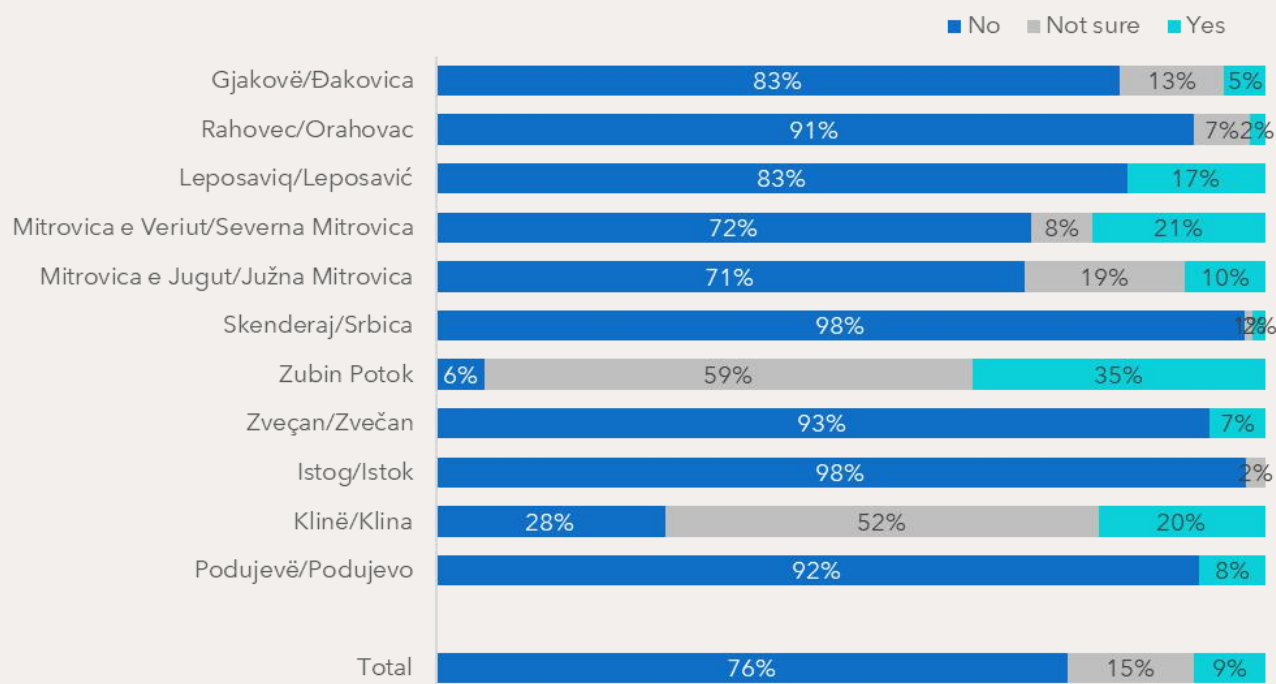


Figure 28: Debris/disaster waster that requires management by municipalities

No major differences are recorded in terms of gender when it comes to reporting on debris/waste management as a result of the flood event.

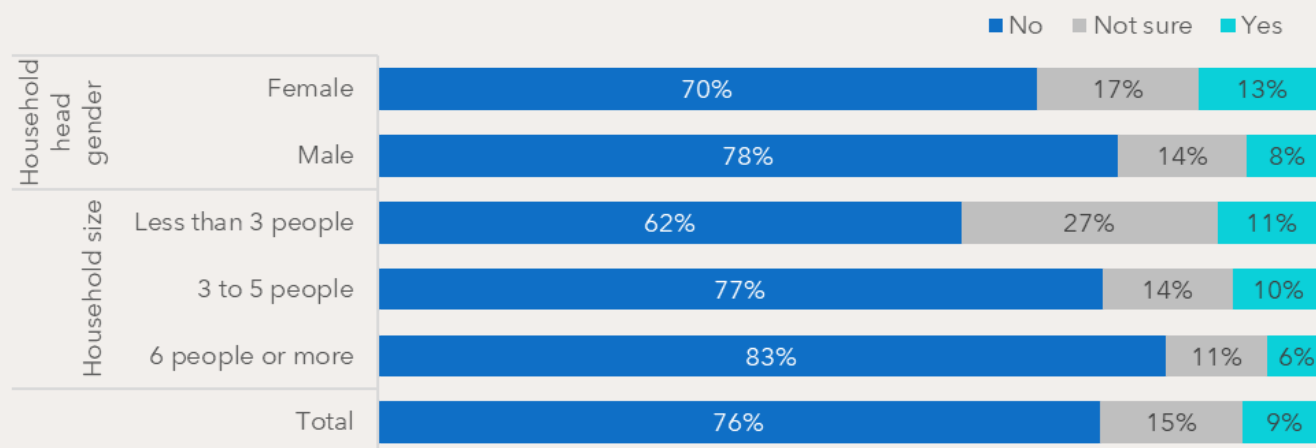


Figure 29: Debris/disaster waster that requires management by gender of household head and household size

The assessment suggests that the location of a building, surrounding environment and infrastructure can significantly affect the level of building disaster preparedness. This sub-section focuses on providing key information about such aspects.

Regarding road accessibility, most households (80%) are connected to the city by asphalted or concrete roads, while 18% are connected by gravel or unpaved roads (see Figure 30). The latter types can be severely affected by flooding, which may hinder communication during a disaster

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

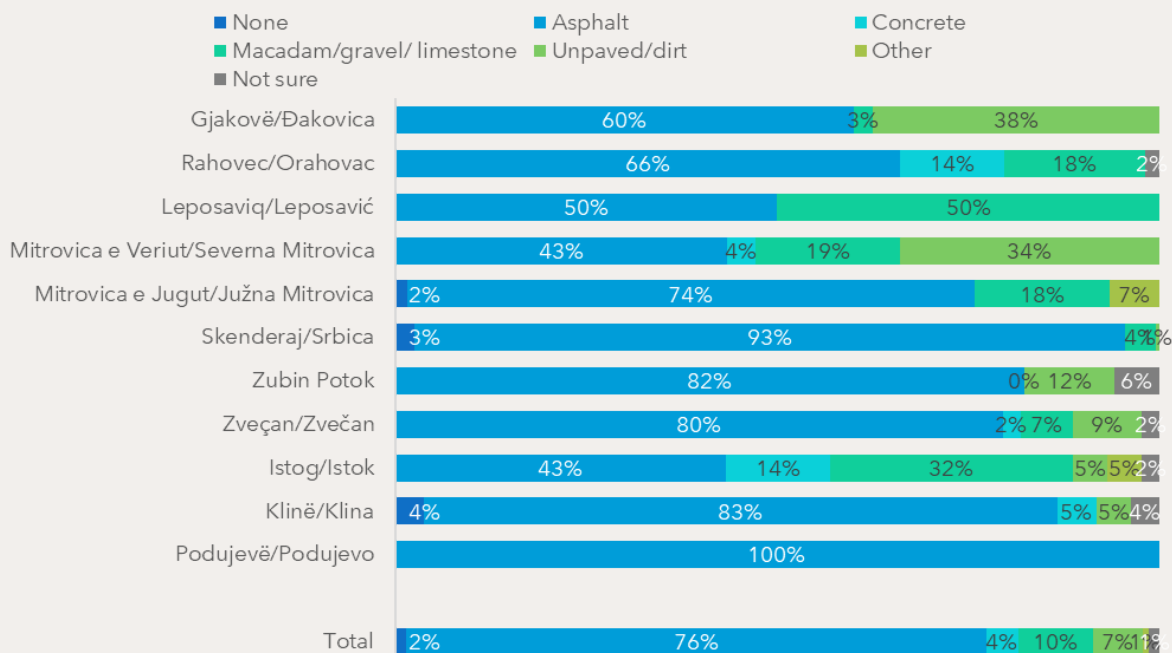


Figure 30: Type of road the building is accessible by from the main town centre by municipalities

No major gender differences are spotted when it comes to the type of the road the building is accessible by from the main town centre.

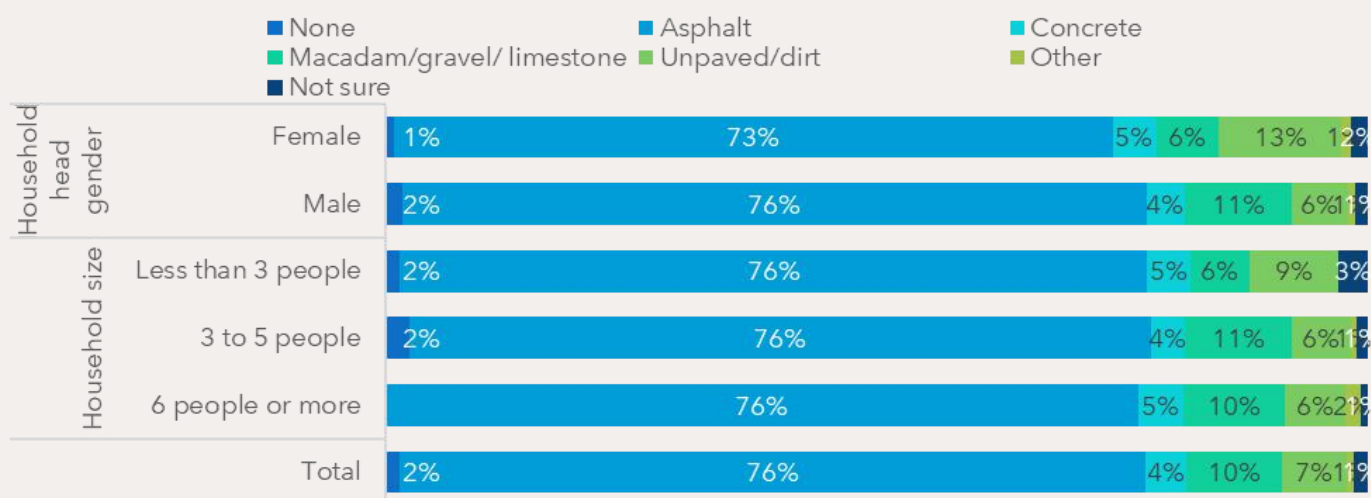


Figure 31: Type of road the building is accessible by from the main town centre, by gender of household head and household size

The majority of the interviewed households (85%) do not report a risk from trees or tall structures located near their building. Exceptions are the municipalities of Leposaviq/Leposavić (25%), Zubin Potok (47%) and Zvečan/Zvečan (25%), with higher percentages of reported trees and other tall structures that could become a threat during a natural disaster (for more refer to Figure 32).

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

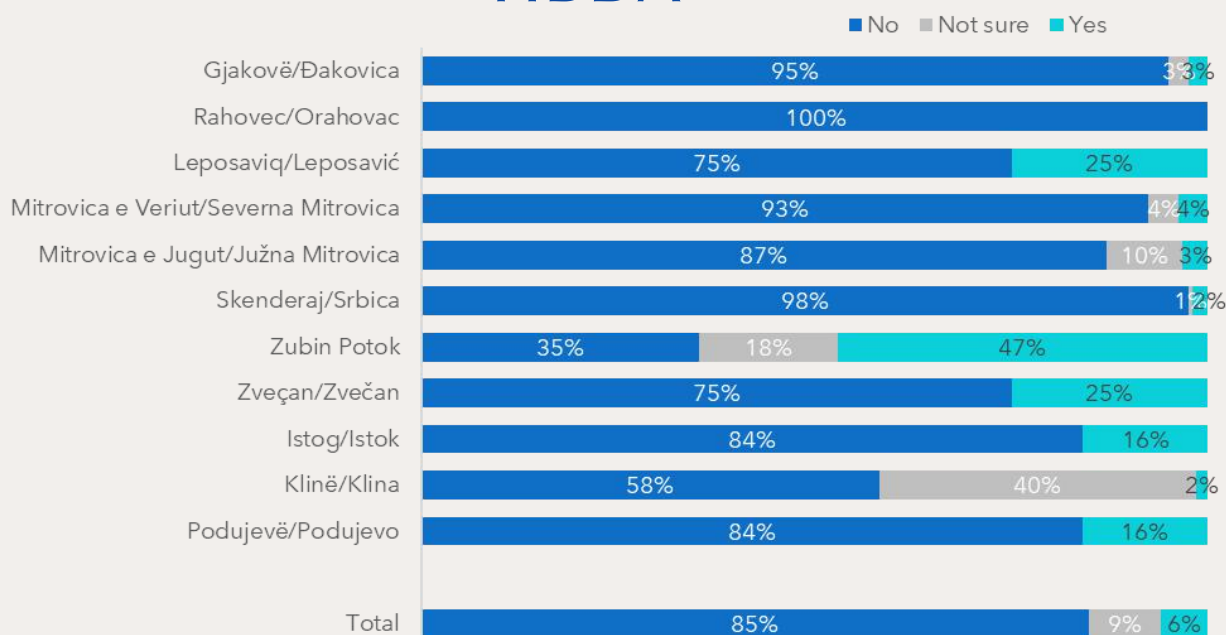


Figure 32: Trees and/or tall structures near the building that could become a threat, by municipalities

No gender differences are reported in terms of exposure to tall structures or trees near buildings.

The same can be said for family size. Details are provided in the figure below.

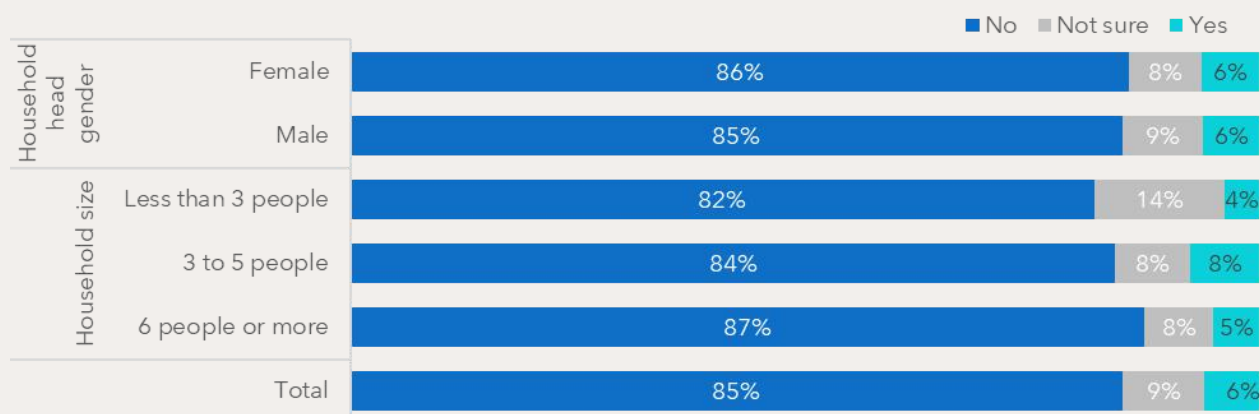


Figure 33: Trees and/or tall structures near the building that could become a threat, by gender of household head and household size



IMPACT ON EDUCATION AND HEALTH

Apart from structural and non-structural damage to household buildings, the rapid and heavy rainfall resulted in many blocked villages with restricted access to schools and health centers, and caused disruptions to drinking water supply and access to clean sanitation.

Approximately 40% of households declared that their children could not attend school due to the floods. Municipalities are still coping with severe damage to bridges and roads, indicating that access is yet to be fully re-established. The ability of municipalities to cope with such damage will be critical in ensuring that the necessary infrastructure is restored, and thus that individuals are able to access the services they need. Mental health was also affected, with significant proportions of the population reporting feeling anxious, sad, afraid or unsafe.

Around 46% of households reported difficulties or constraints in accessing healthcare centres, health services and medical supplies (see Figure 34). 2% of the interviewed households reported no access to such services as a result of the flood event. Approximately 35% of interviewees did not report any restriction in access to health services, and 20% declared that they did not know.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

In terms of municipal differences, 98% of respondents in Gjakovë/Đakovica reported issues in accessing health services, followed by 97% of respondents in Skenderaj/Srbica. **It is noteworthy that 25% of respondents in Leposaviq/Leposavić declared no access whatsoever.** Inability to access healthcare centres and medical supplies may also exacerbate underlying vulnerabilities, especially as 11% of individuals declare themselves to be chronically ill and 8% to be elderly.

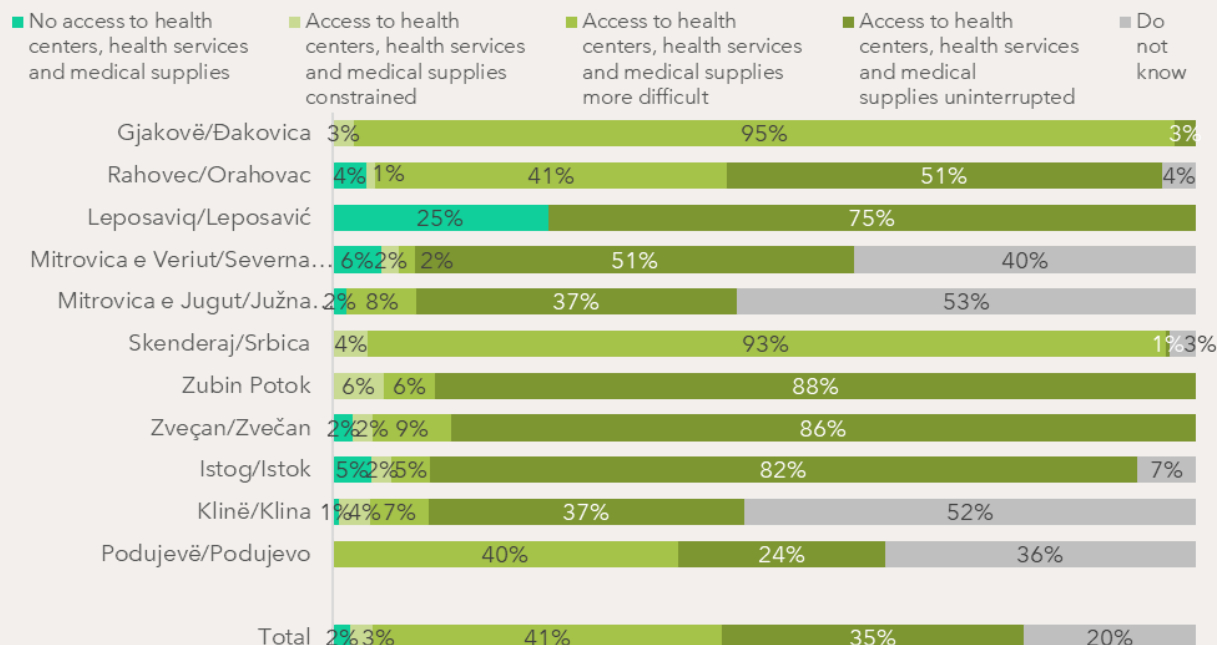


Figure 34: Changes in the level of access to health services since the flood by municipalities

In total, two out of every five assessed households declared that school-aged children stopped attending school due to the floods (see Figure 35). When it comes to variations by municipalities, 63% of respondents in Mitrovicë e Jugut/Južna

Mitrovica declared attendance interruptions, followed by Gjakovë/Đakovica (53%) and Skenderaj/Srbica (49%). Interruption to education can have negative impacts on children's academic progress and long-term opportunities, especially following the interruptions experienced as a result of strikes and the COVID-19 pandemic.

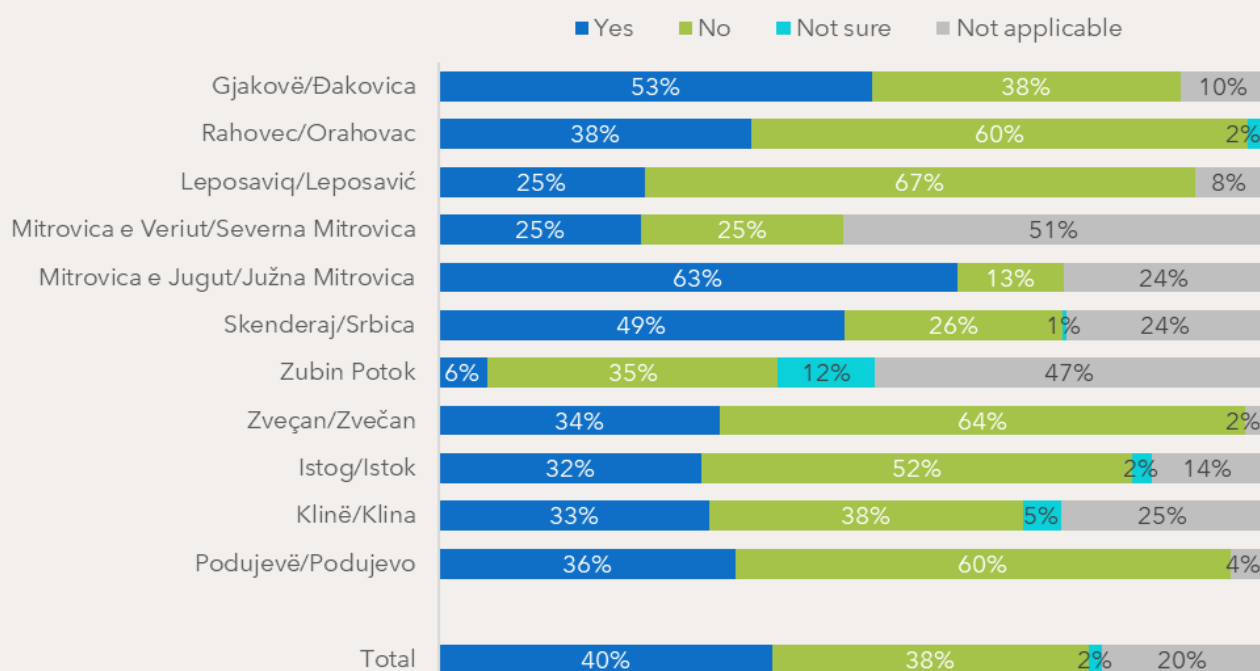


Figure 35: School-aged children stopping attendance due to floods by municipalities

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

The effect of the flood on the emotional state of the population – **in terms of feeling more afraid, anxious, sad, angry, disappointed or unsafe – has been enormous.** The assessment suggests that most of the population is anxious (four out of every five households), afraid (three out of every four households), or sad (one in every two households), and one **out of every three households feels unsafe (29%)** – see Figure 36, including variations by municipality. Such emotional shifts can have significant mental health impacts, which may require psychological support and interventions.

