

Gender Analysis
of the Impact of the 2014 Floods in Serbia

Impressum

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Gender Analysis of the Impact of the 2014 Floods in Serbia

Introduction

In May 2014, Serbia was hit by floods that caused damage estimated to Eur 1,532 billion, claiming the lives of 51 people, 24 of whom drowned (data provided by the government of the Republic of Serbia¹). The worst flood-affected areas were in and around Obrenovac, Svilajnac, Paraćin and Krupanj municipalities, which also suffered destruction and loss from landslides.

On May 15th, the government of the Republic of Serbia adopted a decision, declaring the state of emergency brought about by a natural disaster (pursuant to Article 32, Paragraph 3 of the Law on Emergency Situations, (Official Gazette of the Republic of Serbia, No. 111/2009, 92/2011 and 93/2012), across the country, which was in force until May 23rd. According to official data provided by the Sector for Emergency Management, services responding to the emergency (fire and rescue squads, police, Gendarmerie, Special Anti-terrorist Unit (SAJ), Counter-Terrorist Unit (PTJ), Helicopter Unit, Serbian Army, the Red Cross, Mountain Rescue Service and other protection and rescue forces), carried out emergency evacuation and rescue of 31, 879 people from the affected areas. From Obrenovac alone, 25,000 people were evacuated. The evacuees were accommodated in collective/reception centres but also in the homes of their family and friends².

Although natural disasters affect all segments of the society they can have different social impact on men and women, as well as on vulnerable groups, because of the differences in the degree of their exposure and social exclusion, which considerably affects their ability to avoid and mitigate risk. Gender roles, social norms and inequality between men and women influence exposure to risk, the perception of risks and the ability to respond to risk and rescue, as well as various psychological and physical consequences and the potential for recovery and reconstruction after natural disasters.

1 <http://www.srbija.gov.rs/vesti/specijal.php?id=209591>

2 E-mail correspondence with the Sector for Emergency Management, July 17th, 2014.

The best-known study on gender aspects of natural disasters - *The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy*, 2007 – documented that the casualties in natural disasters are more often women than men and that this trend is determined by gender inequalities, mostly in terms of management of resources and goods.³ A number of seminal studies on gender aspects of natural disasters were conducted in the wake of the 1998 hurricane Mitch (Bradshaw, S., 2000; World Bank studies, 2000.), while a gender needs assessment was developed following the 2010 Pakistan floods (UNIFEM 2010⁴).

International organizations, such as the International Labour Organisation - ILO, World Health Organization, World Bank and the United Nations Development Programme - UNDP, implement and support different programmes and develop guidelines and tools for improving a gender-sensitive approach to natural disasters and risk management, including prevention and mitigation of consequences. A number of aspects stand out, in particular: health risks for women and men in natural disasters, including the risks of violence and human trafficking and the participation of women in decision-making processes, as well as in risk prevention, mitigation of consequences, and rebuilding areas hit by catastrophes. With the aim of further elaborating the principles incorporated in the Beijing Declaration and Platform for Action (1995), the Beijing Agenda for Global Action on Gender-Sensitive Disaster Risk Reduction was adopted in 2009 in Beijing. It defines the goals to be achieved by 2015, allowing the mainstreaming of a gender perspective into disaster risk management prevention and mitigation. Some of the provisions include:

- 1) *Increasing political commitment to gender analysis and gender mainstreaming, through cooperation between the institutions responsible for response in emergency situations, climate change, poverty reduction and gender equality, with the participation of the civil society;*
- 2) *Developing and reviewing national policies and action plans in this field, with the aim of mainstreaming a gender perspective;*

3 Neumayer and Plümer; *The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy, 1981-2002*; LSE, 2007.

4 <http://www.unwomen.org/~media/Headquarters/Media/Publications/UNIFEM/PakistanFloods2010RapidGenderNeedsAssessmenten.pdf>