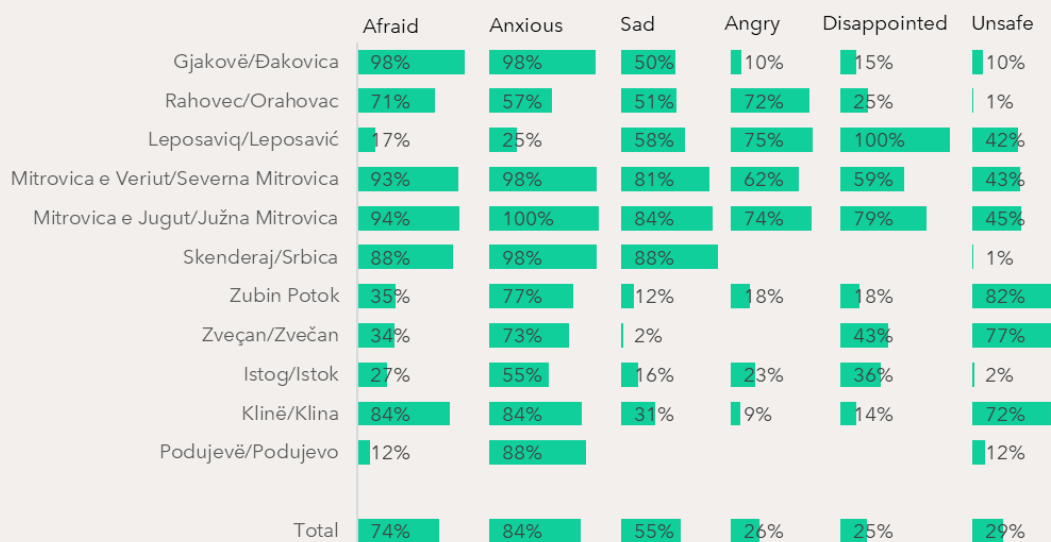


Figure 36: Experience of any major shift in emotional situation in terms of feeling more afraid, anxious, sad, angry, disappointed or unsafe, by municipalities

Disruptions to clean water supply and sanitation were considerable. Although primary water sources are still available in 89% of the interviewed households, there was damage to water network systems and in many areas water supply was interrupted (see Figure 37). **Approximately half of households reported damage to internal or public water networks, with Zvečan/Zvečan (98%), Skenderaj/Srbica (91%) and Mitrovicë e Jugut/Južna Mitrovica (57%) being affected the most.**

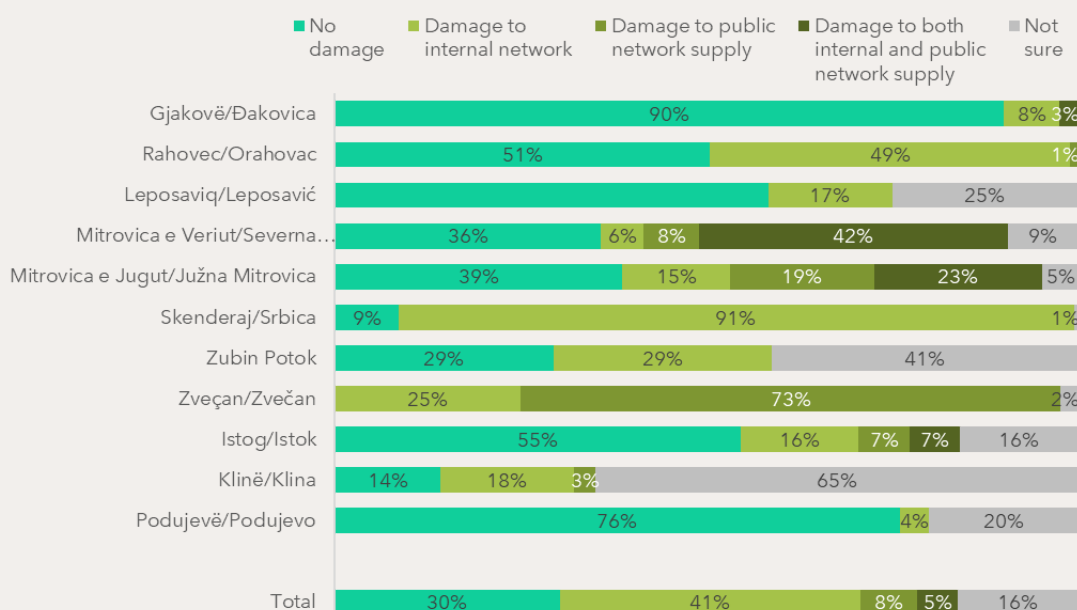


Figure 37: If the facility is connected to the water supply system, has it suffered any damage as a result of the flood? By municipalities

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

Access to toilet facilities and to a functioning wastewater removal system has also deteriorated, with half of households reporting decreased access to clean sanitation (toilet facilities). The municipalities of Skenderaj/Srbica (94%), Mitrovicë e Veriut/Severna Mitrovica (60%) and Podujevë/Podujevo (60%) were affected the most; Zubin Potok (0%), Klinë/Klina (5%) and Leposaviq/Leposavić (17%) have reported the least impact. Damage to wastewater systems is evident. In total 61% of respondents report damage to internal and external sewage networks. Variations per municipalities are reported in the figures below.

Floods cause disruptions to safe water for drinking, washing and domestic activities (water, sanitation and hygiene – WASH); inadequate access to WASH can then increase exposure to various diseases, which can further harm the affected communities. The damage to water and wastewater networks suggests the need to improve the designing, building and maintaining of water and sanitation systems to withstand disasters¹⁰.

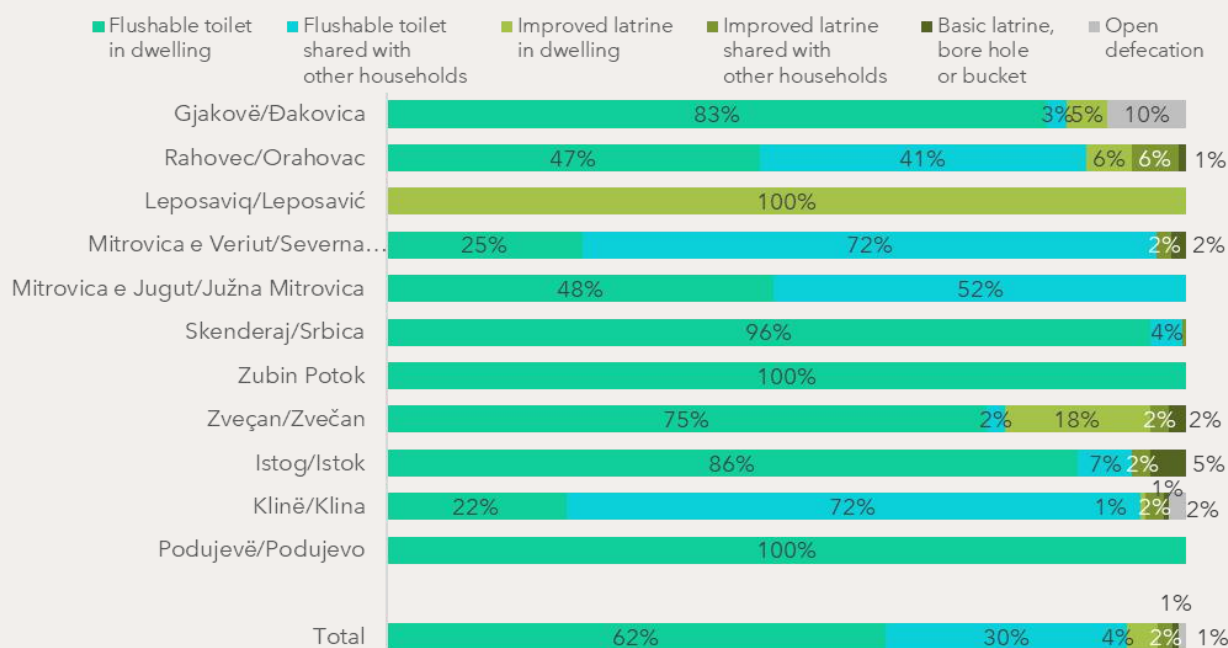


Figure 38: Toilet facility that household members are currently using, by municipalities

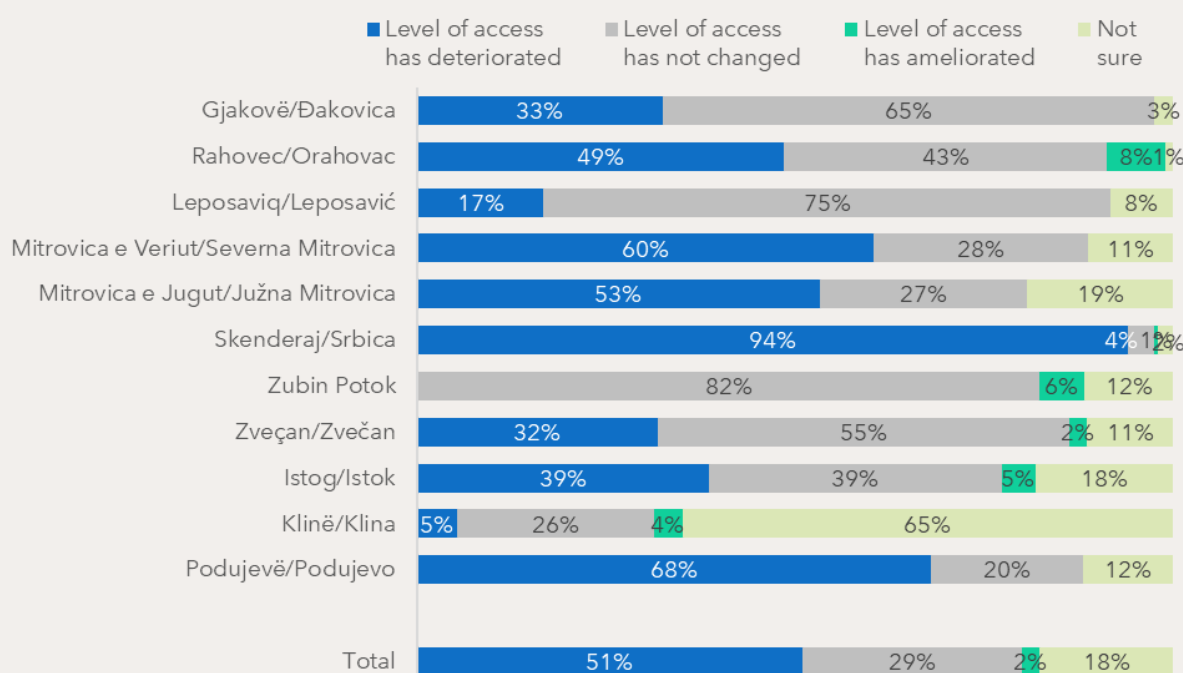


Figure 39: Changes in the level of access to clean sanitation (toilet facility) due to the floods, by municipalities

[10] Health Emergency and Disaster Risk Management Fact Sheets
https://cdn.who.int/media/docs/default-source/disaster-mngmt/risk-management-wash-december2017.pdf?sfvrsn=81ddcc1a_1&download=true

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

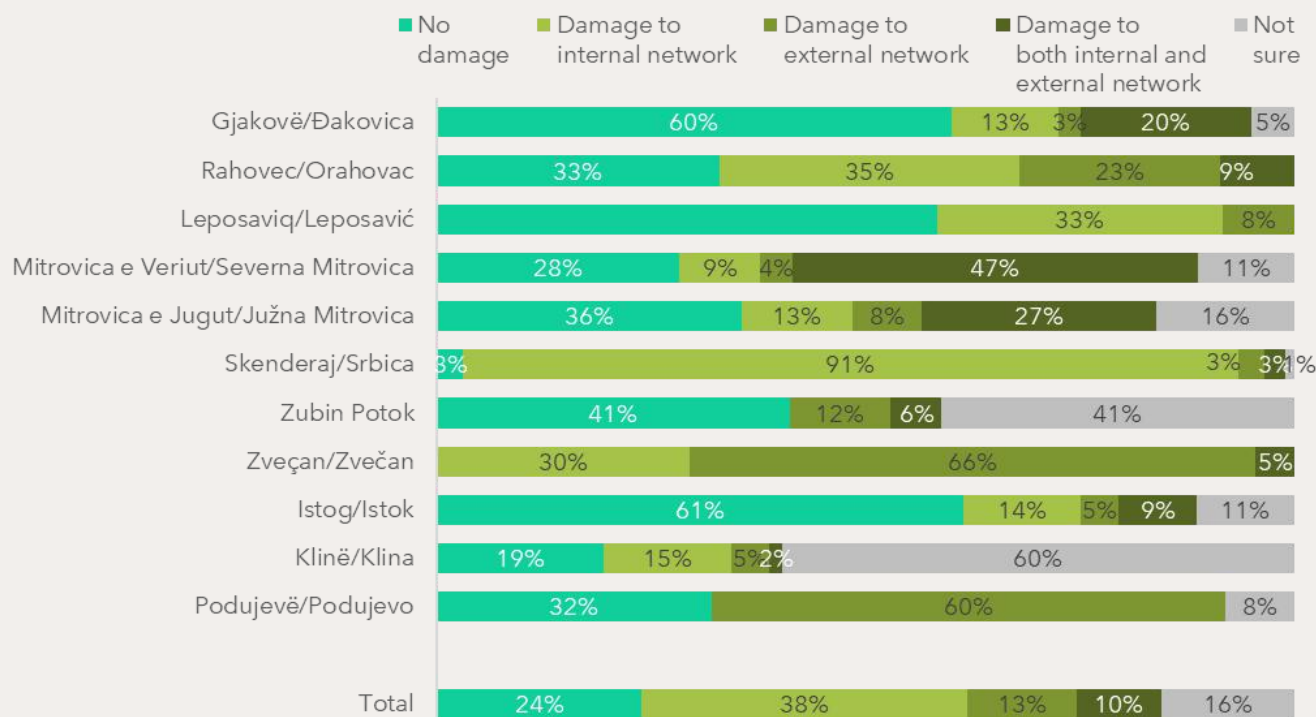


Figure 40: Location of damage to the wastewater system by municipalities



IMPACT ON LABOUR AND FINANCIAL CAPITAL (HOUSEHOLD ITEMS)

The damage caused to public infrastructure, which resulted in restricted access to important public service providers and main town centres, disrupted the normal functioning of households and businesses and in turn affected the level of household income. In addition to damage to buildings, households also lost their assets. Overall, the financial damage in terms of household items is reported to be 3.75 million euros¹¹, with average damage per household of 5,102 euros. Considering the significant number of households which were not assessed because they belong to those living abroad, the level of such damage is estimated to be higher. Skenderaj/Srbica, which was the municipality most affected by the floods of January, reported the highest level of household item damage – approximately 1 million euros (see Figure 41).



Figure 41: The estimated value of damaged household items as a result of floods (euros) by municipalities

[11] Please note that the amounts depicted in this figure as well as the financial losses reported in subsequent figures are self-reported by the interviewed households.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

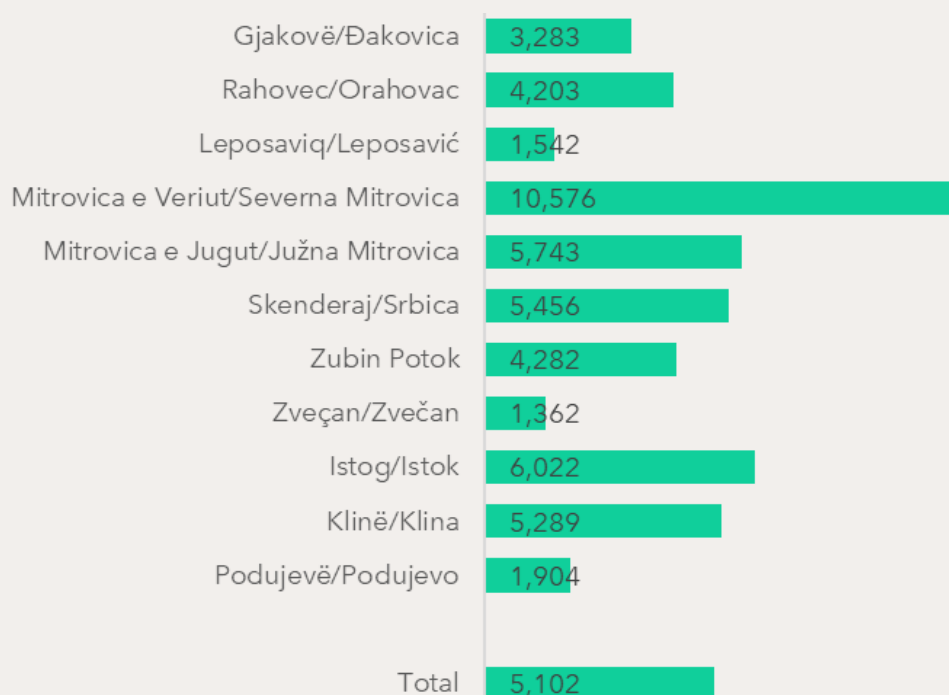


Figure 42: The estimated mean value of damaged household items as a result of floods (euros) by municipalities

Looking at the household size and gender structure, male-headed households report a higher value of damage to household items as compared to female-headed households¹². However, this is mainly a result of the low number of women-headed households.

This is demonstrated by approximately similar levels of mean value of damage, illustrated in Figure 44. The value of damage is reported to be higher in families consisting of 3-5 people and 6 people or more, which is not surprising as larger households tend to own more household items than smaller ones.

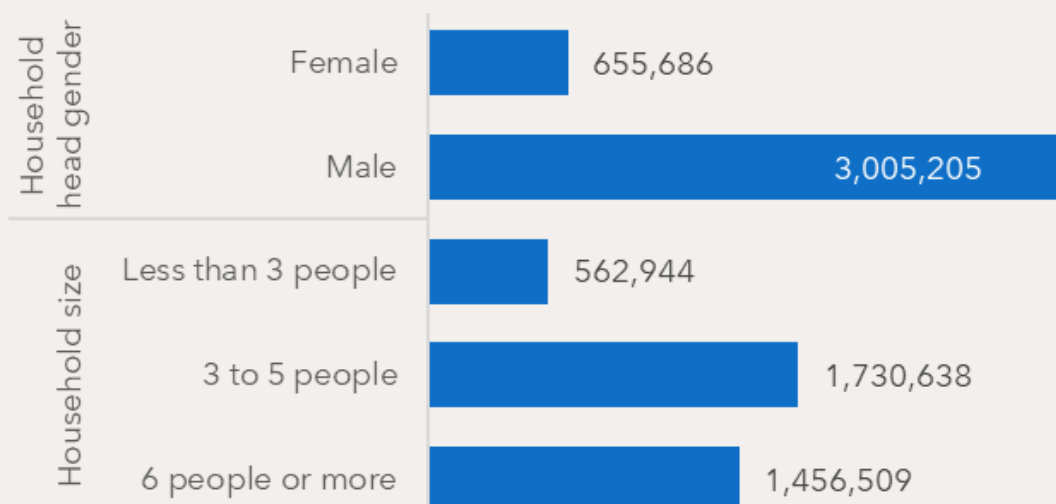


Figure 43: The estimated value of damaged household items as a result of floods (euros) by gender of household head and family size

[12] Please note that the estimated value of damaged household items for male- and female-headed households does not add up to the overall estimation. This is because there are 24 respondents that did not report their gender. The figures for them are: average €3,717 and sum €89,200.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

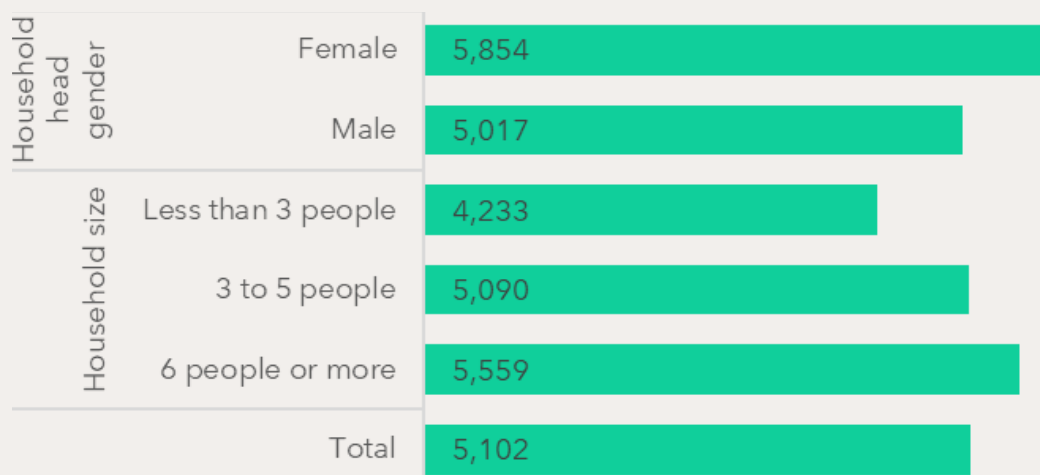


Figure 44: The estimated mean value of damaged household items as a result of floods (euros) by gender of household head and family size

Unemployment of the affected individuals is quite high (28%). Labour inactivity rate is also substantial with 20% of the respondents declaring themselves unemployed and not looking for a job.

Only 10% of the interviewed were employed and had a written contract for long-term employment, indicating a considerable lack of job security and of financial stability. In general, Kosovo continues to experience labour market challenges, with the Kosovo Statistics Agency (KAS) reporting a current unemployment rate of 16.6% (18.9% for women and 15.6% for men)¹³. The risk of unemployment is higher for women, young people and other vulnerable groups.

These levels of unemployment and inactivity coupled with a severe lack of job security indicate **a high vulnerability to natural disasters and play an important role in determining socio-economic resilience or ability to bounce back from a shock.**

This flood event was not severe enough to cause alterations in the employment status of the affected population. **The survey results indicate that the vast majority (98%) did not experience any shifts in employment status as a result of the disaster.** This might also be due to high unemployment and inactivity rates even before the event, but it might also be related to the fact that a high proportion of the employed are engaged in the service sector, which might be less affected by floods compared to the agricultural sector or other sectors.

As Figure 47 depicts, approximately 25% of the employed individuals were engaged in the service sector, followed by 16% in domestic work and 13% in agriculture, livestock and forestry.

Despite this, it is important to note that even a small increase in unemployment can have significant consequences for affected individuals and communities, particularly in the context of high pre-existing levels of unemployment and economic vulnerability. The literature suggests a link between natural disasters and falling into poverty both in the immediate aftermath as well as in the longer term¹⁴. Therefore, well-targeted resilience-building actions which take into account the precarious economic situation are needed to protect these individuals from future flood events.

[13] Please note that the amounts depicted in this figure as well as the financial losses reported in subsequent figures are self-reported by the interviewed households.

[14] Hallegatte, S., Vogt-Schilb, A., Rozenberg, J., Bangalore, M., & Beaudet, C. (2020). From poverty to disaster and back: A review of the literature, *Economics of Disasters and Climate Change*, 4, 223-247. <https://link.springer.com/article/10.1007/s41885-020-00060-5>

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

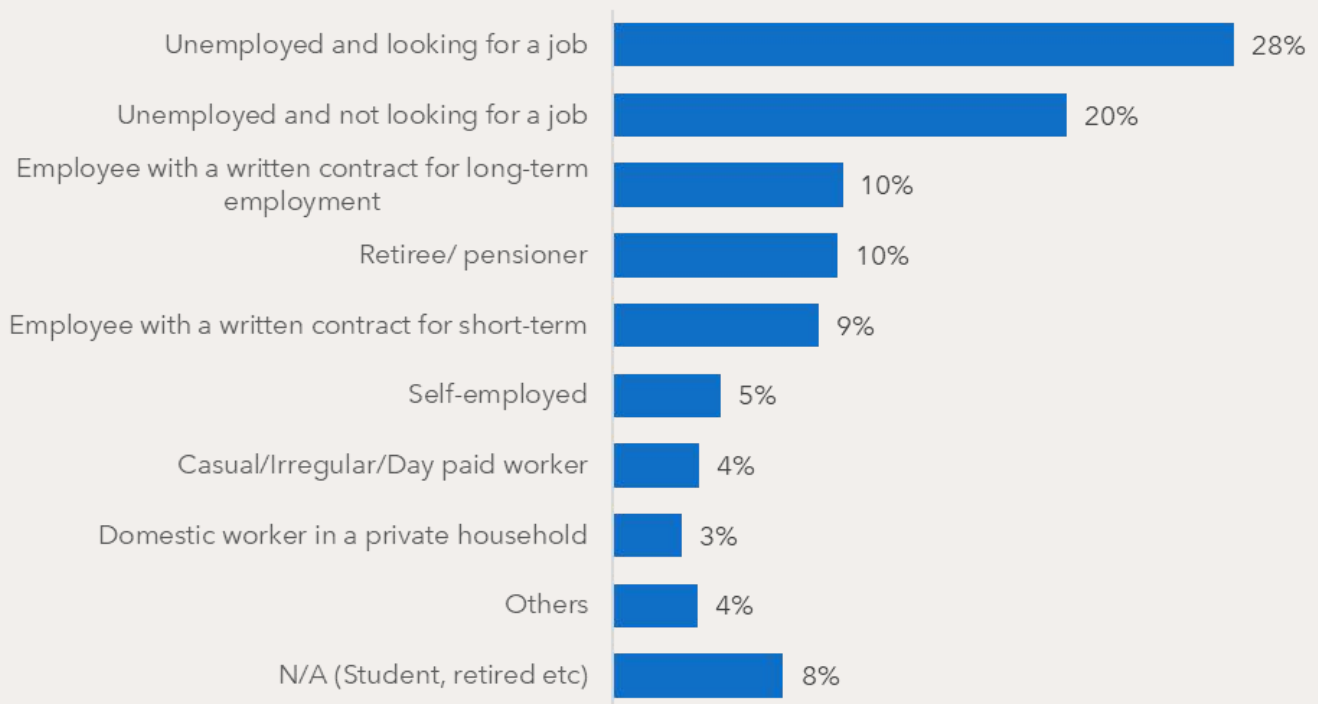


Figure 45: Individual employment status for the main job in the 3 months before the floods

n=2318

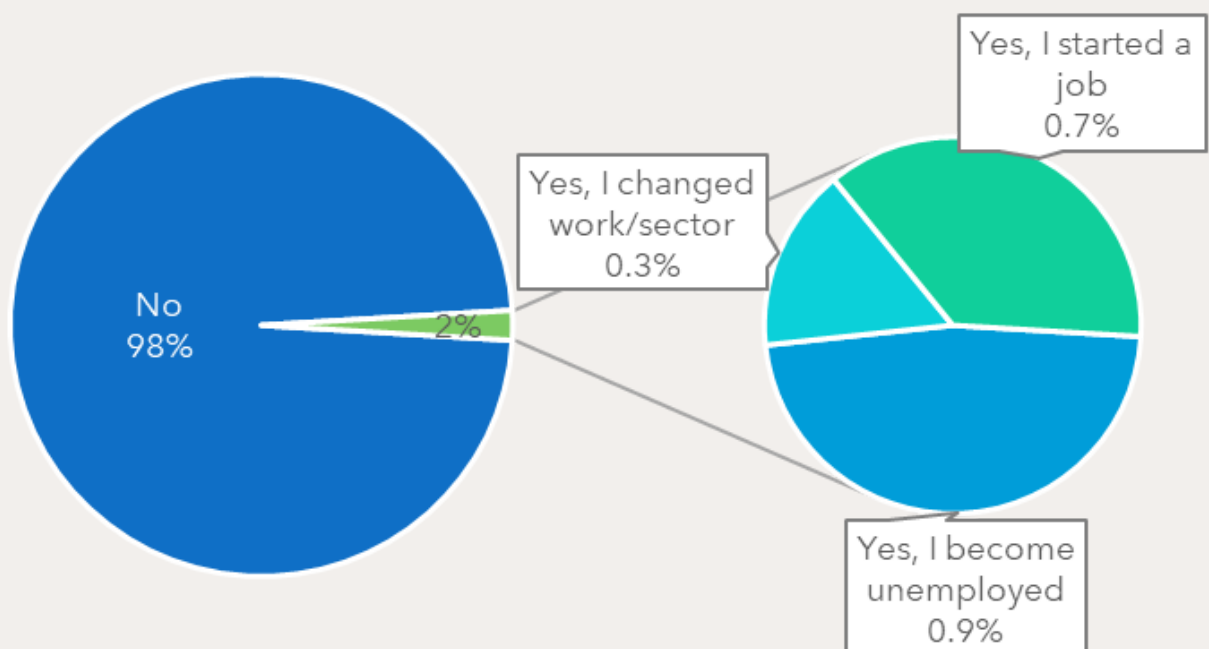


Figure 46: Change of the individual employment status after the floods

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

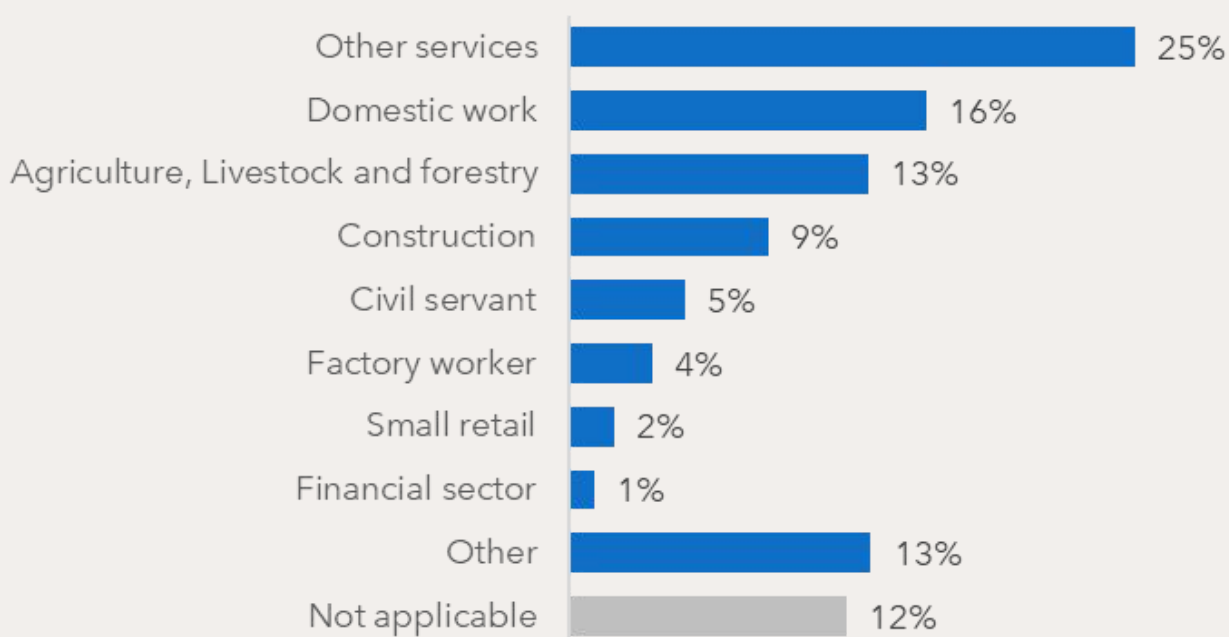


Figure 47: Main sector of activity of the workplace of the individuals, currently

The vast majority (90%) of respondents are not covered by any health insurance scheme, which can limit access to health services in the aftermath of a disaster and may also lead to long-term complications (see Figure 48). It is worth noting that Kosovo is yet to establish any type of public health insurance scheme, and currently the population can only choose to enrol in private schemes which can be unaffordable economically.

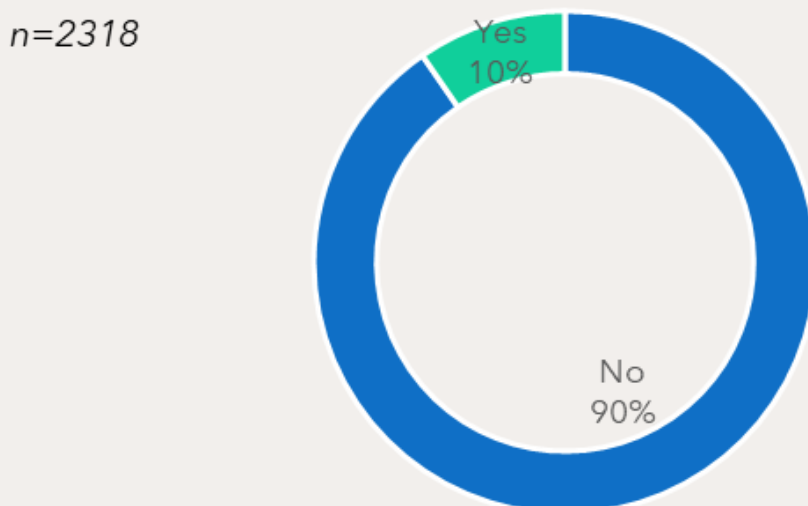


Figure 48: Individuals covered by health insurance

Even though shifts in employment status were minimal, monthly household income was considerably affected, with 67% of respondents reporting a decrease relative to the three months before the flood. Of these, 40% reported a slight decrease, and 27% a moderate to significant decrease.

The variation of responses per municipality is depicted in Figure 49. Over 95% of the respondents in Podujevë/Podujevo and Skenderaj/Srbica reported a monthly income decrease, which suggests that these municipalities were hit more by the shock. Klinë/Klina was also substantially affected, with 42% of households experiencing a great income decrease.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

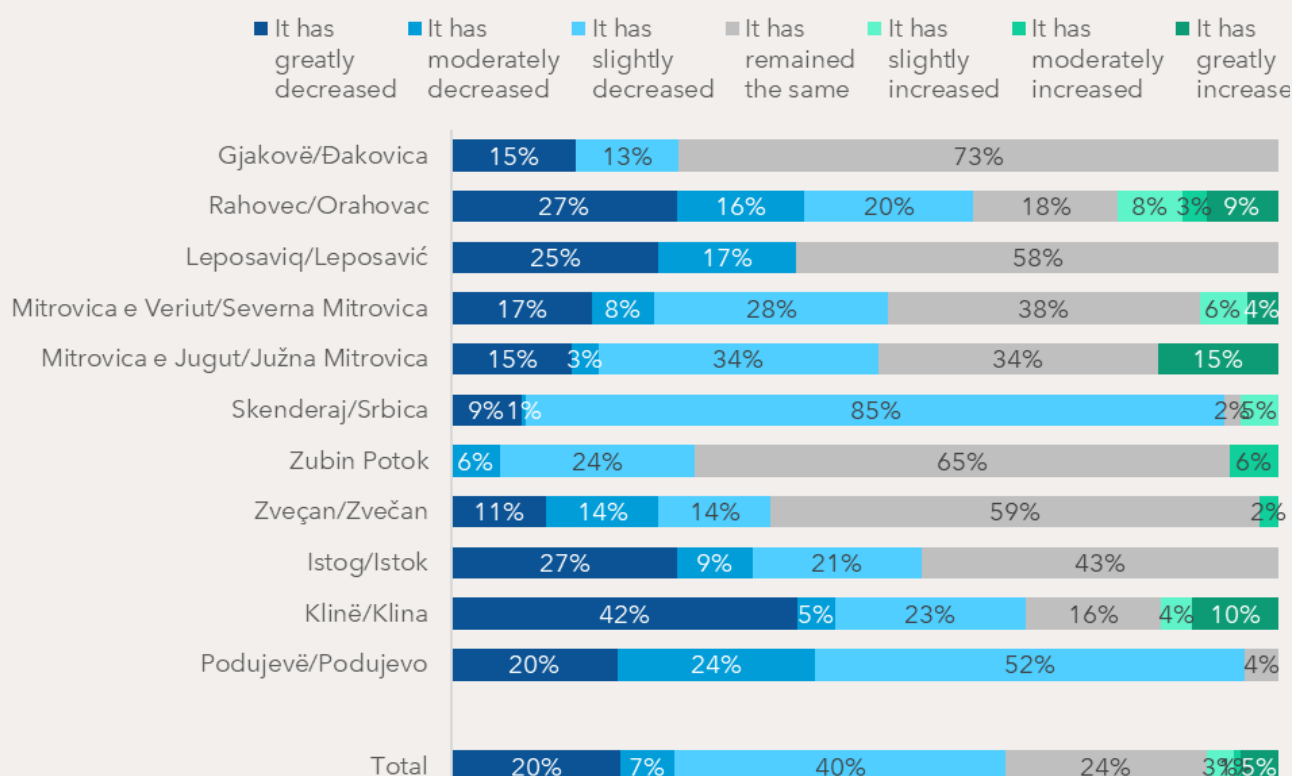


Figure 49: Monthly household income change compared to 3 months before the floods, by municipalities

In terms of gender differences in monthly income change as a result of floods, more male-headed households (69%) report some level of income decrease relative to the three months before the floods than female-headed households (55%). **Bigger households were more affected by monthly income decreases than smaller ones.**

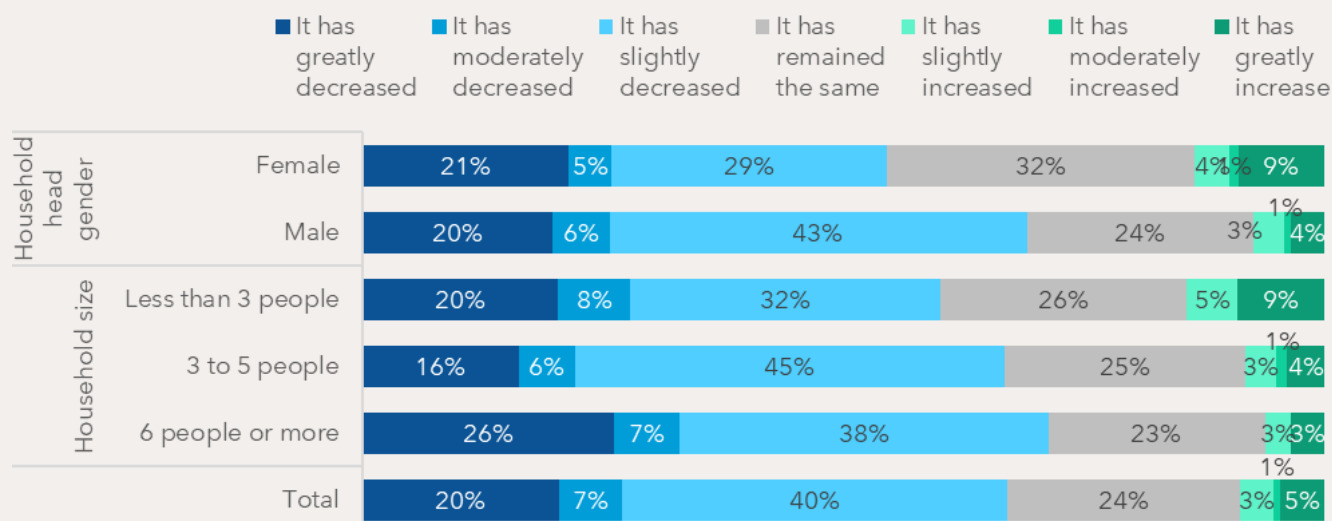


Figure 50: Monthly household income change compared to 3 months before the floods by gender of household head and family size

In addition to job and asset loss, which directly affect monthly household income, natural disasters also result in unexpected expenses related to food and non-food items, as well as to key asset recovery enabling a normal existence. For this reason, it is expected that such shocks can lead to reduced household ability to pay monthly expenses.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

Unfortunately, a comparison of households' ability to cover monthly expenses for the periods before and after the flooding is not possible, due to lack of data. Therefore, the extent to which the flooding affected the ability to pay monthly expenses cannot be clearly established. However, the significant share of households declaring income decrease should also be translated into a lower ability to cover such expenses.

The HBDA shows that approximately 72% of respondents can cover their household's monthly expenses. However, most of them (37%) can do so for only one month and only 13% can do so for more than six months, reflecting a lack of economic and financial security. In total, 23% of the respondents are not able to cover their expenses even for one month, indicating a significant impact from the flood event on their household.

Variations per municipality are quite large. 83% of respondents in the municipality of Gjakovë/Dakovica declared that they do not have financial means or savings to pay monthly expenses, followed by Mitrovica e Veriut/Severna Mitrovica (79%) and Mitrovica e Jugut/Južna Mitrovica (68%). Overall, these figures are not surprising given the high unemployment and inactivity rates of the affected population before the flooding.

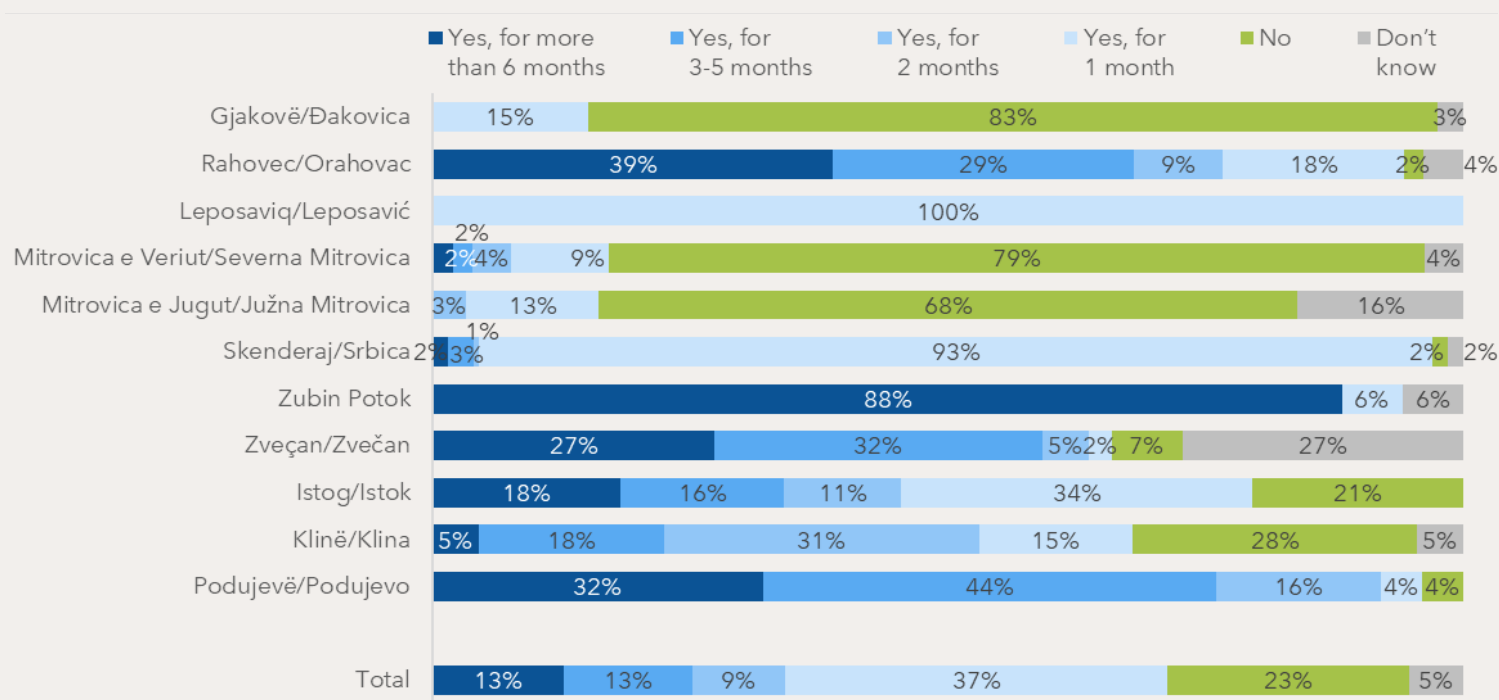


Figure 51: Sufficiency of household income or savings to pay for monthly expenses by municipalities

There is a clear gender difference when it comes to the ability to pay monthly expenses. Female-headed households are less likely to be able to provide than male-headed households, reflecting the overall precarious economic situation of women in Kosovo and exposing the vulnerability of female-headed households. Specifically, 37% of female-headed households declare that they do not have sufficient means to cover expenses, compared to 21% of male-headed households.