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- 3) *Collecting gender-sensitive statistical data on gender-sensitive impact of disasters, making a gender-sensitive vulnerability assessment and developing indicators to monitor and measure progress;*
 - 4) *Increasing awareness of the public and media on the gender-specific vulnerabilities and needs and concerns in disaster risk reduction, supporting research on the benefit of gender-sensitive policies and programmes in disaster and climate change risk reduction and poverty reduction;*
 - 5) *Providing the support necessary for the application of measures and policies that will help prevent disasters from making the poor even poorer and ensuring equal participation between men and women in disaster risk management, improving preparedness, securing a more adequate response, and recovery through capacity building and training;*
 - 6) *Building the capacities of professional organizations and institutions to enable gender mainstreaming into all development sectors.*

In Serbia, equality is guaranteed by the Constitution (Article 15 of the Constitution of the Republic of Serbia), while the state policy on gender equality is defined in more detail in the Law on Gender Equality (2009), Law on the Prohibition of Discrimination (2010) and the National Strategy (and Action Plan) for Improving the Position of Women and Promoting Gender Equality (2010 – 2015).

Serbia also ratified the United Nations Security Council Resolution on Women and Peace and Security and drafted the National Action Plan for the Implementation of the Resolution. The goal of the Resolution and the National Action Plan is increasing the participation of women in the security sector (army, police and similar services), ensuring the involvement of women in making security-related decisions and designing security policies, as well as introducing gender-sensitive policies in the domain of security.

Moreover, Serbia ratified the United Nations Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). To date, three periodic reports were submitted to the Committee on the Elimination of Discrimination against Women, the body that monitors the implementation of the Convention.

After the May floods in Serbia, the United Nations Entity for Gender Equality and the Empowerment of Women (UN WOMEN) developed a study that provides information and guidelines on gender equality during needs assessment immediately following the disaster and offers recommendations on achieving gender equality during the recovery and reconstruction process in flooded ar-

cas.⁵ Based on consultations with female experts and women's groups, the study identified key gender aspects of the impact of floods on employment opportunities and economic status, housing conditions and property, the scope of women's unpaid work, the availability of education, health and social services, as well as the initial response throughout the duration of the state of emergency, evacuation and placement in collective centres.

The gender dimension of flood protection and rescue activities was recognized by the Gender Equality Council of the Government of the Republic Serbia too, which held an emergency meeting to discuss this issue on May 29th, 2014, and concluded, among other things, that it is necessary to develop gender-sensitive statistics, risk indicators on social and economic consequences, as well as indicators on reconstruction and recovery. Furthermore, it is necessary to put additional effort in providing protection for women and girls and ensure equality in the distribution of aid. Having in mind the legal framework and the previous results in Serbia, we expect steps to be taken, in the forthcoming period, toward mainstreaming a gender perspective into emergency management.

Flood risk is also an issue related to the overall human security⁶, and includes food, water, energy, health security, as well as environmental security. Flood risk requires a new approach to natural resource management, namely, producing information about the state of the environment and participation in environmental decision-making available to citizens.

5 UN Women, 2014, Gender Equality in Post-Disaster Needs Assessment: Floods Recovery and Reconstruction in Serbia

6 The United Nations (2012) define human security as "the right of all people to live in freedom and dignity, free from poverty and despair".

The OSCE Mission to Serbia, in collaboration with Aarhus Centres (centres for promotion and implementation of the Aarhus Convention⁷), initiated research into the gender aspects of floods in Serbia, based on the assumption that natural disasters and emergency situations can have different impacts on men and women and that the degree and nature of risks for men and women can be different, as are their causes. Gender-specific risks and consequences of natural disasters or catastrophes can be viewed from several different aspects: different levels and forms of risks, different needs during the period of immediate danger and differences caused by gender to (long-term) consequences of natural disasters, including economic, social or emotional.

The results of the research are based on interviews conducted with residents of four municipalities hit by May floods (Svilajnac, Paraćin, Obrenovac and Krupanj), with female volunteers from evacuation centers in Dobanovci and Železnik, data obtained from the Sector for Emergency Management and other available sources related to the duration and status of the emergency, number of evacuees and casualties, number of rescuers on site and the like.

The goal of the research was to identify and document gender-specific differences as regards flood risk, so as to inform the public and formulate a set of recommendations for improving gender sensitivity in emergency management. Reconstruction in the aftermath of flooding is a social and economic development issue and has considerable impact on the economy, social welfare, health, decision-making and other processes in the country. This is why it is especially important to conduct a timely analysis of gender aspects, not only during the state of emergency, but also its consequences, in order to mainstream gender into programmes and policies related to rescue operations and reconstruction of flooded areas.