In terms of household size, smaller households report more difficulties in covering their monthly expenses than bigger households. Specifically, 57% of households with fewer than 3 members are able to cover their expenses compared to 75% of households with 6 people or more.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

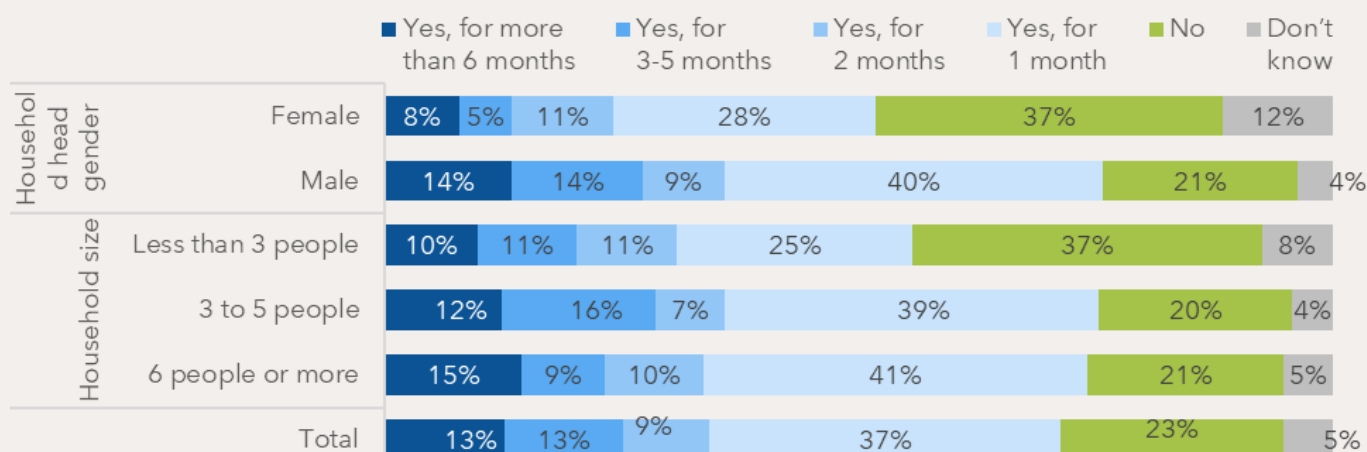


Figure 52: Sufficiency of household income or savings to pay for monthly expenses by gender of household head and family size

HOUSEHOLD COPING STRATEGIES AND RECOVERY NEEDS

Decreases in income as a result of natural disasters push the affected households and individuals to employ various coping mechanisms and strategies to manage. These can include reliance on savings to purchase food, selling of assets, borrowing of money, and reducing expenditure on other factors (i.e. health or education) – which in turn affect the long-term financial stability of the household. The adoption of coping strategies varies on the income level of the household but also on factors such as education, the type of disaster, its severity and physical location, and information opportunities, to name a few¹⁵. Overall, the literature suggests that the types of strategies households rely on to cope with the aftermath of a disaster are sequential, **meaning that initially households rely on coping mechanisms which do not jeopardize future earnings (i.e. savings) and move on to disposing of productive assets that are directly linked to future earnings (equipment, machinery) only if it is necessary and the crisis is prolonged¹⁷.**

Assessing household coping strategies is of essential importance to understanding the severity of the crisis and the vulnerability of the affected population; this then has the potential to feed into a well-tailored response and effective recovery. The coping strategies of the affected population in Kosovo have been assessed by obtaining information about the mechanisms they relied on to support themselves and their families in the flood aftermath and specifically with regard to food security. It is positive to note that the majority of the affected households were not forced to engage in any coping mechanism due to lack of food. **The most-used coping mechanism is reliance on savings, with 21% of households reporting having spent their savings because of the disaster. Fewer households (10%) were forced to send their members to eat elsewhere, approximately 9% have reduced expenses on health and education and only 6% have purchased food on credit – which may also impact their financial stability. In terms of disposing of productive and non-productive assets, this does not appear to be a major issue: only a very small fraction (approximately 2%) of households reported doing so.**

In general, these results indicate that the flood event was not severe enough to push people into more strategic asset disposal, despite the overall high unemployment and labour inactivity rates in the affected households. Nonetheless, savings disposal and reductions in health and education expenditures should be taken into account and proper assistance interventions need to be designed to support the affected individuals.

[15] Mondal MSH, Murayama T, Nishikizawa S, Determinants of Household-Level Coping Strategies and Recoveries from Riverine Flood Disasters: Empirical Evidence from the Right Bank of Teesta River, Bangladesh, Climate 2021; 9(1):4. <https://doi.org/10.3390/cli9010004>

[16] Rashid, D. A., Langworthy, M., & Aradhyula, S. V. (2006), Livelihood shocks and coping strategies: An empirical study of Bangladesh households (No. 379-2016-21620). https://www.researchgate.net/profile/Satheesh-Aradhyula/2/publication/23506513_Livelihood_Shocks_and_Coping_Strategies_An_Empirical_Study_of_Bangladesh_Households/links/58c579fc45851538eb8afa5d/Livelihood-Shocks-and-Coping-Strategies-An-Empirical-Study-of-Bangladesh-Households.pdf

[17] Ibid.

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

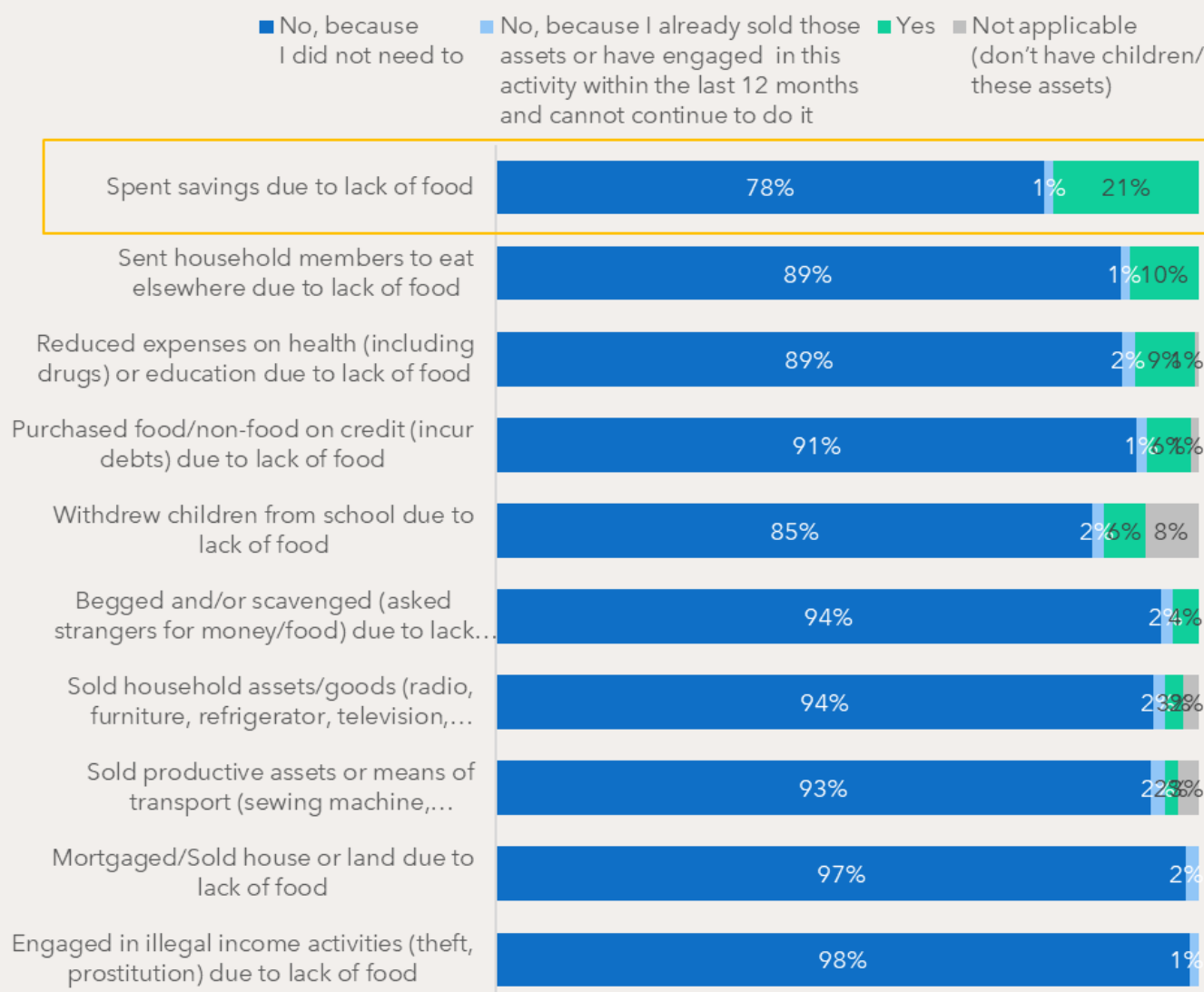


Figure 53: Household have to engage in these activities due to lack of food.
This figure provides a detailed picture of the reported coping mechanisms.

As the literature suggests¹⁸, the employment of coping mechanisms depends on many factors including location. Figure 54 provides a breakdown of the most-used coping mechanism (reliance on savings) by municipality.

Gjakova/Dakovica has been affected the most, with 85% of households relying on savings due to lack of food; this municipality is followed by Mitrovicë e Jugut/Južna Mitrovica (65%), Mitrovicë e Veriut/Severna Mitrovica (45%) and Podujevë/Podujevo (32%).

Even though Skenderaj/Srbica is the most affected municipality in terms of flood damage, the majority of households from this area have not reverted to any coping mechanism. This could be related to many factors and more data are needed to establish the reasons. Factors which could have played a role include the assistance deployed from the local and central levels and from miscellaneous organizations, and the economic situation of the affected households before the flood.

[18] Mondal MSH, Murayama T, Nishikizawa S, Determinants of Household-Level Coping Strategies and Recoveries from Riverine Flood Disasters: Empirical Evidence from the Right Bank of Teesta River, Bangladesh, Climate 2021; 9(1):4. <https://doi.org/10.3390/cli9010004>

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

Gender and household disaggregated data do not suggest any major differences with respect to relying on savings as a coping mechanism. Overall, both male- and female-headed households report similar reliance. A detailed breakdown is provided in Figure 55.

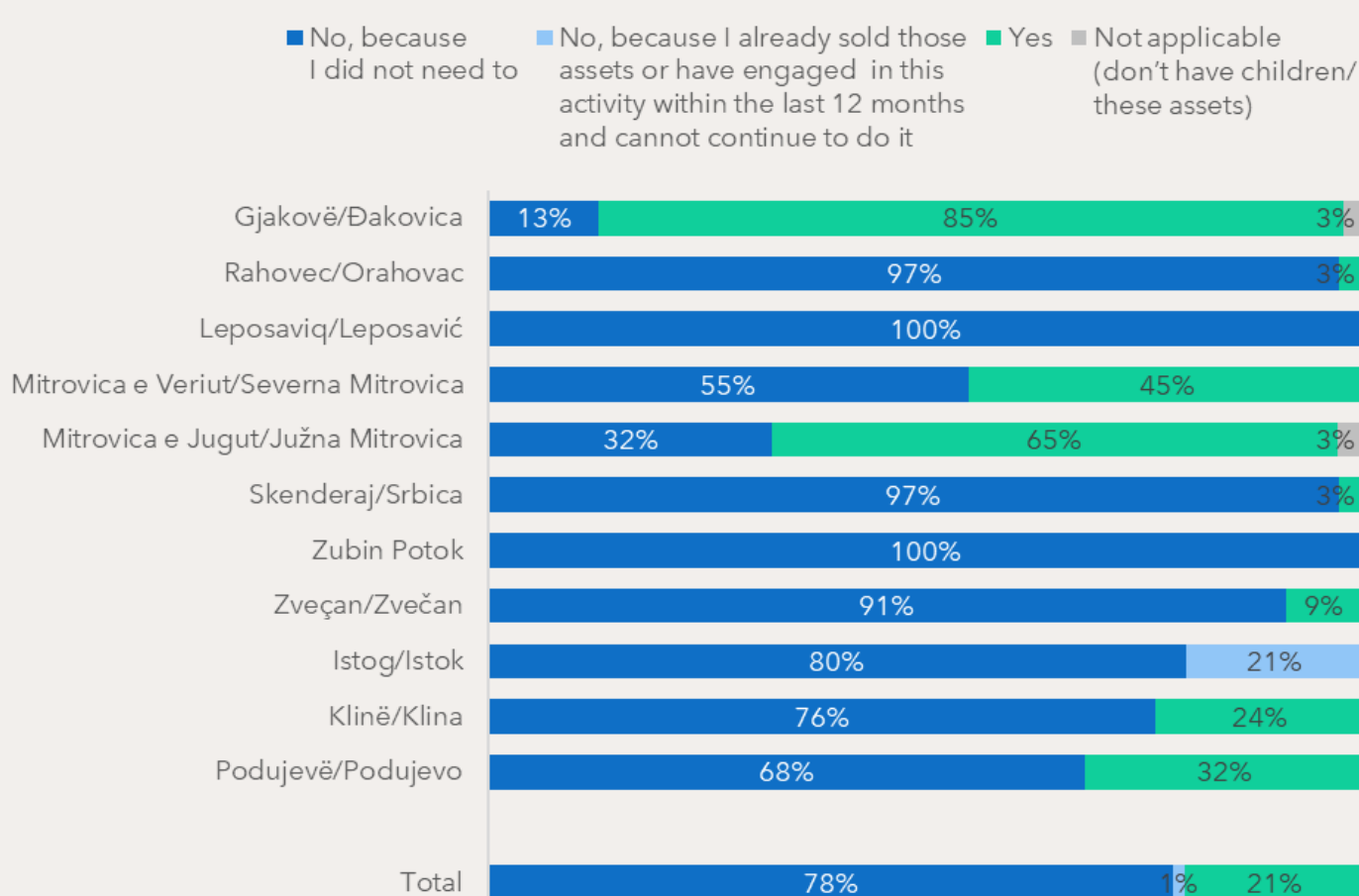


Figure 54: Spent savings due to lack of food by municipalities

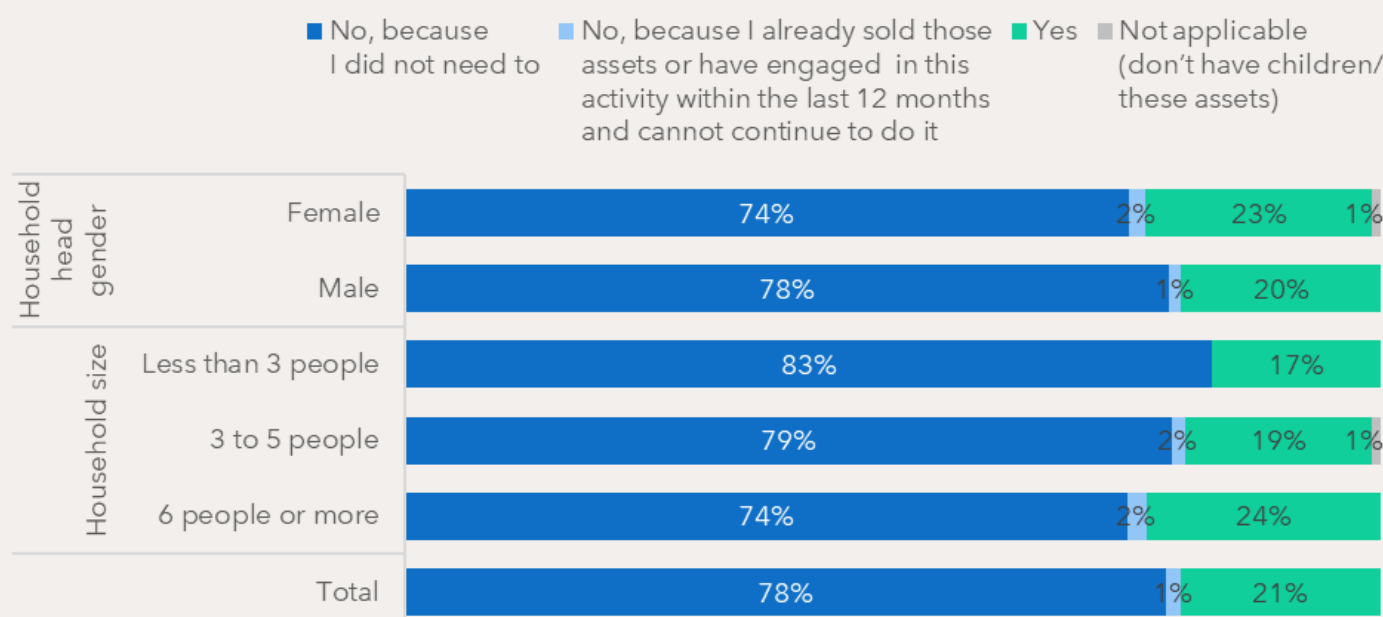


Figure 55: Spent savings due to lack of food by gender of household head and family size

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

When it comes to recovery needs, the affected households rank health (80%), water (60%) and food security (43%) as the top three which they need to address; see Figure 56. Variations by municipality, by gender of the head of household and by household size are depicted in Figure 57 and Figure 58.

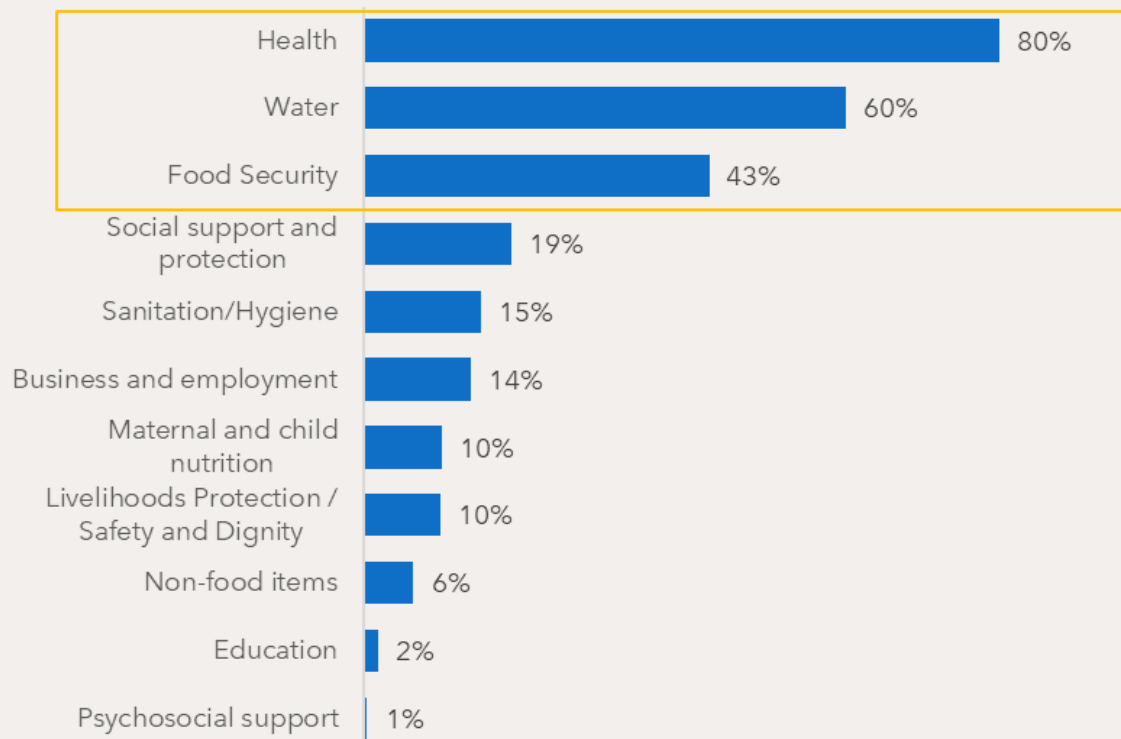


Figure 56: Household top priority needs

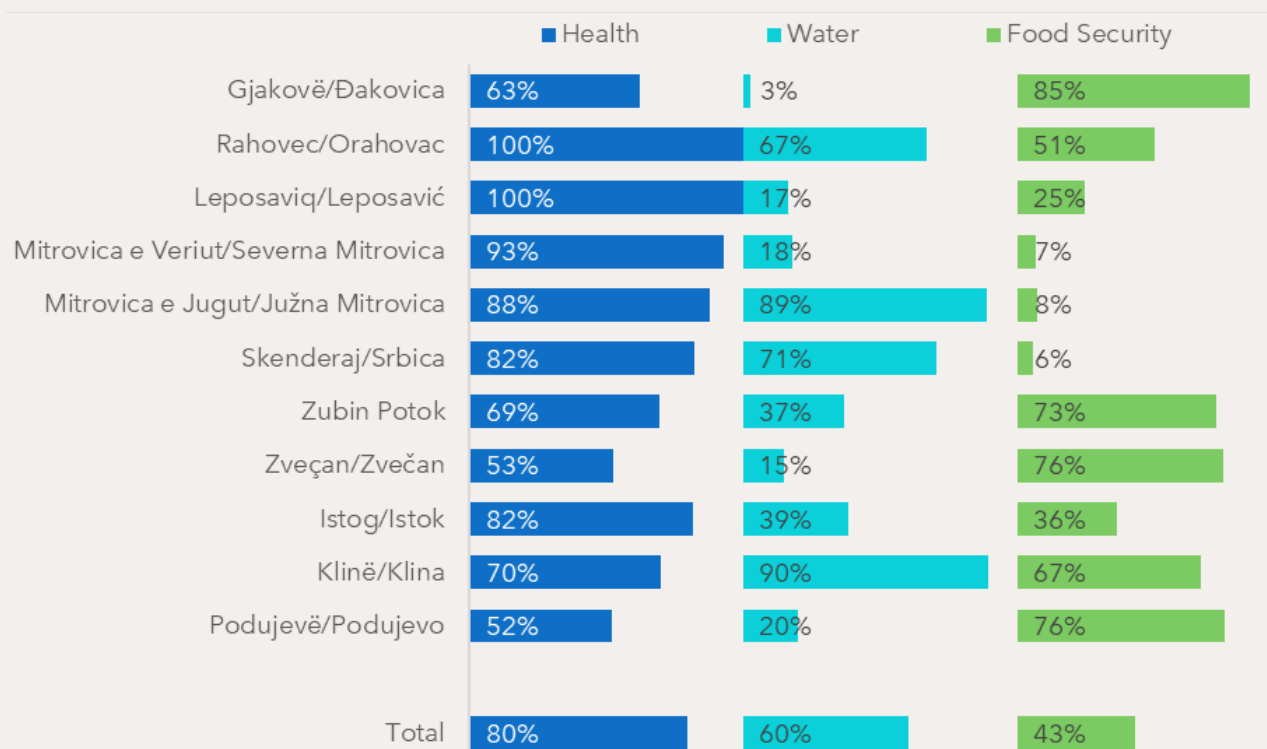


Figure 57: Household top three priority needs by municipalities

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

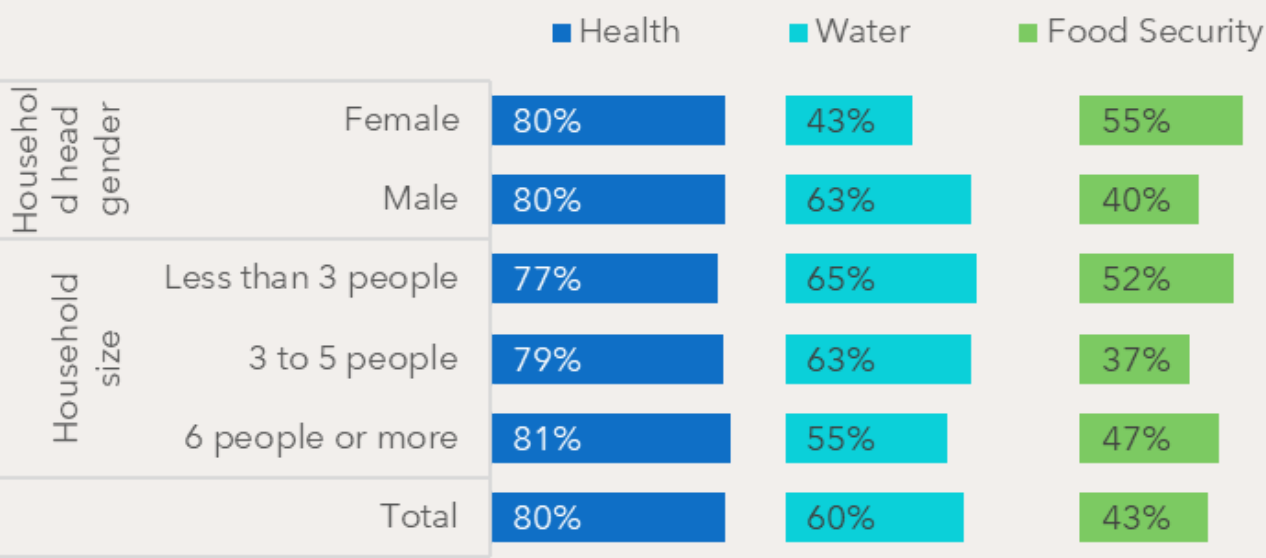


Figure 58: Household top three priority needs by gender of household head and family size

Currently, almost all the affected households are in need of assistance to cope with the aftermath of the crisis. The HBDA finds that the assistance most helpful for households affected by the floods is 'cash for work' (58%) and 'cash transfers' (51%).