7 The Aarhus Convention was adopted in 1998 in Aarhus, Denmark. It is one of the instruments for improving the environment. The Convention stands on three fundamental pillars: access to information, public participation in environmental decision-making and access to justice when the above two rights are violated. The Republic of Serbia adopted the Law on Ratification of the Aarhus Convention in 2009. The activities of Aarhus Centres are aimed at promotion and improvement of the implementation of the principles incorporated in the Aarhus Convention. The Aarhus Centre network consists of the centres in Novi Sad, Niš, Subotica and Kragujevac.

The research was carried out also to determine the effect of gender patterns on the health and safety of the population and the impact that the state of emergency can have on the status of women.

Together with international guidelines the results of this research aim to contribute to increasing gender sensitive policies in the Sector for Emergency Management. Research findings illustrate gender-specific flood risks and should be considered in the process of advancing gender-sensitive prevention and prevention in general.

Methodology

The starting point of our research was the assumption that socially determined gender differences, but also biological differences, between men and women elicit different kinds of risks and bring about different reactions during emergencies and in the aftermath.

The research aimed to determine and document the following:

- The existence of gender-specific differences to flood hazards within a community;
- The existence of gender-specific differences related to needs and risk exposure during rescue and in the course of immediate danger to life and property;
- Ways to enhance prevention and increase access to information and participation of men and women in developing a response to emergency situations, primarily at local level but also in the management of natural resources and the environment.

Gender-specific differences related to the risk, rescue and return to the examined flood-affected areas pertain to the period immediately before and during the emergency, namely, during the initial response to the state of emergency (rescuing people and property). Gender analysis of the reconstruction program of the flooded areas is outside the scope of this research, because, among other things, reconstruction of residential housing was still ongoing at the time when

the research was developed, in July, 2014, through efforts co-ordinated by the government of Serbia⁸.

The research is based on pre-determined gender aspects, as well as those previously documented in earlier studies (mentioned above) dedicated to gender and natural disasters. Preliminary identification of relevant gender patterns is found in areas where gender differences are generally most pronounced including economy, household work, child care and parenthood, decision-making, health, violence against women. Therefore, primary categories considered as relevant in terms of gender include: availability of resources (including information), taking care of children and separation from family members, personal hygiene, health risks, sexual violence and risks of human trafficking.

The collection of data was carried out through interviews with residents of communities most severely hit by the devastating floods including Obrenovac, Krupanj, Svilajnac and Paraćin. The survey was carried out on a sample of 78 respondents: 25 from Paraćin and Svilajnac, respectively, 16 from Obrenovac and 12 from Krupanj. To identify gender-specific differences, the research team interviewed 32 men and 46 women that were exposed to flooding. The respondents were selected based on random sampling in settlements affected by flooding. Volunteers from Aarhus centers Novi Sad and Kragujevac were engaged in the survey by conducting interviews with returnees in the field. Gender-related differences of residents that took temporary shelter in evacuation centers and the type of support provided to them was examined with the assistance of a focus group comprised of volunteers⁹, which were engaged in reception centres in Dobanovci, Železnik (occasionally) and sport centers Pionir and Arena. In addition to information obtained by in-person interviews, the research also includes information provided by the Sector for

8 Since Serbia does not have a well-developed system of monitoring the consequences of natural disasters with incorporated gender-sensitive indicators, at this point it is very difficult to precisely determine the gender-specific consequences, namely, gender-specific differences impacts of floods on the status of men and women.

9 We wish to express gratitude to the following senior students of andragogy, from the Faculty of Philosophy, University of Belgrade: Tijana Kuzmanović, Jelena Tasić, Aleksandra Mitrović, Nina Stevanović, Milica Đuričić, Vilena Višnjić and Nevena Stoisavljević.

Emergency Management, which was not gender-sensitive. The records of evacuees were kept by the Red Cross; however, we didn't receive information on the number of evacuated people, their gender and age.

Based on the findings of this research, recommendations were developed for the involvement of women in prevention, dissemination of information and risk management, mainstreaming gender and gender sensitivity into the system of emergency management. The recommendations also address the need for further research into gender aspects of the consequences of the state of emergency, the needs during immediate return to affected areas, restoration and remediation of damage as well as general recommendations for the empowerment of women during and after emergency situations¹⁰.

10 Recommendations for mainstreaming gender into emergency management are based on the findings of other studies conducted in Serbia, international guidelines and the findings of this research.

Research Findings

This research demonstrated that both male and female community members were unprepared for the state of emergency, and lacked information on the course of action that should be taken in the event of an emergency. The citizens we spoke with were unanimous in stating that they had no access to information about what was going on, what was in store and what they could expect. The research revealed that biological differences but also gender roles were the underlying reasons due to which a more pronounced sense of “helplessness” prevailed among women, because of which they relied, to a much greater extent than men, upon professional and organized support. On the other hand, men showed overall more initiative than women, actively participated in rescuing neighbours and animals, communicated more often with the rescue services and were more critical of the rescue system at the time of flooding.

Elderly residents living alone were in a particularly difficult position; our study included seven such women and one man, while the majority of respondents were over 55. Younger male respondents (aged 30 and over), more often lived with their parents. Most respondents were married and had an average of two children.

Three aspects that surfaced as key differences between men and women induced by gender patterns and lifestyles included:

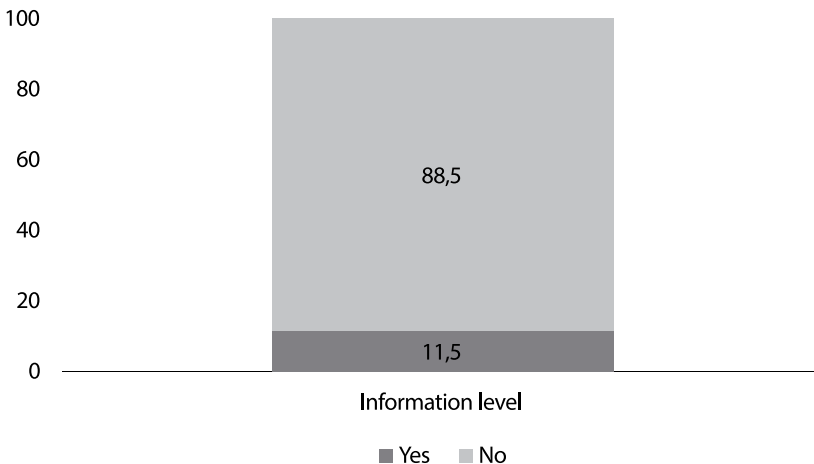
- Level of information and preferred means of obtaining information prior to the onset and during the state of emergency;
- Possibilities for evacuation and needs during placement in collective centres and
- Difficulties immediately after returning to the residential units, more precisely challenges during rehabilitation.

Access to information

Information obtained by citizens, through informal channels only, did not include instructions on how to act in the event of flooding, neither were they notified about procedures during and immediately prior to evacuation. Most respondents emphasized they were taken by surprise as regards the speed at which they had to leave their homes. Some respondents described the situation in the following way: *“We had no time to pack. We did not know what to take, where to go or who to wait for. The water was rising at tremendous speed, within two hours it was literally over the roofs. Had we waited a little bit longer, we would have drowned.”*

The warning system also failed; most respondents stated that: *“the sirens could not be heard”*, adding that they were not informed about what was expected from them and what they should do. Many respondents described their predicament in the following way: *“We were left to fend for ourselves”*. Even when the respondents saw rescue teams pass by, knowing they would return, they were not informed about what to do in the meantime or when the teams would come back. Some residents spent up to 48 hours in their homes (in Obrenovac) before they were evacuated; on an average, some respondents spent just as much time in “Jefimija” Elementary School, in Obrenovac, where they were either evacuated or found refuge on their own because it was located “on the highest point” beyond reach of the flood.

Figure 1. Graphical presentation of respondent answers to the question: “Were you informed about the possibility of evacuation and the risk of flood?”