This suggests that providing households with financial support and opportunities for employment would be the most effective way to help them recover from the flood and rebuild their livelihoods. The findings highlight the importance of providing flexible and adaptable assistance that can be tailored to the specific needs and circumstances of affected households. Variations by municipality are depicted in Figure 60.

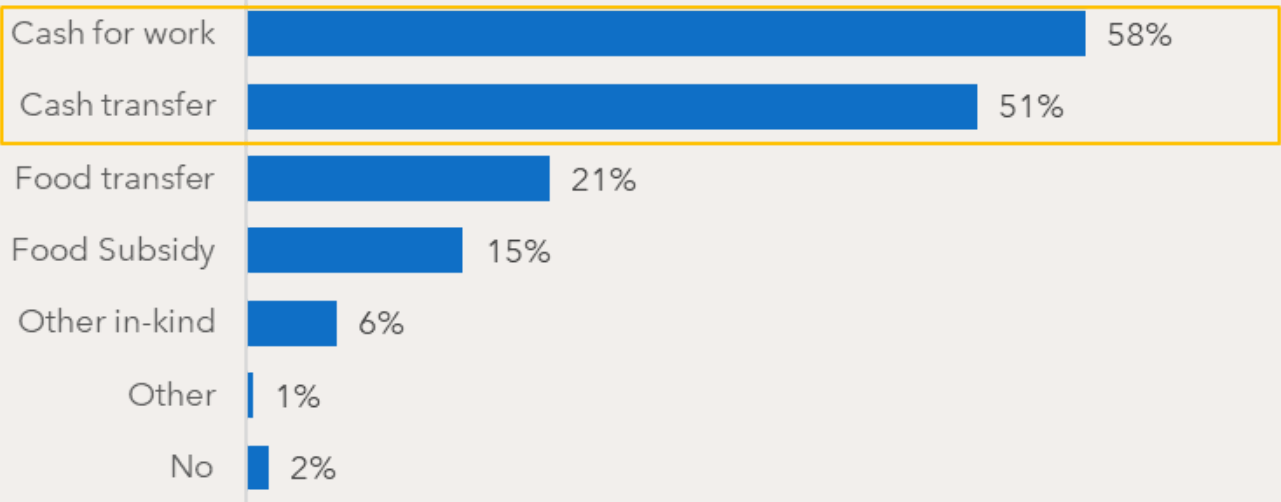


Figure 59: Household top three priority needs by gender of household head and family size

FINDINGS FOR HOUSEHOLD BUILDINGS

HBDA

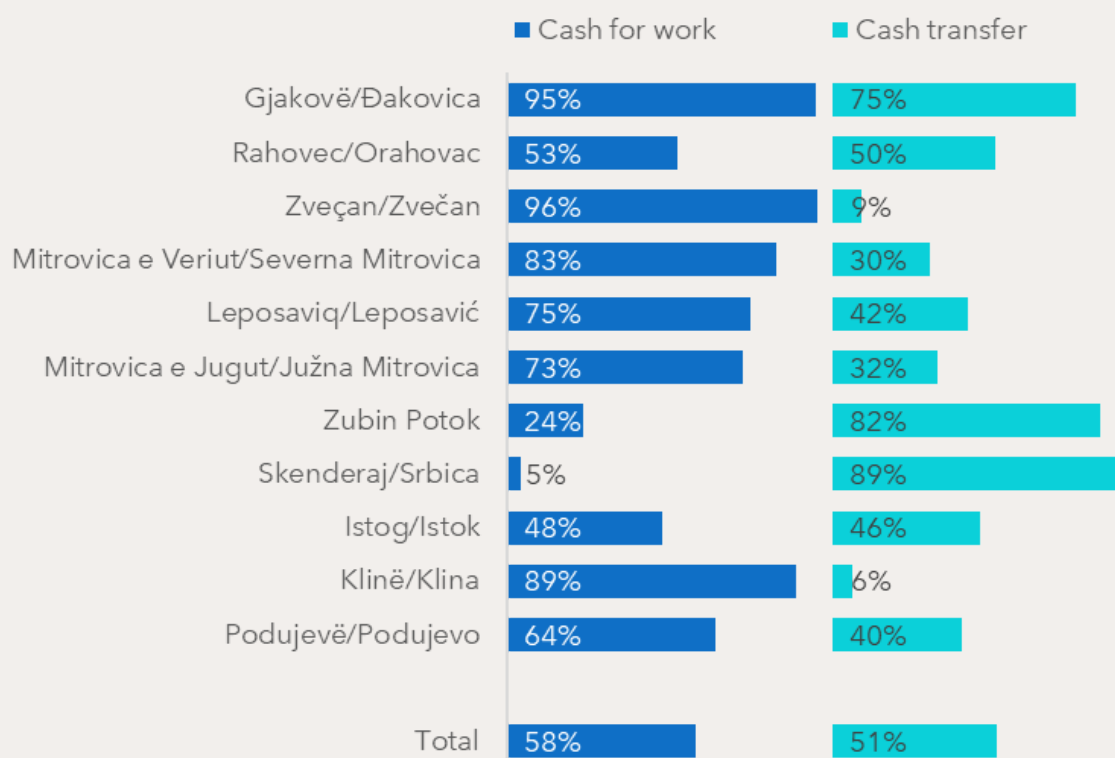


Figure 60: Top two types of assistance that would be the most helpful for the household currently, by municipalities

There are some differences according to gender and household size in terms of preferences for types of assistance. Female-headed households were more likely to prefer 'cash for work' (66%) than male-headed households (55%), while male-headed households were more likely to prefer 'cash transfers' (54%) than female-headed households (42%).

In terms of household size, households with fewer than 3 people were more likely to prefer 'cash for work' (76%) compared to large households (53%-56%). These findings suggest that assistance programmes should take into account gender and household size differences to effectively meet the needs and preferences of affected households.

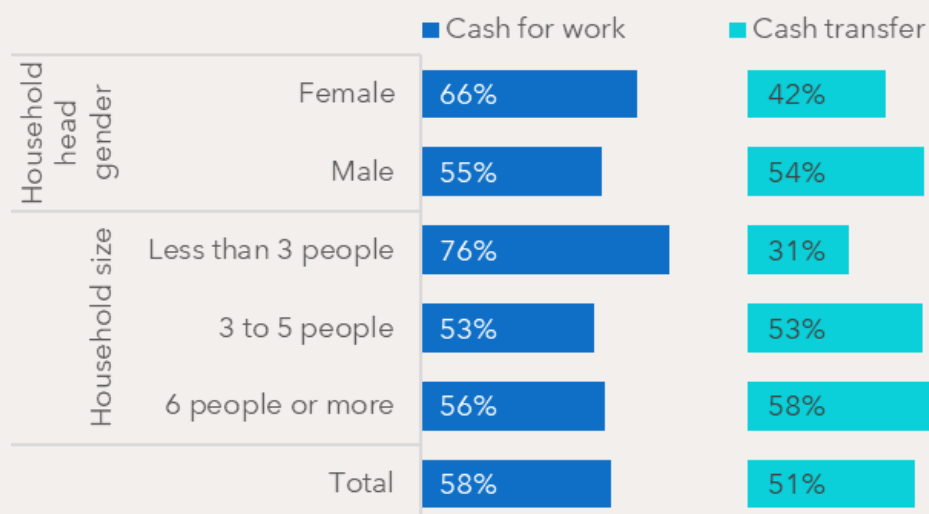


Figure 61: Top two types of assistance that would be the most helpful for the household currently by gender of household head and household size

FINDINGS FOR BUSINESSES

BPDA

Floods can have a devastating impact on the private sector and on the operation of businesses. Infrastructural damage, disruptions in connectivity, building and productive asset damage as well as damage to stock are among the key consequences which disrupt the operation of the private sector. **Rehabilitation of business premises and recovery of lost assets are crucial elements of the disaster recovery process.** Speedy recovery by the private sector translates into economic stability as fewer jobs are lost in the process.

Similarly to the HBDA, the BPDA is designed to capture information for the affected businesses according to several aspects. This information is organized in thematic modules and is presented accordingly. The assessment starts with a snapshot of the interviewed businesses, providing key characteristics of their type, size and structure. The assessment moves on to provide information on the impact of floods on business premises, assets and stock and then to describe the impact of the floods on business continuity.



BUSINESS PROFILE

The BPDA targeted 110 businesses affected by the disaster; 95 (86%) participated in the survey. Mitrovica e Jugut/Južna Mitrovica (26%) and Klinë/Klina (22%) had the highest number of interviewed businesses. These two municipalities provided a list of the affected businesses which made the surveying process easier. They are thus more represented in the assessment.

Figure 62 provides details about the number of surveyed businesses and the proportion of businesses that did not participate in the process, along with the reasons why.

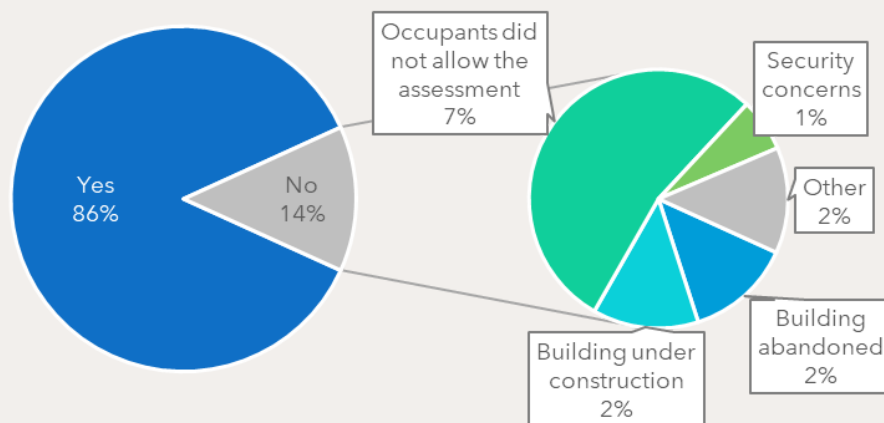


Figure 62: Businesses that gave consent to fill in the questionnaire

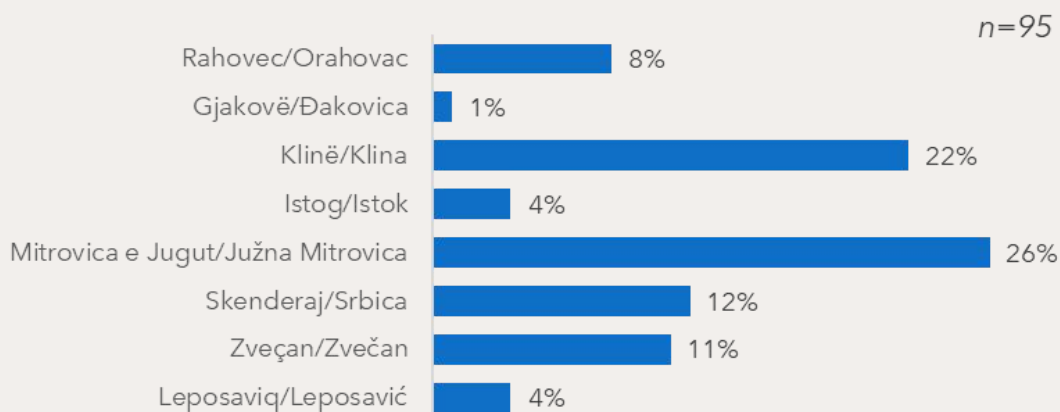


Figure 63: Surveyed businesses by municipalities

FINDINGS FOR BUSINESSES

BPDA

The majority of the interviewed businesses (81%) were classified as commercial; 19% were other types of businesses – either a combination of residential and commercial, education facilities or health centres. The majority of the respondents were business owners or co-owners (75%). In terms of the gender of respondents, 19% of all business respondents were women and 81% were men, reflecting the overall gender structure of the labor market and in particular the very low share of businesses owned by women.

Figure 64 provides details about the type of the interviewed businesses.

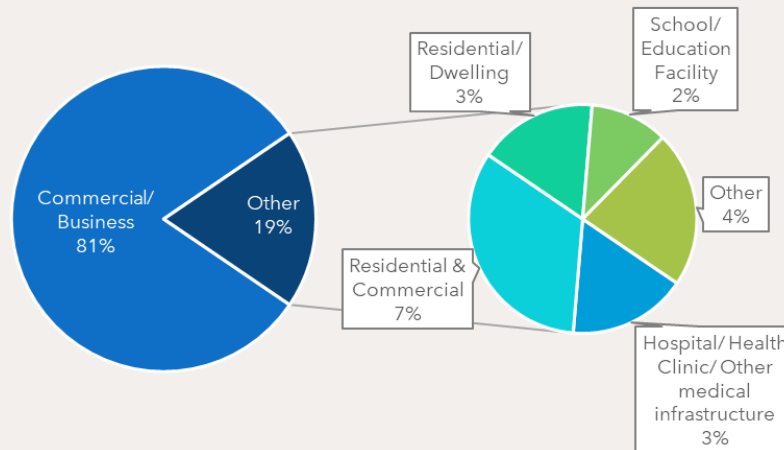


Figure 64: Type of surveyed businesses

The private sector in Kosovo is dominated by Small to Medium Enterprises (SMEs) with up to 50 employees, and thus the majority of the interviewed businesses for this assessment are SMEs. Half of businesses operate in the service industry (wholesale and retail trade, accommodation and food and other services). Only a small proportion are engaged in manufacturing (10%) and agriculture (4%).

The figures below provide details on the size of the enterprises and the type of economic activity they engage in.

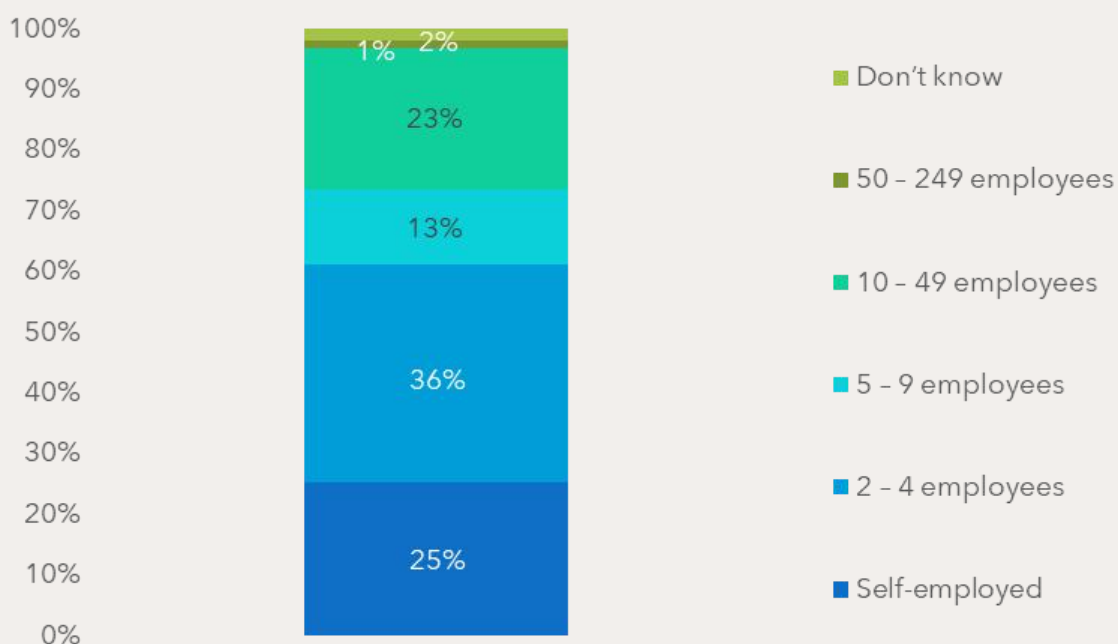


Figure 65: Business size (number of employees)

FINDINGS FOR BUSINESSES

BPDA

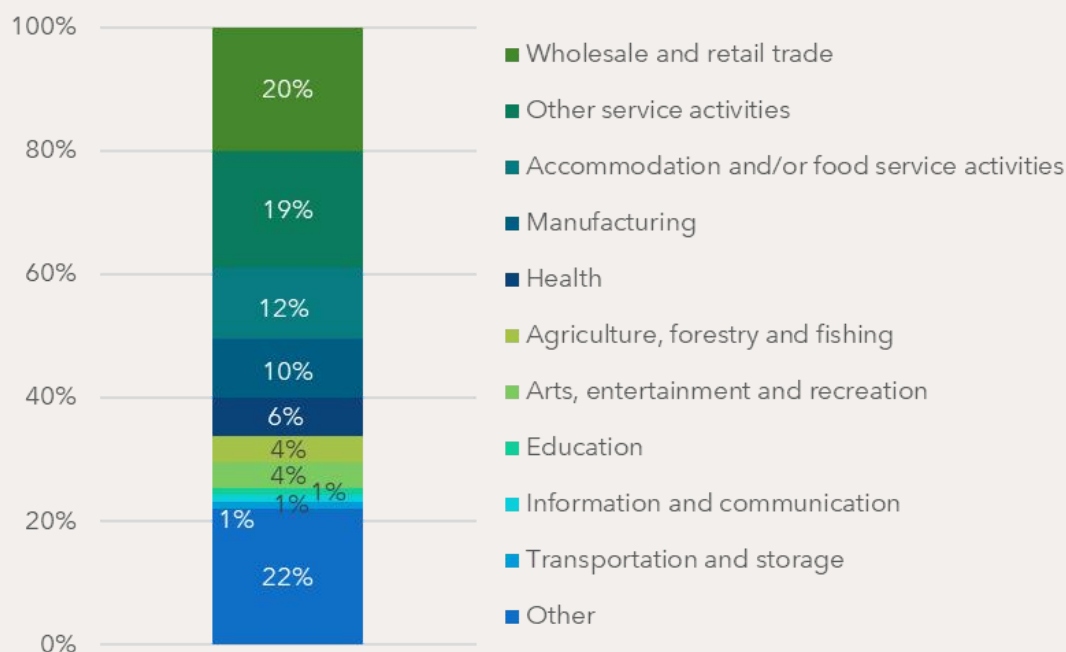


Figure 66: Main sector of activity of this business

THE IMPACT OF FLOODS ON PREMISES, ASSETS AND STOCK

The impact of floods on businesses depends on the severity of the disaster and the risk exposure (exogenous factors), as well as the characteristics of the business in question which either increase or decrease the vulnerability to disasters (endogenous factors)¹⁹. Factors such as the severity of the disaster, preparedness, exposure, and area of economic activity are among the key factors determining the level of disruption.

For example, companies operating in the retail sector are known to be less affected compared to those operating in the manufacturing sector²⁰. This is due to the fact that the latter usually own heavier machinery or equipment and recovery can be more costly. Businesses that operate in sectors which are vulnerable to extreme weather events such as agriculture are usually impacted more by floods.

A significant share of businesses experienced high flooding levels – of 80-100 cm – which resulted in significant damage to assets and stock but also to building elements (floors, walls and foundations) and electrical systems. Such damage led to interruptions in business operations, affecting the private sector significantly. Approximately 86% of businesses reported some level of damage to assets and stock, 84% reported some damage to walls, 71% reported floor damage and 30% reported damage to building foundations. Losses in assets and stock can significantly delay the recovery process. The scale of damage is depicted in Figure 67.

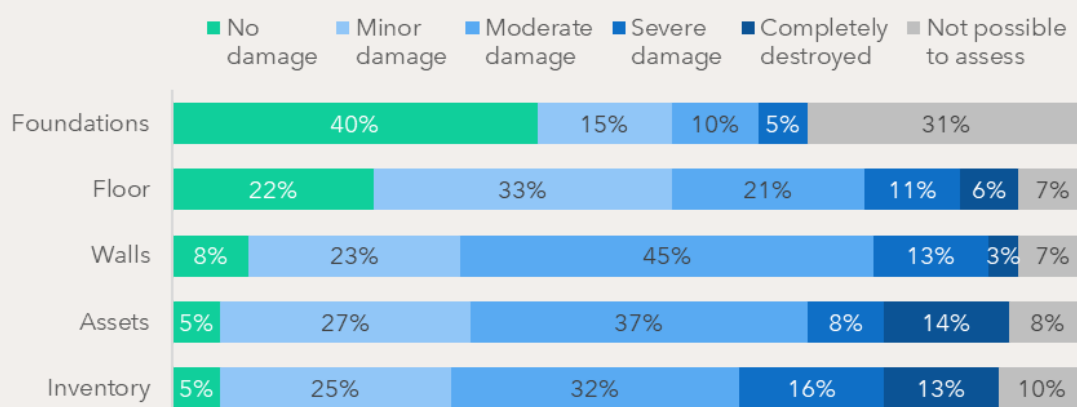


Figure 67: Damage to the foundations, floor, walls, assets and inventory of business premises

[19] Small Businesses - Impact of Disasters and Building Resilience, <https://www.undp.org/publications/small-businesses-impact-disasters-and-building-resilience>

[20] Ibid.