Residents we talked to believe that emergency alert should be broadcasted in the media (67%) and/or sounded by sirens (42%). The percentage of women preferring media was somewhat higher than that of men, who favoured the use of both sirens and the media. This issue was also interesting because men showed stronger interest in the functioning of the system and were more critical about the organization of the protection and rescue system. Still, the community alert siren system, even when fully functional, proved to be insufficient. Women highlighted the importance of developing promotional material (leaflet, brochure or the like) containing information about how to act in the event of an emergency and evacuation, which would assist them in coping with the situation.

Answers provided by the respondents demonstrated that women preferred receiving official information, while men were prepared to obtain informal information and to grapple with the situation at hand; namely, they did not stress that information prepared in advance would have been useful. One respondent explained the discrepancy by the fact that men served the army, during which they underwent training on the basics of rescue operations during emergencies and therefore acquired more knowledge than women. In light of this fact, women would have considerably benefited from organized, comprehensive dissemination of information and education on how to act in case of emergencies.

The re-establishment of the civil defence system, which was transferred from the competency of the military to the Serbian Ministry of the Interior, commenced in 2013 and since then, specialized civil protection units began recruiting male and female volunteers and reservists with experience in the unarmed military service. General purpose civil defence units are within the authority of local self-governments and as such can offer a good framework for providing information and education of the community.

The floods that hit Serbia in May 2014, were marked by the lack of an adequate system of dissemination of information, foremost to communities living in areas under threat. Out of 78 respondents, only nine were informed- in some way- about the flood, threat and imminent evacuation before the actual evacuation began. These were mostly women – a total of six respondents, as compared to three men (Figure 1). All nine of them obtained information in informal ways, either through individuals working in the police or those engaged in the emergency flood response activities.

Based on the Law on Emergency Situations, the government adopted the Decree on the Content and Model of Development of Plans of Protection and Rescue in Emergency Situations (Official Gazette of the Republic of Serbia 8/2011-12 which came into force on February 19th, 2011) and the Guidelines on the Methods of Development of Risk Assessment and Protection and Rescue Plans in Emergency Situations” (Official Gazette of the Republic of Serbia 096/2012-28). Based on this legislation, local self-government units should develop risk assessment plans of their natural surroundings and infrastructure for the area they cover, and accordingly define modalities and develop evacuation plans of residents of their communities. In the municipalities that were worst affected by the May floods, protection and rescue plans were not developed. The importance of protection and rescue plans is because they contain instructions for:

- Preparedness – readiness for emergency situations;
- Mobilization – taking action in case of immediate danger or onset of an emergency;
- Protection and rescue according to the nature of hazards;
- Civil defence measures and tasks;
- Observation, early warning and alerts;
- Employing protection and rescue teams;
- Mitigation and elimination of consequences;
- Informing the public.

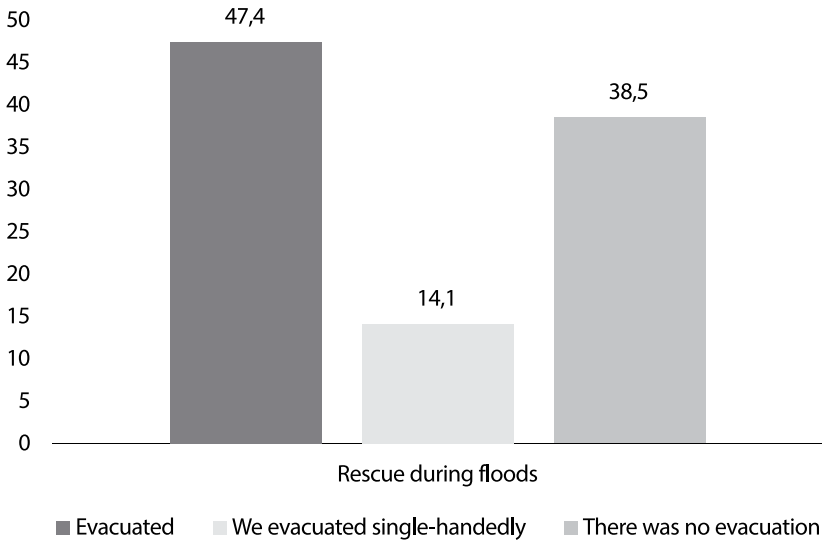
Informing the public on the content of these plans and their participation in the development process proved to be very important, since community members have good knowledge of their local surroundings, including information on escape routes, access to different facilities, consequences of certain natural disasters and the like. It is also important that local authorities rely on resources available in the community, including human resources. These plans should include capacity building and empowerment of local civil defence systems.