FINDINGS FOR BUSINESSES

BPDA

High water levels within premises led to electrical system damage.

Approximately 65% of the interviewed businesses experienced such damage either to internal networks or to public electrical networks. Given that electricity is a key factor to enable business operations, interruptions in supply led to temporary interruptions in activity

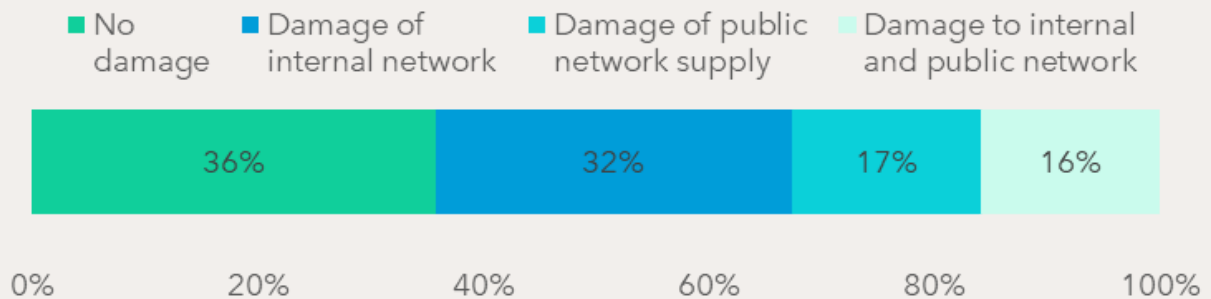


Figure 68: Damage to the electricity system as a result of the flood

The most typical flooding was up to knee-level (30-40 cm), but 36% of businesses experienced flooding of 80-160 cm

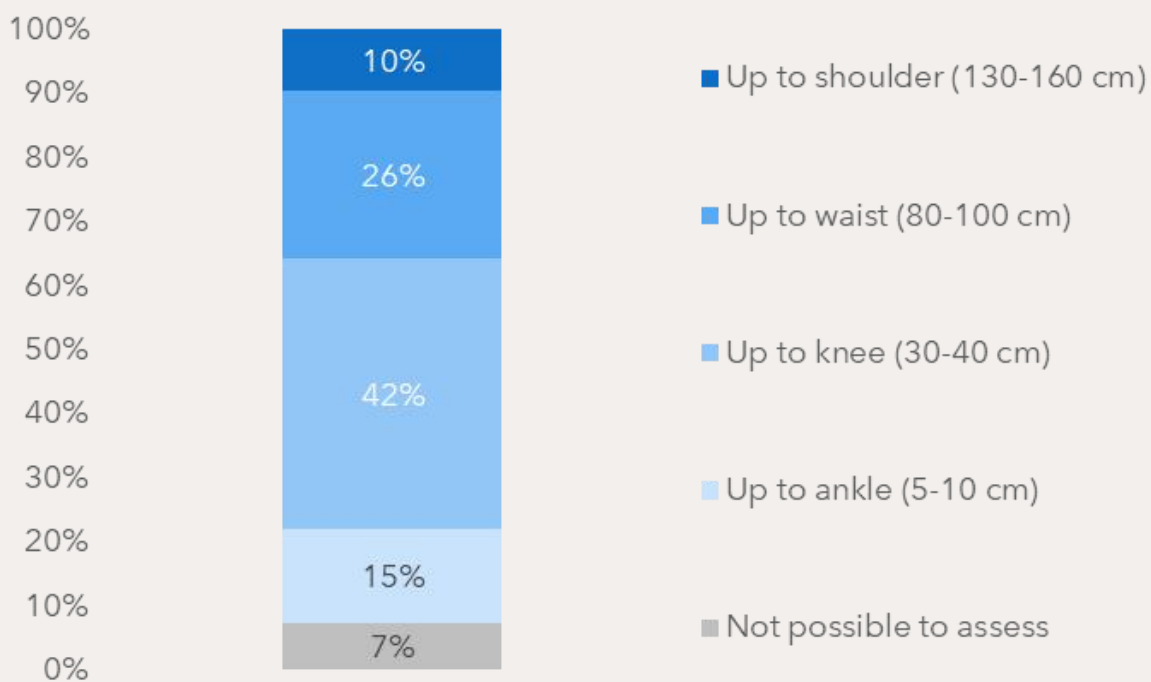


Figure 69: Has the building been flooded?

Most businesses (66%) are in no need of essential or urgent repairs, but 34% declared that they still need to do urgent repairs related to securing dangerous structural elements (17.9%), addressing hazards from utilities (water pipes, electricity; 5.3%) and other types of repairs

FINDINGS FOR BUSINESSES

BPDA

→ Flooded restaurant and water pump station in Koshtovë/Košutovo village.
The pump station provides drinking water for multiple villages.
Photo credit: Bashkim Kurti, Director of Regional Water Company "Mitrovica."



FINDINGS FOR BUSINESSES

BPDA

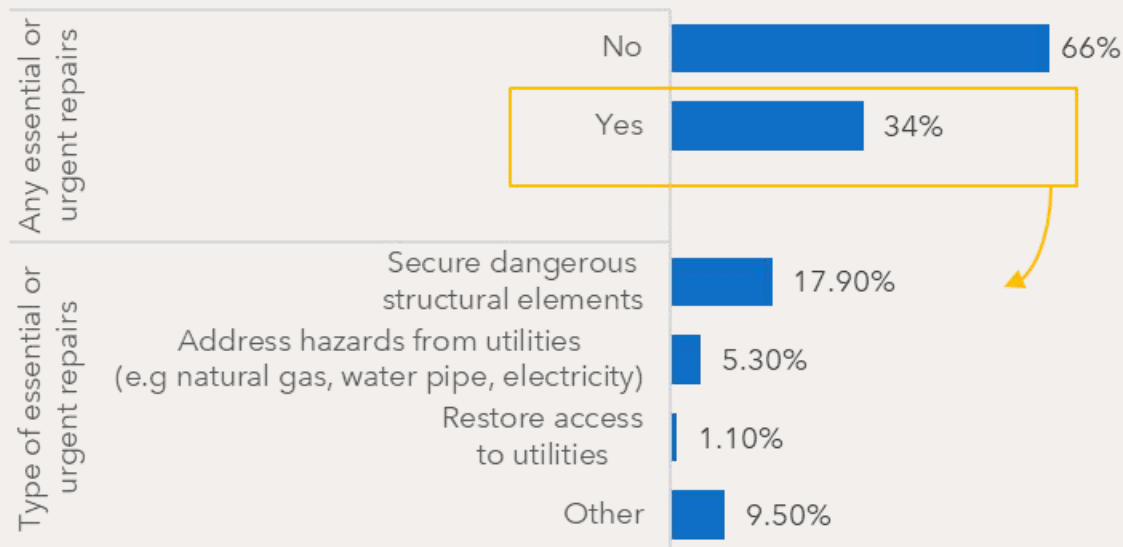


Figure 70: Essential or urgent repairs needed

Most business premises (48%) are at the same level as the ground outside; around 19% are more than 1 metre below the outside ground level, and 13% are 0-1 metre below the outside level. 21% of the premises are constructed higher than the external ground level.

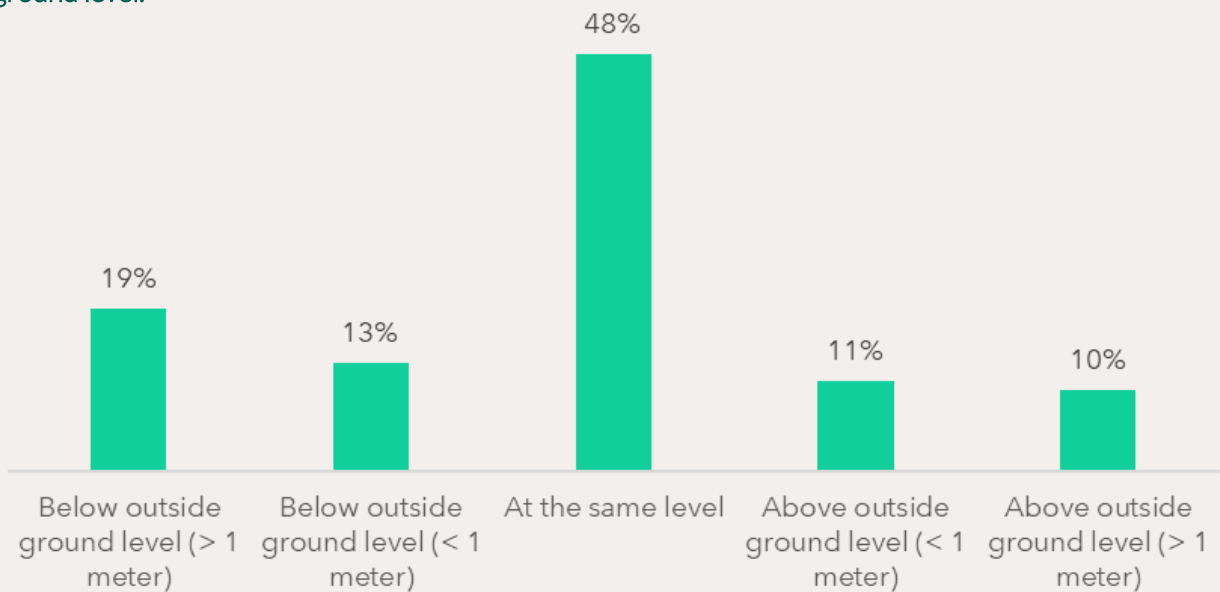


Figure 71: Building ground level in comparison to the outside ground level

THE IMPACT OF FLOODS ON BUSINESS OPERATIONS

SMEs are the backbone of the economy; they provide employment opportunities and ensure the provision of goods and services within a community.

Therefore ensuring their continuity is vital to the well-being of individuals within the community²¹.

The structural and non-structural damage to business premises along with damage to critical infrastructure led to severe disruptions in business continuity. **Almost all (97%) of the interviewed businesses were forced to close during the flooding. Currently, 55% have managed to return to business as usual and 15% operate only partially. A significant portion (31%) have remained closed.** The range of days on which a business was closed stands between 10 and 56. The severity of the disaster and the individual characteristics of the affected businesses shape their ability to recover and thus have an impact on the local economy in terms of employment and productivity. The figure below provides details about the proportion of businesses that were temporarily closed and their current state of operation.

[21] Small Businesses - Impact of Disasters and Building Resilience, <https://www.undp.org/publications/small-businesses-impact-disasters-and-building-resilience>

FINDINGS FOR BUSINESSES

BPDA

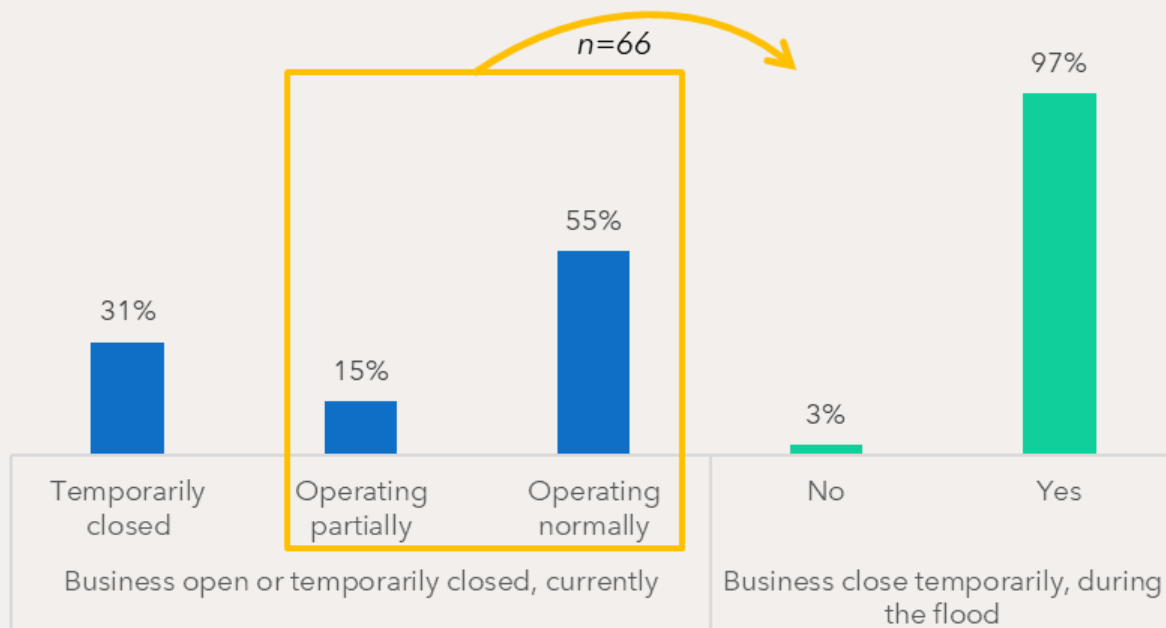


Figure 72: Business open, temporarily closed, or permanently closed

Figure 73 shows the average number of days a business has been closed. While this varies by municipality it is important to note that the number of businesses interviewed in some municipalities was particularly low. **As an illustration, in Rahovec/Orahovac, the average number of days a business has been closed is 56 – but only one business was interviewed in this municipality.**



Figure 73: Average of days a business has been closed (or was closed) due to the floods

In addition to building and asset damage, the affected businesses experienced damage to critical infrastructure which is key to ensuring business continuity. This includes access to electricity, access to transportation, access to water supply and access to the internet. **According to the survey, the three top problems experienced by the private sector following the flood were power outage (42%), problems with roads (33%) and water supply disruptions (31%). A significant share of businesses (22%) also reported disruptions in the supply chain.** The business recovery period is reported to be between 1-3 months in 48% of cases.

FINDINGS FOR BUSINESSES

BPDA

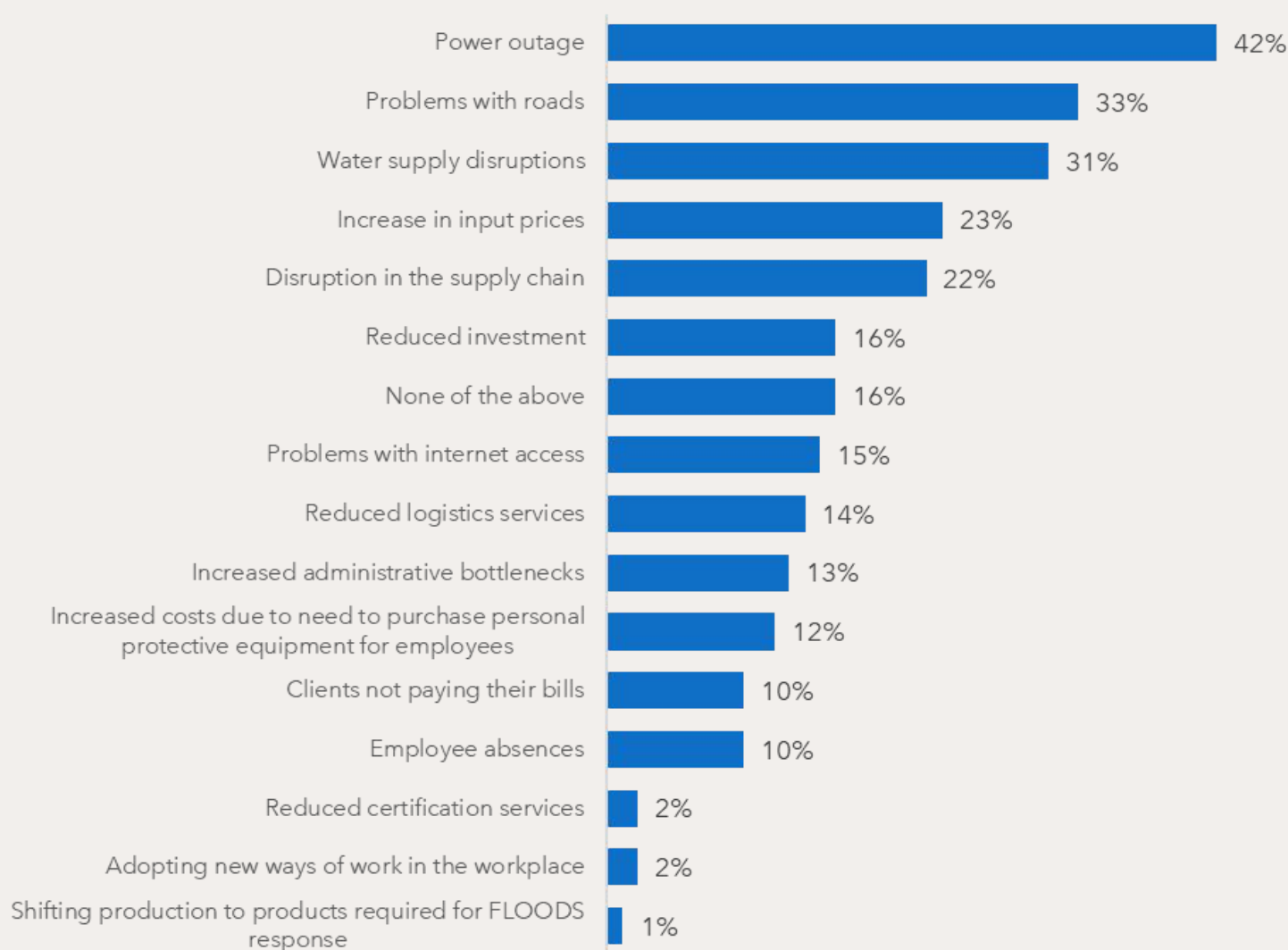


Figure 74: Top business problems due to the floods

Facilitating the recovery of SMEs which are crucial to economic development and to ensuring the continuity of livelihoods in the affected communities is a key element of the post-disaster recovery process. Restoration of public infrastructure and supply of basic services (i.e. water, electricity) is critical to enabling the functioning of the private sector²². Along with this, direct/indirect support to the affected SMEs could also be a way of ensuring their continuity; this can include grants, emergency employment programmes, in-kind support and so on²³. Overall, the design of support schemes should be based on the local context, taking into account the needs of the affected SMEs so as to ensure well-tailored and effective assistance.

So far, support for the private sector in the flood aftermath seems to be lacking. The vast majority of the interviewed businesses (98%) claim not to have received any assistance whatsoever. Only 2% claim to have received either access to new credit schemes or cash transfers. In terms of the institutional help deemed most helpful for businesses to cope with flood consequences, 85% of interviewees state that cash transfers would be of most help, followed by wage subsidies (34%) and fiscal exemptions or reductions (21%). Cash transfers are indeed considered as one of the most effective support mechanisms for SME recovery after disasters, especially in cases where markets are well-functioning and no major disruptions in supply chains have been caused²⁴. The figure below provides a breakdown of assistance preferences among the affected businesses.

[22] Small Businesses - Impact of Disasters and Building Resilience
<https://www.undp.org/publications/small-businesses-impact-disasters-and-building-resilience>

[23] Ibid.

[24] Ibid.

FINDINGS FOR BUSINESSES

BPDA

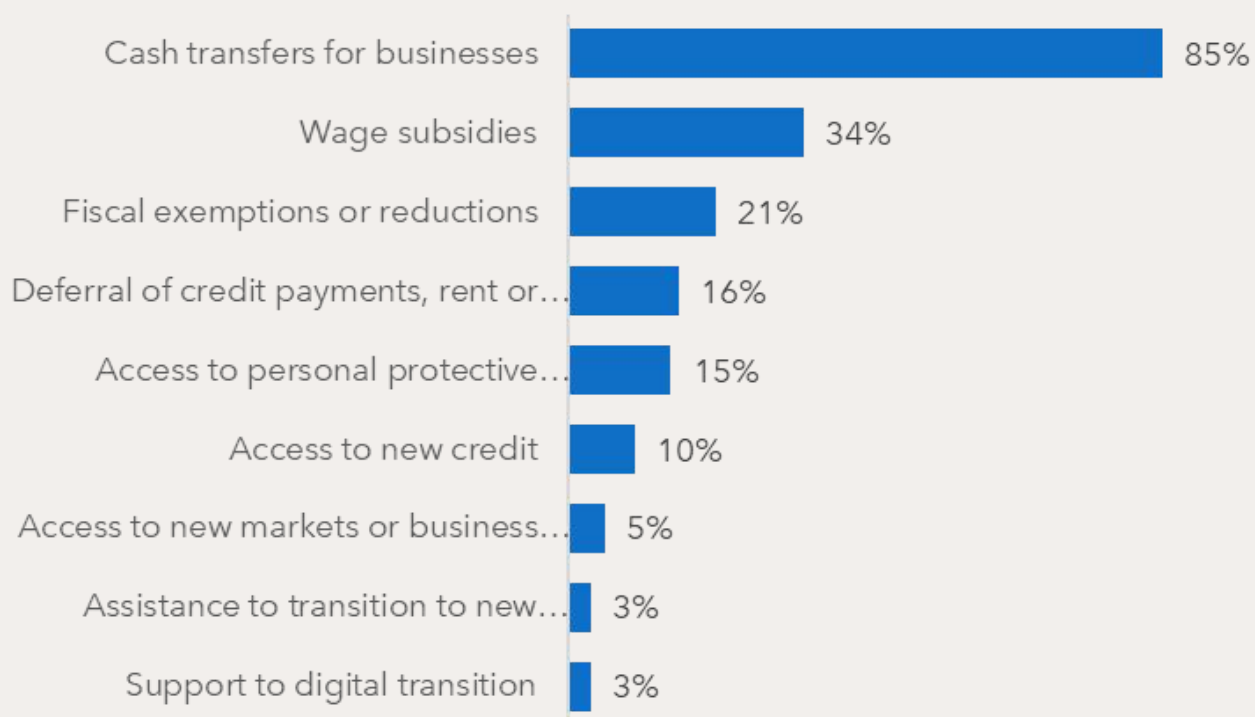


Figure 75: Institutional measures that would be most helpful as this business copes with the floods

CONCLUSIONS



FOR HOUSEHOLDS

The high flooding levels damaged buildings, with a considerable proportion of households reporting damaged floors, walls, and foundations. Many individuals were forced to temporarily evacuate their buildings. Structural damage calls for a professional evaluation from the local level. This assessment is necessary to determine whether the buildings are safe or require immediate repair, and to determine whether it is safe for residents to reside in them. Approximately 13% of households have suffered severe wall damage and 29% are in need of urgent repair measures.