Duration of the imminent danger and evacuation

Evacuation was not carried out at an equal pace in all the observed municipalities - in Krupanj there was no organized evacuation at all, but also in most parts of Svilajnac and Paraćin. The largest number of evacuated respondents was from Obrenovac. In the examined group, rescue services carried out evacuated in 47.4%, (or 37 respondents), of which the number of women was slightly larger - 21 as opposed to 16 men (figure 2). Approximately half of the respondents were not evacuated because the rescue teams never reached them or their settlement, so some remained in their homes (ascending to higher floors), or organized evacuated themselves: *“we moved to a safer location as we did not dare wait”*. Answers provided by the respondents clearly demonstrated that families with male members evacuated themselves “independently”, more often, meaning they left their dwellings and found shelter with neighbours and relatives who live outside the affected area. Those that stayed in their home because they could not be evacuated, described their situation in the following way: *“We could not come downstairs to the ground floor and nobody could get into the house”*. The biggest problem for those remaining in the affected area, was the lack of food, drinking water and electricity, along with the fact that they were *“cut off from the rest of the world”*. *“The water level rose to about one meter and I didn’t have anywhere to sleep. I had to sleep on the table and I was completely cut off from the rest of the world for four days”*, said a female respondent from Svilajnac. Also in Svilajnac, where organized evacuation was not an option, people with disabilities were especially affected. Medical, food supplies and drinking water were provided to them only after a couple of days. *“I could not evacuate myself because I have an artificial hip, but I wasn’t afraid, even though I was alone. The doctors came and I was attached to an intravenous drip, they brought food and water”*, said an elderly female resident of Svilajnac.

Mail respondents considered evacuation more a “technical measure”, while from an organizational point, the biggest problem for them was the fact that they left their property. Women were more afraid and concerned about themselves and their children.

Figure 2 Graphical representation of respondent answers to the question: "Were you evacuated?"



The participants of this study commented that affected citizens, evacuated without formal support (organized rescue operations and instructions) or participation of rescue services were evacuated in boats belonging to their neighbours. A respondent from Paraćin described the situation in the following way: "We were evacuated by a neighbour who owns a boat and who saved many people, he later delivered food and water to those remaining in their homes". All boat owners and volunteers that participated in spontaneous rescue efforts were men. Women also took part in the rescue services and the respondents stressed that women were equally skilful as men and that they were amazed by the skills of rescuers, both male and female. "I take my hat off to them", said one respondent from Obrenovac, who was evacuated from his flooded home due to assistance from the rescuers. The respondents also noticed that rescue teams from Denmark and other countries included female members. Still, female community members showed lack of initiative for a more active role in rescue efforts. One respondent from Obrenovac commented that only one woman he knew actively participated in rescue efforts, together with a neighbour who owned a boat. "That woman lives alone", he said, adding that: "she is used to doing everything

herself". This is indicative of a gender pattern, according to which women, living in a marital union, are more passive and dependant on their husband's support, which thereby links them to their gender role.

During flood rescue, men entered into the water evacuated farm animals and pets, while women that were alone did not. Wading through the water, when entering the boats, was perceived by women as one of the greatest health risks. *"I was afraid of the water, more than anything else; we had to wade through deep water which was very cold. I was afraid that I would catch a cold"*, said a female respondent from Obrenovac. Men too, were uncomfortable with wading through the water before reaching the rescue boats, but only 6 of them depicted this issue as their major concern or difficulty. On the other hand, 13 women described they were most distressed by having to wade through the water and depicted this as their strongest fear.