Critical infrastructure was also damaged, with a considerable proportion of households reporting restricted access to water supply, electricity, and wastewater systems because of damage to the internal and public systems. Around 40% of households reported damage to their internal electricity supply, and 41% reported damage to their internal water supply. This level of damage makes the recovery process longer and more difficult and influences the time-period during which the affected population cannot return to their residences.

With 61% of all households reporting damage to either the internal or the external sewage system, there has been a high risk of pollution, infections and diseases. Municipalities must learn from these floods and other similar disasters to install sustainable and flood-resistant sewage systems at public and household levels. By law, it is the responsibility of the municipality to ensure a well-functioning sewage system at the local level.

Damage to public infrastructure (roads, bridges, networks) caused disruptions in access to healthcare centres and education centres. As a result, many households reported interruptions in school attendance among school-aged children. As of April 2023, many roads and bridges remained damaged and in some cases inaccessible. Municipalities need interventions to restore the mobility of affected citizens.

Individuals living in areas which have a high exposure to natural disasters (i.e. areas prone to floods, heatwaves or earthquakes) tend to also struggle economically. **This makes them more vulnerable to shocks and less able to bounce back in the aftermath of the event.** Disasters affect the poor and the vulnerable disproportionately. The affected population suffer from high unemployment and labour inactivity. Job insecurity is also an issue with only a small fraction having long-term labour contracts. Such characteristics indicate that the affected individuals are highly vulnerable to natural disasters.

It is widely accepted that poor households lose more wealth as a result of natural disasters and face difficulties in recovering during the aftermath. The floods have not led to major shifts in employment status, but they have affected household income levels negatively. **Approximately 67% of households declare a decrease in household income. In addition to damage to household buildings, it is estimated that the affected population lost 3.75 million euros in damaged household assets.**

The coping strategy most practised in the aftermath of the crisis was reliance on savings for food supplies. **Only a small percentage of the affected households reverted to more negative coping mechanisms such as sending household members to eat elsewhere or reducing spending on health and education to secure access to food.** Selling of non productive and productive assets was not used as a coping strategy. **The top three priority needs among the affected are access to health, water and food security. The most preferred types of assistance are cash transfers and cash for work.**

Natural disasters are known to have significant impacts on the mental health of the population. Similar patterns are observed in this case in Kosovo, with the large numbers of respondents reporting feelings of anxiety, sadness and being afraid and unsafe highlighting a need for interventions in this regard.

The impact of flooding on the economy, finances, health and education highlights the need for designing and implementing effective early warning and preparedness measures and adequately informing and educating citizens in advance. It also points up the importance of designing resilient infrastructure, systems, and networks to withstand the impact of natural disasters.

CONCLUSIONS

Based on the results of Housing and Building Damage Assessment (HBDA), the following recommendations are derived:



The high vulnerability of the affected population calls for well-tailored interventions by local and central institutions to tackle high unemployment levels and job insecurity. This would not only contribute to improving the well-being of the affected individuals, but it would also make them more resilient to future disasters. To support early recovery, there is a need to design well-targeted assistance programmes in the form of cash for work or cash transfers. These assistance programmes need to take into account the specificities of gender and other vulnerabilities within the household.



A strengthened Flood Early Warning System is key to better flood response and a more resilient community. Kosovo's Institute of Hydrometeorology needs to ensure that information is disseminated in timely fashion and received by the potentially at-risk municipalities. Prompt early warning by municipal authorities of those at risk would 'leave no one behind'. Timely information sharing will result in fewer evacuation efforts, less damage to infrastructure and households, and less damage to businesses and agricultural land.



Post-Disaster Damage Assessment by municipalities in consultation with EMA has been significantly delayed, and still to date there is no official report of the overall damage caused. Moreover, much damage could not be evaluated even during the HBDA assessment. Therefore in future disaster recovery processes it is highly recommended that, based on the situation, municipalities establish cooperation with the University of Prishtina's Faculty of Civil Engineering to provide support in professional assessment of damage, especially in buildings with visible damage to structural elements. It would ensure timely identification and 'building back better' of buildings with severe damage.



Regional Water Companies and Electricity providers need to upgrade their existing network to be resilient in future disasters. Leaving an affected population without drinking water and electricity on cold winter days is most undesirable; it also hampers early recovery efforts and delays the return to flooded homes.



Municipalities through their budget or supported by the central level or donors need to upgrade the sewage system. The gaps identified in the existing network need to be addressed so that in future similar events the system will not fail with such damaging impact.



Cooperation with the private sector at the local level should be strengthened in order to respond to all requests for cleaning of debris, tall trees and other destructive elements which pose risks to residents. Proper guidelines for municipal solid waste management need to be respected, and support by the municipality or private sector is required in order to clean households of flood debris.



Health professionals and the Red Cross should combine their efforts to respond to the affected population who need support with respect to mental health. Fortunately, the floods did not cause any casualties but for families who rely completely on their locally-owned business, flooded agricultural land can cause enormous harm to their mental health.



Safety of school buildings needs to be addressed by the Ministry of Education, Science and Technology and Ministry of Environment, Spatial Planning and Infrastructure, and concrete measures need to be taken in order to ensure that school buildings as structures are flood resistant and that early warning is given to all pupils in good time. Schools, as educational institutions, should ensure awareness among pupils of prevention, preparedness and response measures during floods. Drills and public awareness campaigns should be organized, not least to ensure that cooperation between key local disaster management stakeholders is strengthened.

CONCLUSIONS

FOR BUSINESSES

The floods resulted in considerable building damage with **86% of businesses reporting losses in assets and stock** and more than **70% reporting damage in structural elements such as walls and floors**. Business continuity was disrupted with **95% of businesses being temporarily closed**. By April 2023, 30% of businesses were still closed and 15% were operating partially. SMEs are the backbone of the economy and **in Kosovo they are the main employers**. Ensuring business continuity is vital for economic stability and for the well-being of the affected communities. Despite this, the affected businesses are yet to receive any type of support from the relevant institutions.

Based on the Business Premises Damage Assessment (BPDA), the following recommendations can be derived:



To ensure business continuity **there is a need to ensure access to critical infrastructure** (electricity, water, transport) and design direct support programmes for SMEs. **Cash transfers, wage subsidies and fiscal exemptions are the most preferred types of assistance.**



Business Continuity and Disaster **Recovery Plans** must be developed for all businesses which operate in disaster risk areas. This will enable managed operation of the business after a disaster happens. The Emergency Management Agency could support businesses which want to develop such a plan. According to the assessment, **businesses were closed from 10 to 56 days.**



In future BPDA processes it is proposed to establish cooperation with chambers of commerce in order to convince all businesses to participate in the BPDA process. For unknown reasons a significant number of businesses declined to participate in the assessment process.



Businesses trying to recover were facing electrical outages, problems with roads and water supply disruptions, difficulties which made business operation impossible. The companies providing water and electricity must strengthen their network to ensure supply of water and electricity even after a disaster strikes.



ANNEX

Table 2: Number (share) of observations by regions

Region	Municipalities	Count	Share (%)
Gjakovë/Đakovica	Gjakovë/Đakovica	40	5%
	Rahovec/Orahovac	103	14%
	Total	143	19%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	12	2%
	Mitrovicë e Veriut/Severna Mitrovica	53	7%
	Mitrovicë e Jugut/Južna Mitrovica	62	8%
	Zubin Potok	17	2%
	Zvečan/Zvečan	44	6%
	Skenderaj/Srbica	201	27%
	Total	389	52%
Pejë/Peć	Istog/Istok	44	6%
	Klinë/Klina	134	18%
	Total	178	24%
Prishtinë/Priština	Podujevë/Podujevo	25	3%
Total		735	0.98

Table 3: The building's proximity to other structures and type of building

Type	Categories	Count	Share (%)
What is the building's proximity to other structures?	Detached building/stand alone	366	49.80%
	Adjoining building on two sides	172	23.40%
	Adjoining building on one side	157	21.40%
	Adjoining building on three sides	40	5.40%
	Total	735	100%
What is the type of building?	Residential/Dwelling	709	96.50%
	Commercial/Business	9	1.20%
	Residential & Commercial	2	0.30%
	Other	15	2.00%
	Total	735	100%

Table 4: Gender of respondent by region

Region	Municipalities	Female	Male	N
Gjakovë/Đakovica	Gjakovë/Đakovica	23%	78%	40
	Rahovec/Orahovac	7%	86%	103
Mitrovicë/Mitrovica	Skenderaj/Srbica	11%	89%	201
	Mitrovicë e Jugut/Južna Mitrovica	23%	77%	62
	Mitrovicë e Veriut/Severna Mitrovica	38%	62%	53
	Zvečan/Zvečan	23%	77%	44
	Zubin Potok	12%	88%	17
	Leposaviq/Leposavić	42%	58%	12
Pejë/Peć	Istog/Istok	11%	89%	44
	Klinë/Klina	10%	77%	117
Prishtinë/Priština	Podujevë/Podujevo	16%	84%	25
Total		15%	82%	735

ANNEX

Table 5: Building has some damage due to previous disasters, by municipality, gender of the household head and household size

Region	Municipality	Damage due to previous disasters			Total
		No	Not sure	Yes	
Gjakovë/Đakovica	Gjakovë/Đakovica	28	2	10	40
	Rahovec/Orahovac	77	1	25	103
Mitrovicë/Mitrovica	Leposaviq/Leposavić	5	0	7	12
	Mitrovicë e Veriut/Severna Mitrovica	42	2	9	53
	Mitrovicë e Jugut/Južna Mitrovica	49	9	4	62
	Skenderaj/Srbica	191	2	8	201
	Zubin Potok	9	8	0	17
	Zvečan/Zvečan	11	1	32	44
Pejë/Peć	Istog/Istok	38	1	5	44
	Klinë/Klina	105	24	5	134
Prishtinë/Priština	Podujevë/Podujevo	24	0	1	25
Gender of the head of the household	Female	77	14	21	112
	Male	484	31	84	599
Household size	Fewer than 3 people	94	18	21	133
	3 to 5 people	260	23	57	340
	6 people or more	225	9	28	262
Total		579	50	106	735

ANNEX

Table 6: Damage to the walls of the building by region, gender of household head and family size

Region	Municipality	No damage	Minor damage	Moderate damage	Severe damage	Completely destroyed	Not possible to assess
Gjakovë/Đakovica	Gjakovë/Đakovica (n=40)	10%	38%	43%	8%	0%	3%
	Rahovec/Orahovac (n=103)	17%	39%	39%	4%	2%	0%
Mitrovicë/Mitrovica	Zubin Potok (n=17)	0%	12%	59%	29%	0%	0%
	Zvečan/Zvečan (n=44)	2%	11%	61%	25%	0%	0%
	Skenderaj/Srbica (n=201)	7%	39%	36%	14%	4%	0%
	Leposaviq/Leposavić (n=12)	8%	25%	67%	0%	0%	0%
	Mitrovicë e Jugut/Južna Mitrovica (n=62)	16%	40%	37%	3%	0%	3%
	Mitrovicë e Veriut/Severna Mitrovica (n=53)	17%	26%	36%	19%	2%	0%
Pejë/Peć	Istog/Istok (n=44)	5%	34%	55%	7%	0%	0%
	Klinë/Klina (n=134)	4%	19%	34%	19%	3%	21%
Prishtinë/Priština	Podujevë/Podujevo (n=25)	48%	36%	16%	0%	0%	0%
Household head gender	Female (n=112)	10%	37%	38%	9%	3%	5%
	Male (n=599)	10%	31%	40%	14%	2%	4%
Household size	Fewer than 3 people (n=133)	7%	24%	39%	19%	1%	11%
	3 to 5 people (n=340)	11%	36%	36%	12%	2%	4%
	6 people or more (n=262)	11%	30%	44%	10%	2%	2%
Total (n=735)		10%	32%	40%	13%	2%	4%

ANNEX

Table 7: Damage to the floor of the building by region, gender of household head and family size

Region	Municipality	No damage	Minor damage	Moderate damage	Severe damage	Completely destroyed	Not possible to assess
Gjakovë/Đakovica	Gjakovë/Đakovica (n=40)	15%	20%	53%	8%		5%
	Rahovec/Orahovac (n=103)	7%	34%	44%	16%		
Mitrovicë/Mitrovica	Zubin Potok (n=17)	75%	8%	17%			
	Zvečan/Zvečan (n=44)	15%	23%	34%	15%	13%	
	Skenderaj/Srbica (n=201)	18%	32%	2%	21%	26%	2%
	Leposaviq/Leposavić (n=12)	5%	28%	26%	14%	26%	1%
	Mitrovicë e Jugut/Južna Mitrovica (n=62)	6%	18%	59%	18%		
	Mitrovicë e Veriut/Severna Mitrovica (n=53)	11%	32%	36%	16%		5%
Pejë/Peć	Istog/Istok (n=44)	9%	25%	61%	5%		
	Klinë/Klina (n=134)	2%	13%	28%	25%	11%	20%
Prishtinë/Priština	Podujevë/Podujevo (n=25)	36%	48%	16%			
Household head gender	Female (n=112)	11%	33%	33%	9%	11%	4%
	Male (n=599)	10%	24%	32%	17%	13%	4%
Household size	Fewer than 3 people (n=133)	8%	26%	29%	19%	7%	12%
	3 to 5 people (n=340)	11%	27%	30%	15%	13%	4%
	6 people or more (n=262)	9%	24%	36%	15%	14%	2%
Total (n=735)		10%	26%	32%	16%	12%	5%



ANNEX

Table 8: Damage to the foundations of the building by region, gender of household head and family size

Region	Municipality	No damage	Minor damage	Moderate damage	Severe damage	Completely destroyed	Not possible to assess
Gjakovë/Đakovica	Gjakovë/Đakovica (n=40)	5%	30%	50%	10%	0%	5%
	Rahovec/Orahovac (n=103)	77%	15%	5%	4%	0%	0%
Mitrovicë/Mitrovica	Zubin Potok (n=17)	0%	58%	33%	0%	0%	8%
	Mitrovicë e Jugut/Južna Mitrovica (n=62)	0%	53%	29%	18%	0%	0%
	Skenderaj/Srbica (n=201)	42%	29%	13%	3%	0%	13%
	Mitrovicë e Veriut/Severna Mitrovica (n=53)	16%	27%	48%	9%	0%	0%
	Leposaviq/Leposavić (n=12)	70%	17%	8%	2%	2%	2%
	Zvečan/Zvečan (n=44)	17%	13%	26%	4%	13%	26%
Pejë/Peć	Istog/Istok (n=44)	23%	64%	11%	2%	0%	0%
	Klinë/Klina (n=134)	21%	5%	16%	8%	2%	48%
Prishtinë/Priština	Podujevë/Podujevo (n=25)	36%	48%	16%	0%	0%	0%
Household head gender	Female	32%	25%	25%	4%	5%	10%
	Male	45%	22%	16%	5%	2%	12%
Household size	Fewer than 3 people	31%	15%	21%	6%	2%	26%
	3 to 5 people	43%	25%	16%	5%	2%	10%
	6 people or more	48%	21%	15%	4%	2%	10%
Total		42%	22%	17%	5%	2%	13%

ANNEX

Table 9: The building has been flooded, by region, gender of household head and family size

Region	Municipality	No flooding	Up to ankle (5-10 cm)	Up to knee (30-40 cm)	Up to waist (80-100 cm)	Up to shoulder (130-160 cm)	Not possible to assess
Gjakovë/Đakovica	Gjakovë/Đakovica	10%	8%	30%	35%	18%	0%
	Rahovec/Orahovac	0%	6%	47%	40%	7%	1%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	8%	8%	58%	17%	8%	0%
	Mitrovicë e Veriut/Severna Mitrovica	0%	2%	42%	40%	8%	9%
	Mitrovicë e Jugut/Južna Mitrovica	0%	3%	45%	23%	21%	8%
	Skenderaj/Srbica	4%	24%	42%	24%	5%	0%
	Zubin Potok	6%	12%	47%	35%	0%	0%
	Zvečan/Zvečan	7%	41%	43%	5%	5%	0%
Pejë/Peć	Istog/Istok	5%	27%	55%	14%	0%	0%
	Klinë/Klina	0%	8%	46%	25%	8%	14%
Prishtinë/Priština	Podujevë/Podujevo	36%	44%	20%	0%	0%	0%
Household head gender	Female	5%	14%	45%	21%	8%	6%
	Male	4%	16%	42%	27%	7%	4%
Household size	Fewer than 3 people	3%	8%	47%	29%	5%	8%
	3 to 5 people	5%	16%	45%	24%	7%	4%
	6 people or more	3%	19%	39%	27%	9%	3%
Total		4%	16%	43%	26%	7%	4%

ANNEX

Table 10: Need for essential/urgent repairs for the building to prevent further damage in the future

Region	Municipality	Any essential/urgent repairs		
		No	Not sure	Yes
Gjakovë/Đakovica	Gjakovë/Đakovica	85%	3%	13%
	Rahovec/Orahovac	89%	6%	5%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	42%	25%	33%
	Mitrovicë e Veriut/Severna Mitrovica	60%	13%	26%
	Mitrovicë e Jugut/Južna Mitrovica	68%	23%	10%
	Skenderaj/Srbica	54%	3%	44%
	Zubin Potok	18%	53%	29%
	Zvečan/Zvečan	50%	0%	50%
Pejë/Peć	Istog/Istok	66%	9%	25%
	Klinë/Klina	22%	38%	40%
Prishtinë/Priština	Podujevë/Podujevo	100%	0%	0%
Household head gender	Female	51%	18%	31%
	Male	59%	12%	29%
Household size	Fewer than 3 people	44%	22%	35%
	3 to 5 people	58%	14%	29%
	6 people or more	64%	10%	26%
Total		57%	14%	29%



ANNEX

Table 11: The essential/urgent repairs to the building

Region	Municipality	Secure dangerous structural elements	Temporary roofing/shelter solutions	Address hazards from utilities	Restore access to utilities	Other
Gjakovë/Đakovica	Gjakovë/Đakovica (n=5)	40%	60%	0%	0%	0%
	Rahovec/Orahovac (n=5)	40%	60%	0%	0%	0%
Mitrovicë/Mitrovica	Leposaviq/Leposavić (n=4)	0%	25%	25%	0%	50%
	Mitrovicë e Veriut/Severna Mitrovica (n=14)	36%	21%	7%	7%	29%
	Mitrovicë e Jugut/Južna Mitrovica (n=6)	67%	17%	0%	0%	17%
	Skenderaj/Srbica (n=88)	93%	2%	5%	0%	0%
	Zubin Potok (n=5)	60%	40%	0%	0%	0%
	Zvečan/Zvečan (n=22)	18%	18%	36%	9%	18%
Pejë/Peć	Istog/Istok (n=11)	18%	0%	18%	0%	64%
	Klinë/Klina (n=53)	34%	15%	9%	2%	40%
Prishtinë/Priština	Podujevë/Podujevo (n=0)	0%	0%	0%	0%	0%
Household head gender	Female (n=35)	37%	26%	17%	3%	17%
	Male (n=172)	62%	10%	9%	1%	17%
Household size	Fewer than 3 people (n=46)	35%	17%	11%	2%	35%
	3 to 5 people (n=98)	65%	12%	8%	2%	12%
	6 people or more (n=69)	61%	10%	12%	1%	16%
Total (n=213)		57%	13%	10%	2%	18%

ANNEX

Table 12: Has there been any damage to the electricity system as a result of the flood?

Region	Municipality	No damage	Damage to internal network	Damage to public network supply	Damage to internal and public network	Not sure
Gjakovë/Đakovica	Gjakovë/Đakovica	80%	15%	0%	3%	3%
	Rahovec/Orahovac	32%	65%	3%	0%	0%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	67%	17%	8%	8%	0%
	Mitrovicë e Veriut/Severna Mitrovica	47%	17%	8%	21%	8%
	Mitrovicë e Jugut/Južna Mitrovica	42%	13%	16%	16%	13%
	Skenderaj/Srbica	9%	87%	4%	1%	0%
	Zubin Potok	18%	35%	6%	6%	35%
	Zvečan/Zvečan	11%	0%	89%	0%	0%
Pejë/Peć	Istog/Istok	66%	27%	2%	2%	2%
	Klinë/Klina	30%	6%	6%	0%	58%
Prishtinë/Priština	Podujevë/Podujevo	92%	8%	0%	0%	0%
Household head gender	Female	40%	27%	14%	4%	15%
	Male	31%	44%	10%	4%	11%
Household size	Fewer than 3 people	27%	26%	15%	3%	29%
	3 to 5 people	32%	43%	10%	4%	11%
	6 people or more	36%	44%	8%	4%	8%
Total		33%	40%	10%	4%	13%

ANNEX

Table 13: Is there debris/disaster waste that will require management?

Region	Municipality	No	Not sure	Yes	Total
Gjakovë/Đakovica	Gjakovë/Đakovica	83%	13%	5%	100%
	Rahovec/Orahovac	91%	7%	2%	100%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	83%	0%	17%	100%
	Mitrovicë e Veriut/Severna Mitrovica	72%	8%	21%	100%
	Mitrovicë e Jugut/Južna Mitrovica	71%	19%	10%	100%
	Skenderaj/Srbica	98%	1%	2%	100%
	Zubin Potok	6%	59%	35%	100%
	Zvečan/Zvečan	93%	0%	7%	100%
Pejë/Peć	Istog/Istok	98%	2%	0%	100%
	Klinë/Klina	28%	52%	20%	100%
Prishtinë/Priština	Podujevë/Podujevo	92%	0%	8%	100%
Household head gender	Female	70%	17%	13%	100%
	Male	78%	14%	8%	100%
Household size	Fewer than 3 people	62%	27%	11%	100%
	3 to 5 people	77%	14%	10%	100%
	6 people or more	83%	11%	6%	100%
Total		76%	15%	9%	100%

Table 14: Are there any trees and/or tall structures near the building that could become a threat in case the event happens again?

Region	Municipality	No	Not sure	Yes
Gjakovë/Đakovica	Gjakovë/Đakovica	95%	3%	3%
	Rahovec/Orahovac	100%	0%	0%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	75%	0%	25%
	Mitrovicë e Veriut/Severna Mitrovica	93%	4%	4%
	Mitrovicë e Jugut/Južna Mitrovica	87%	10%	3%
	Skenderaj/Srbica	98%	1%	2%
	Zubin Potok	35%	18%	47%
	Zvečan/Zvečan	75%	0%	25%
Pejë/Peć	Istog/Istok	84%	0%	16%
	Klinë/Klina	58%	40%	2%
Prishtinë/Priština	Podujevë/Podujevo	84%	0%	16%
Household head gender	Female	86%	8%	6%
	Male	85%	9%	6%
Household size	Fewer than 3 people	82%	14%	4%
	3 to 5 people	84%	8%	8%
	6 people or more	87%	8%	5%
Total		85%	9%	6%

ANNEX

Table 15: If there are school-aged children in the household, did flood impact stop attendance?

Region	Municipality	Yes	No	Not sure	Not applicable
Gjakovë/Đakovica	Gjakovë/Đakovica	53%	38%	0%	10%
	Rahovec/Orahovac	38%	60%	2%	0%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	25%	67%	0%	8%
	Mitrovicë e Veriut/Severna Mitrovica	25%	25%	0%	51%
	Mitrovicë e Jugut/Južna Mitrovica	63%	13%	0%	24%
	Skenderaj/Srbica	49%	26%	1%	24%
	Zubin Potok	6%	35%	12%	47%
	Zvečan/Zvečan	34%	64%	0%	2%
Pejë/Peć	Istog/Istok	32%	52%	2%	14%
	Klinë/Klina	33%	38%	5%	25%
Prishtinë/Priština	Podujevë/Podujevo	36%	60%	0%	4%
Household head gender	Female	35%	34%	2%	30%
	Male	43%	38%	2%	18%
Household size	Fewer than 3 people	8%	50%	2%	41%
	3 to 5 people	37%	40%	2%	22%
	6 people or more	62%	31%	2%	6%
Total		40%	38%	2%	20%



ANNEX

Table 16: What is the estimated value of damaged household items as a result of floods (euros)?

Region	Municipality	Sum	Mean	Count
Gjakovë/Đakovica	Gjakovë/Đakovica	131,300	3,283	40
	Rahovec/Orahovac	432,934	4,203	103
Mitrovicë/Mitrovica	Leposaviq/Leposavić	18,500	1,542	12
	Mitrovicë e Veriut/Severna Mitrovica	560,513	10,576	53
	Mitrovicë e Jugut/Južna Mitrovica	356,081	5,743	62
	Skenderaj/Srbica	1,096,701	5,456	201
	Zubin Potok	72,800	4,282	17
	Zvečan/Zvečan	59,930	1,362	44
Pejë/Peć	Istog/Istok	264,950	6,022	44
	Klinë/Klina	708,783	5,289	134
Prishtinë/Priština	Podujevë/Podujevo	47,600	1,904	25
Household head gender	Female	655,686	5,854	112
	Male	3,005,205	5,017	599
Household size	Fewer than 3 people	562,944	4,233	133
	3 to 5 people	1,730,638	5,090	340
	6 people or more	1,456,509	5,559	262
Total		3,750,091	5,102	735

ANNEX

Table 17: How would you describe any changes in the level of access to health services since the flood?

Region	Municipality	No access to health centres, health services and medical supplies	Access to health centres, health services and medical supplies constrained	Access to health centres, health services and medical supplies more difficult	Access to health centres, health services and medical supplies uninterrupted	Do not know
Gjakovë/Đakovica	Gjakovë/Đakovica	0%	3%	95%	3%	0%
	Rahovec/Orahovac	4%	1%	41%	51%	4%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	25%	0%	0%	75%	0%
	Mitrovicë e Veriut/Severna Mitrovica	6%	2%	2%	51%	40%
	Mitrovicë e Jugut/Južna Mitrovica	2%	0%	8%	37%	53%
	Skenderaj/Srbica	0%	4%	93%	1%	3%
	Zubin Potok	0%	6%	6%	88%	0%
	Zvečan/Zvečan	2%	2%	9%	86%	0%
Pejë/Peć	Istog/Istok	5%	2%	5%	82%	7%
	Klinë/Klina	1%	4%	7%	37%	52%
Prishtinë/Priština	Podujevë/Podujevo	0%	0%	40%	24%	36%
Household head gender	Female	1%	1%	31%	40%	27%
	Male	2%	3%	44%	34%	17%
Household size	Fewer than 3 people	2%	2%	25%	38%	35%
	3 to 5 people	2%	3%	42%	36%	18%
	6 people or more	2%	3%	47%	33%	15%
Total		2%	3%	41%	35%	20%

ANNEX

Table 18: Is the primary water source still currently available?

Region	Municipality	No	Not sure	Yes	Total
Gjakovë/Đakovica	Gjakovë/Đakovica	8%	0%	93%	100%
	Rahovec/Orahovac	3%	1%	96%	100%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	17%	8%	75%	100%
	Mitrovicë e Veriut/Severna Mitrovica	6%	2%	93%	100%
	Mitrovicë e Jugut/Južna Mitrovica	3%	3%	94%	100%
	Skenderaj/Srbica	10%	1%	90%	100%
	Zubin Potok	0%	12%	88%	100%
	Zvečan/Zvečan	2%	0%	98%	100%
Pejë/Peć	Istog/Istok	5%	0%	96%	100%
	Klinë/Klina	11%	13%	76%	100%
Prishtinë/Priština	Podujevë/Podujevo	24%	0%	76%	100%
Household head gender	Female	6%	2%	92%	100%
	Male	8%	3%	89%	100%
Household size	Fewer than 3 people	11%	10%	79%	100%
	3 to 5 people	8%	3%	90%	100%
	6 people or more	6%	1%	93%	100%
Total		8%	3%	89%	100%



ANNEX

Table 19: If the facility is connected to the water supply system, has it suffered any damage as a result of the flood?

Region	Municipality	No damage	Damage to internal network	Damage to public network supply	Damage to both internal and public network supply	Not sure
Gjakovë/Đakovica	Gjakovë/Đakovica	90%	8%	0%	3%	0%
	Rahovec/Orahovac	51%	49%	1%	0%	0%
Mitrovicë/Mitrovca	Leposaviq/Leposavić	58%	17%	0%	0%	25%
	Mitrovicë e Veriut/Severna Mitrovica	36%	6%	8%	42%	9%
	Mitrovicë e Jugut/Južna Mitrovica	39%	15%	19%	23%	5%
	Skenderaj/Srbica	9%	91%	0%	0%	1%
	Zubin Potok	29%	29%	0%	0%	41%
	Zvečan/Zvečan	0%	25%	73%	0%	2%
Pejë/Peć	Istog/Istok	55%	16%	7%	7%	16%
	Klinë/Klina	14%	18%	3%	0%	65%
Prishtinë/Priština	Podujevë/Podujevo	76%	4%	0%	0%	20%
Household head gender	Female	40%	28%	13%	5%	14%
	Male	28%	44%	7%	6%	15%
Household size	Fewer than 3 people	24%	28%	10%	5%	33%
	3 to 5 people	27%	44%	9%	6%	14%
	6 people or more	38%	43%	5%	5%	10%
	Total	30%	41%	8%	5%	16%

ANNEX

Table 20: What kind of toilet facility are household members currently using?

Region	Municipality	Flushable toilet in dwelling	Flushable toilet shared with other households	Improved latrine in dwelling	Improved latrine shared with other households	Basic latrine, bore hole or bucket	Open defecation
Gjakovë/Đakovica	Gjakovë/Đakovica	83%	3%	5%	0%	0%	10%
	Rahovec/Orahovac	47%	41%	6%	6%	1%	0%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	0%	0%	100%	0%	0%	0%
	Mitrovicë e Veriut/Severna Mitrovica	25%	72%	0%	2%	2%	0%
	Mitrovicë e Jugut/Južna Mitrovica	48%	52%	0%	0%	0%	0%
	Skenderaj/Srbica	96%	4%	0%	1%	0%	0%
	Zubin Potok	100%	0%	0%	0%	0%	0%
	Zvečan/Zvečan	75%	2%	18%	2%	2%	0%
Pejë/Peć	Istog/Istok	86%	7%	0%	2%	5%	0%
	Klinë/Klina	22%	72%	1%	2%	1%	2%
Prishtinë/Priština	Podujevë/Podujevo	100%	0%	0%	0%	0%	0%
Household head gender	Female	57%	32%	8%	2%	0%	1%
	Male	64%	29%	3%	2%	1%	1%
Household size	Fewer than 3 people	41%	44%	7%	4%	2%	3%
	3 to 5 people	69%	26%	4%	1%	0%	0%
	6 people or more	66%	28%	3%	2%	1%	1%
Total		62%	30%	4%	2%	1%	1%

ANNEX

Table 21: How would you describe any changes in the level of access to clean sanitation (toilet facility) as a result of the floods?

Region	Municipality	Level of access has deteriorated	Level of access has not changed	Level of access has improved	Not sure	Total
Gjakovë/Đakovica	Gjakovë/Đakovica	33%	65%	0%	3%	100%
	Rahovec/Orahovac	49%	43%	8%	1%	100%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	17%	75%	0%	8%	100%
	Mitrovicë e Veriut/Severna Mitrovica	60%	28%	0%	11%	100%
	Mitrovicë e Jugut/Južna Mitrovica	53%	27%	0%	19%	100%
	Skenderaj/Srbica	94%	4%	1%	2%	100%
	Zubin Potok	0%	82%	6%	12%	100%
	Zvečan/Zvečan	32%	55%	2%	11%	100%
Pejë/Peć	Istog/Istok	39%	39%	5%	18%	100%
	Klinë/Klina	5%	26%	4%	65%	100%
Prishtinë/Priština	Podujevë/Podujevo	68%	20%	0%	12%	100%
Household head gender	Female	46%	35%	1%	19%	100%
	Male	54%	27%	3%	16%	100%
Household size	Fewer than 3 people	35%	26%	5%	34%	100%
	3 to 5 people	54%	29%	2%	15%	100%
	6 people or more	56%	30%	2%	13%	100%
Total		51%	29%	2%	18%	100%

ANNEX

Table 22: Where is the damage located regarding the wastewater system?

Region	Municipality	No damage	Damage to internal network	Damage to external network	Damage to both internal and external network	Not sure
Gjakovë/Đakovica	Gjakovë/Đakovica	60%	13%	3%	20%	5%
	Rahovec/Orahovac	33%	35%	23%	9%	0%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	58%	33%	8%	0%	0%
	Mitrovicë e Veriut/Severna Mitrovica	28%	9%	4%	47%	11%
	Mitrovicë e Jugut/Južna Mitrovica	36%	13%	8%	27%	16%
	Skenderaj/Srbica	3%	91%	3%	3%	1%
	Zubin Potok	41%	0%	12%	6%	41%
	Zvečan/Zvečan	0%	30%	66%	5%	0%
Pejë/Peć	Istog/Istok	61%	14%	5%	9%	11%
	Klinë/Klina	19%	15%	5%	2%	60%
Prishtinë/Priština	Podujevë/Podujevo	32%	0%	60%	0%	8%
Household head gender	Female	31%	30%	13%	10%	15%
	Male	22%	41%	13%	10%	14%
Household size	Fewer than 3 people	20%	26%	14%	9%	31%
	3 to 5 people	23%	40%	14%	10%	13%
	6 people or more	27%	41%	11%	10%	11%
Total		24%	38%	13%	10%	16%

ANNEX

Table 23: Compared to 3 months before the flood how has your household's monthly income changed?

Region	Municipality	It has greatly decreased	It has moderately decreased	It has slightly decreased	It has remained the same	It has slightly increased	It has moderately increased	It has greatly increased
Gjakovë/Đakovica	Gjakovë/Đakovica	15%	0%	13%	73%	0%	0%	0%
	Rahovec/Orahovac	27%	16%	20%	18%	8%	3%	9%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	25%	17%	0%	58%	0%	0%	0%
	Mitrovicë e Veriut/Severna Mitrovica	17%	8%	28%	38%	6%	0%	4%
	Mitrovicë e Jugut/Južna Mitrovica	15%	3%	34%	34%	0%	0%	15%
	Skenderaj/Srbica	9%	1%	85%	2%	5%	0%	0%
	Zubin Potok	0%	6%	24%	65%	0%	6%	0%
	Zvečan/Zvečan	11%	14%	14%	59%	0%	2%	0%
Pejë/Peć	Istog/Istok	27%	9%	21%	43%	0%	0%	0%
	Klinë/Klina	42%	5%	23%	16%	4%	0%	10%
Prishtinë/Priština	Podujevë/Podujevo	20%	24%	52%	4%	0%	0%	0%
Household head gender	Female	21%	5%	29%	32%	4%	1%	9%
	Male	20%	6%	43%	24%	3%	1%	4%
Household size	Fewer than 3 people	20%	8%	32%	26%	5%	0%	9%
	3 to 5 people	16%	6%	45%	25%	3%	1%	4%
	6 people or more	26%	7%	38%	23%	3%	0%	3%
	Total	20%	7%	40%	24%	3%	1%	5%



ANNEX

Table 24: Does your household have a sufficient source of income or savings to pay for your monthly expenses (rent, utilities, and food)?

Region	Municipality	Yes, for more than 6 months	Yes, for 3-5 months	Yes, for 2 months	Yes, for 1 month	No	Do not know
Gjakovë/Đakovica	Gjakovë/Đakovica	0%	0%	0%	15%	83%	3%
	Rahovec/Orahovac	39%	29%	9%	18%	2%	4%
Mitrovicë/Mitrovica	Leposaviq/Leposavić	0%	0%	0%	100%	0%	0%
	Mitrovicë e Veriut/Severna Mitrovica	2%	2%	4%	9%	79%	4%
	Mitrovicë e Jugut/Južna Mitrovica	0%	0%	3%	13%	68%	16%
	Skenderaj/Srbica	2%	3%	1%	93%	2%	2%
	Zubin Potok	88%	0%	0%	6%	0%	6%
	Zvečan/Zvečan	27%	32%	5%	2%	7%	27%
Pejë/Peć	Istog/Istok	18%	16%	11%	34%	21%	0%
	Klinë/Klina	5%	18%	31%	15%	28%	5%
Prishtinë/Priština	Podujevë/Podujevo	32%	44%	16%	4%	4%	0%
Household head gender	Female	8%	5%	11%	28%	37%	12%
	Male	14%	14%	9%	40%	21%	4%
Household size	Fewer than 3 people	10%	11%	11%	25%	37%	8%
	3 to 5 people	12%	16%	7%	39%	20%	4%
	6 people or more	15%	9%	10%	41%	21%	5%
Total		13%	13%	9%	37%	23%	5%

ANNEX

Table 25: Coping strategies

	No, because I did not need to	No, because I already sold those assets or have engaged in this activity within the last 12 months	Yes	Not applicable (don't have children/ these assets)	Total
Spent savings due to lack of food	78%	1%	21%	0%	100%
Sent household members to eat elsewhere due to lack of food	89%	1%	10%	0%	100%
Reduced expenses on health (including drugs) or education due to lack of food	89%	2%	9%	1%	100%
Purchased food/non-food on credit (incurring debts) due to lack of food	91%	1%	6%	1%	100%
Withdrew children from school due to lack of food	85%	2%	6%	8%	100%
Begged and/or scavenged (asked strangers for money/food) due to lack of food	94%	2%	4%		100%
Sold household assets/goods (radio, furniture, refrigerator, television, jewellery, etc.) due to lack of food	94%	2%	3%	2%	100%
Sold productive assets or means of transport (sewing machine, wheelbarrow, bicycle, car etc.) due to lack of food	93%	2%	2%	3%	100%
Mortgaged/sold house or land due to lack of food	97%	2%	0%	0%	100%
Engaged in illegal income activities (theft, prostitution) due to lack of food	98%	1%	0%	0%	100%

Table 26: What are your household top three priority needs?

	Yes	No
Health	80%	20%
Water	60%	40%
Food security	43%	57%
Social support and protection	19%	82%
Sanitation/hygiene	15%	85%
Business and employment	14%	87%
Maternal and child nutrition	10%	90%
Livelihood Protection/safety and dignity	10%	90%
Non-food items	6%	94%
Education	2%	98%
Psychosocial support	1%	100%
Rehabilitation of logistics infrastructure (roads, railways, airports)	0%	100%
Telecommunication	0%	100%

ANNEX

Table 27: Does the household have any member with the following vulnerability?

	Selected
Chronically ill	11%
Elderly (60+)	8%
Ethnic minority	8%
Single parent	5%
Other	5%
Not sure	66%

Table 28: What is the highest level of education attained by individuals?

	Count	Column N %
None	159	7%
Incomplete Primary	128	6%
Complete Primary	600	26%
Incomplete secondary	132	6%
Complete secondary	874	38%
Technical tertiary	26	1%
Higher (University)	346	15%
Don't know or NA	53	2%
Total	2265	100%

Table 29: Is the main respondent/head of household covered by health insurance?

	Count	Column N %
No	2091	90%
Yes	223	10%
Total	2316	100%

Table 30: Has employment status changed after the floods?

	Count	Column N %
No	2269	98%
Yes, I become unemployed	22	0.9%
Yes, I changed work/sector	6	0.3%
Yes, I started a job	17	0.7%
Total	2316	100%

ANNEX

Table 31: Giving consent to fill in the questionnaire – businesses

Question	Category	Count	Column N %
Do you agree to let me ask you these questions?	No	15	13.60%
	Yes	95	86.40%
If No, please indicate the main reason why it is not possible to proceed with the assessment	Building abandoned	2	1.80%
	Building under construction	2	1.80%
	Occupants did not allow the assessment	8	7.30%
	Security concerns	1	0.90%
	Other	2	1.80%
Total		110	100 %

Table 32: Type of building and current position in the business of the respondent

Question	Category	Count	Column N %
Type of building	Commercial/Business	77	81.10%
	Hospital/Health Clinic/Other medical infrastructure	3	3.20%
	Residential & Commercial	6	6.30%
	Residential/Dwelling	3	3.20%
	School/Education Facility	2	2.10%
	Other	4	4.20%
Current position in this business?	Owner/Co-owner	71	74.70%
	Manager	16	16.80%
	General Director/Executive Director/Deputy Director/Managing Director	4	4.20%
	Chief Accountant/Financial Director/Financial Manager/Accountant	2	2.10%
	Other	2	2.10%
Total		95	100.00%

Table 33: Business size

	Count	Column N %
Self-employed	24	25%
2 – 4 employees	34	36%
5 – 9 employees	12	13%
10 – 49 employees	22	23%
50 – 249 employees	1	1%
Don't know	2	2%
Total	95	100.00%

ANNEX

Table 34: What is the main sector of activity of this business?

	Count	Column N %
Wholesale and retail trade	19	20%
Other service activities	18	19%
Accommodation and/or food service activities	11	12%
Manufacturing	9	10%
Health	6	6%
Agriculture, forestry and fishing	4	4%
Arts, entertainment and recreation	4	4%
Education	1	1%
Information and communication	1	1%
Transportation and storage	1	1%
Other	21	22%
Total	95	100.00%

Table 35: Business operation status

	Category	Count	Column N %
B1. Currently, is this business open, temporarily closed, or permanently closed?	Temporarily closed	29	30.50%
	Operating partially	14	14.70%
	Operating normally	52	54.70%
	Total	95	100 %
B2. Did this business close temporarily due to the floods?	No	2	2.10%
	Yes	64	67.40%
	Total	66	100 %

Table 36: For how many days has this business been closed due to the floods?

Region	Municipalities	Mean	Count
Gjakovë/Đakovica	Rahovec/Orahovac (n=1)	56	1
	Gjakovë/Đakovica (n=9)	10	9
Mitrovicë/Mitrovica	Zvečan/Zvečan (n=4)	23	4
	Leposaviq/Leposavić (n=28)	23	28
	Skenderaj/Srbica (n=13)	16	13
	Mitrovicë e Jugut/Južna Mitrovica (n=12)	13	12
Pejë/Peć	Klinë/Klina (n=4)	34	4
	Istog/Istok (n=24)	31	24

ANNEX

Table 37: Has the flooding affected this business in any of the following ways?

	Row N %	Count
Power outage	42%	40
Problems with roads	33%	31
Water supply disruptions	31%	29
Increase in input prices	23%	22
Disruption in the supply chain	22%	21
Reduced investment	16%	15
Problems with internet access	15%	14
Reduced logistics services	14%	13
Increased administrative bottlenecks	13%	12
Increased costs due to need to purchase personal protective equipment for employees	12%	11
Clients not paying their bills	10%	9
Employee absences	10%	9
Reduced certification services	2%	2
Adopting new ways of work in the workplace	2%	2
Shifting production to products required for flood response	1%	1
None of the above	16%	15

Table 38: Have stock or assets, or building walls, floors, or foundations, suffered any damage?

	No damage	Minor damage	Moderate damage	Severe damage	Completely destroyed	Not possible to assess
Inventory	5%	25%	32%	16%	13%	10%
Assets	5%	27%	37%	8%	14%	8%
Walls	8%	23%	45%	13%	3%	7%
Floor	22%	33%	21%	11%	6%	7%
Foundations	40%	15%	10%	5%		31%

Table 39: Has the building been flooded?

Up to...	Column N %
Up to ankle (5-10 cm)	15%
Up to knee (30-40 cm)	42%
Up to waist (80-100 cm)	26%
Up to shoulder (130-160 cm)	10%
Not possible to assess	7%

ANNEX

Table 40: Urgent repairs

Question	Category	Share %
Any essential or urgent repairs	No	66%
	Yes	34%
Type of essential or urgent repairs	Secure dangerous structural elements	17.90%
	Address hazards from utilities (e.g natural gas, water pipe, electricity)	5.30%
	Restore access to utilities	1.10%
	Other	9.50%

Table 41: Has there been any damage to the electricity system as a result of the flood?

	Column N %	Count
No damage	36%	34
Damage to internal network	32%	30
Damage to public network supply	17%	16
Damage to internal and public network	16%	15
Total	100%	95

Table 42: What type of debris/disaster waste is present?

	Row N %
Mud (n=18)	78%
Rocks/Stones (n=16)	70%
Soil (n=15)	65%
Wood (trees, logs) (n=9)	39%
Garbage (n=7)	30%
Other (n=5)	22%

ANNEX

Table 43: How is the building ground level in comparison to the outside ground level?

	Column N %	Count
Below outside ground level (> 1 metre)	19%	18
Below outside ground level (< 1 metre)	13%	12
At the same level	48%	46
Above outside ground level (< 1 metre)	11%	10
Above outside ground level (> 1 metre)	10%	9
Total	100%	95