According to statements given by 78 respondents, there were cases when rescue services evacuated women and children, while male members of their families stayed behind in the flooded areas, believing the situation was not so critical and doesn't pose a risk to their safety. At the same time they believed they could contribute to rescue efforts and protection against floods. Families were separated in four cases in Krupanj and Paraćin, when male family members were absent due to business, at the time of the onset of floods and evacuation. In the course of the interviews with the respondents, we learned about cases of family members that were evacuated in different boats but also of residents that organized evacuation for female members and children, that found shelter with relatives, while men stayed in the flooded dwellings, upon their own initiative, in order to start repair work as soon as the water receded. One respondent shared his story with us: *"My wife and children are still staying with relatives and I remained here to see what I can do in the house, so they can return to safety"*, while another stated: *"My wife and children are in Lipnica and I'm here in Krupanj. They can't come back because we have not been provided with accommodation yet"*. Men were less likely to recognize that the situation had become dangerous and life threatening, therefore they were more inclined to refuse to be evacuated. This was evidenced by a statement of a respondent from Obrenovac. *"At first, I didn't want to be evacuated, because I did not think the situation would become that critical, but when the water level started to rise, I had no choice."*

Respondents stressed that the Law defining priorities during evacuation, according to which, children up to the age of 15, their parents or guardians caring

for the children, pregnant women, elderly, ill and bed-ridden people are given priority, is entirely justified. They also pointed out that the responsible services invested considerable time to locate prioritized individuals, which slowed down the rescue process considerably. *“The rescue teams passed by houses in which residents were waiting to be rescued, because they had orders to find a pregnant woman at a certain address, but because they weren’t locals, they had difficulties finding their way around and lost a lot of time”*, a respondent from Obrenovac commented. This issue also illustrates the importance of involving local residents in rescue operations, because of their good orientation in their settlements and knowledge of the streets. The respondents found this to be an aspect in which inadequate organization of rescue services was evident. Men and women who participated in the study agreed that the rescue services should conduct evacuations in a consecutive manner, and in case of limited space in boats, priority should be given to children, pregnant women, sick and bed-ridden citizens. They were of opinion that it was necessary to create teams tasked with locating and evacuating affected priority groups, but that a certain number of teams should have been assigned to evacuate the general population.

The respondents spent 48 hours, on an average, without electricity, water, hygiene products (especially in Obrenovac), regardless of whether they were evacuated in collective centres located in the flooded municipality or remained in their homes and waited for the rescue service teams to arrive.

One of the questions in the survey referred to the respondents’ perception of the biggest problem they faced during evacuation. The majority replied that leaving their property (73%), was the biggest obstacle, followed by entering the boat (14%) and wading through the water (13%). More men (73%) than women (58%) emphasized that leaving their property was most distressing for them and a few were ready to stay in their flooded homes (five male respondents). The safety and well-being of children and other family members was a priority concern for women and men, alike.

In addition to rising water levels, respondents were concerned about an outbreak of disease, foremost because of the shortage of drinking water. Eight women and three men depicted this as major threat for them.

Conditions in collective centers in Belgrade or temporary shelters located in the flooded municipalities (from which further evacuation was organized), according to the respondents, were evaluated as satisfactory, although women and

children more often found shelter with relatives and friends, while men stayed in collective centres. Female respondents evacuated from Obrenovac, accommodated in the local primary school, waiting for further evacuation, found that maintaining personal hygiene was a significant problem (particularly for girls), due to the lack of adequate conditions. Respondents commented that they would have been more mentally prepared had they been informed, beforehand, about the locations of the collective centres in their municipalities.

In 2009, the Republic of Serbia adopted the Action Plan for establishing a single service for emergency management and passed the Law on Emergency Situations (Official Gazette of the Republic of Serbia, No 111/2009, 92/2011, 93/2012) which defines activities, sets out rules for declaring and managing the state of emergency; the system of protection and rescue of people and goods; authority, rights, duties and responsibilities (from state bodies to other physical and legal persons) and all other issues relevant to the set-up and functioning of the protection and rescue system.

According to the Law on Emergency Situations, every citizen has the right to be protected from disasters and catastrophes caused by natural hazards and other disasters. Pursuant to the first principle of this Law, protection and rescue of human lives has priority over all other protection and rescue activities.

This Law defines the notion of evacuation as a planned, organized and temporary relocation of the population, livestock, material and cultural goods, state bodies, business companies and other legal persons from the affected area to the area demarcated in the Emergency Protection and Rescue Plan, free from threat, which provides conditions for living and protection. Moreover, in accordance with Article 58, Paragraph 3 of the Law, residents from areas for which mandatory evacuation was ordered shall act in line with the evacuation order.

According to this Law, priority during evacuation will be given to:

- Mothers with children up to 15 years of age, namely, other persons legally responsible for the up-bringing and caring of minors, younger than 15;
- Pregnant women;
- Sick persons, persons with special needs and other persons dependant on the assistance and care of third parties;
- Persons under the age of 16 and over the age of 65 (men) and 60 (women).

The period following imminent danger

As regards to the question of what the respondents perceived as the biggest obstacle in the period following imminent danger, the majority stated that the impossibility of returning to their homes caused greatest concern, along with the fact that they were prevented from cleaning their dwelling after the water receded. Out of a total of 78 respondents in our study, 3 respondents from Krupanj and 4 from Obrenovac said that they “*did not have anything left to clean*”, in other words, their homes were completely destroyed. At the time of the development of this research, only 14 interviewees from Obrenovac moved back to their homes completely, while others still stayed with relatives and friends or in rented accommodation in Obrenovac, daily working on the repair of their homes. People found it very difficult to give up their property and the sense of uncertainty was an additional burden for them. To preserve an active stance towards this unfortunate situation and stay physical close to their homes, respondents visited and worked on improving their damaged houses and destroyed gardens as much as they could. People over 50 were in the most difficult position, some of which were unemployed or retired and describe themselves as “*having no chance of building and furnishing the home from scratch*.”

Immediately after establishing the basic conditions for safe return, men and women jointly carried out clean-up work in their buildings, which included discarding furniture and flooded household appliances and electronics, removing mud and floorings, as well as removing mortar from the flooded walls. The respondents described that the division of tasks was carried out with men mostly working on repairs requiring greater physical effort, while women were more focused on cleaning after the heavy-duty jobs were done.

Removing the rubble and destroyed furniture was a serious challenge in Obrenovac, which required the engagement of three trucks to transport several tons of debris, deposited in locations outside Obrenovac. Respondents commented that post-flooding rubble removal was not organized in the most rational way due to lack of machinery.

In the local communities within Paraćin and Svilajnac, respondents commended the well-organized distribution of leaflets containing information on health risks in the aftermath of floods, as well as the distribution of disinfectant packages, which gave them a sense of security, not so much because of the protec-

tion provided by the cleaning products, but because it was regarded as proof of good organization and concern for the returnees. Respondents evaluated that good communication between the municipal representatives and affected citizens in Paraćin and Svilajnac considerably facilitated the process of return and recovery.

This research demonstrated that single mothers, households without male members as well as elderly households were not capable of carrying out post-flooding recovery works of their dwellings but resorted to paying for removal of debris, whitewashing the walls, placing new flooring and the like.

Psychological support was provided only for residents of collective centres in Belgrade, but not in collective centres located in municipalities from other flood-affected areas. Female respondents from Krupanj and Paraćin pointed out that they *“were support to the children, because professional support was not organized”*. More men than women (28 men, as compared to 13 women), stated that they didn't need psychological support at all, while others did not take advantage because of shortage of staff and because they believed they did not need it that much. Thus, psychological support turned out to be most needed by children and women who predominantly took care of children throughout the duration of the emergency.

There were numerous collective/reception centres throughout Belgrade, offering considerably differed conditions ranging from accommodation in spacious hall such as those provided by “Pionir” and “Arena” sports centres to small reception centres in Dobanovci and Železnik, which mostly housed mothers with children. We did not manage to obtain information from the Red Cross on the number of women and men accommodated in collective centres.

Based on the estimates provided by the volunteers we talked to, there were more women than men among the volunteers, and most of them were young. There were a sufficient number of volunteers engaged in organizing accommodation, distribution of food and clothing, to provide for the basic needs of the evacuees; however, the number of those providing psychological support or initiating free-time activities in the collective centres was much smaller.

For residents accommodated in collective centres following evacuation, the biggest problem was linked to the uncertainty regarding their return – when and whether they would return and also *“what”* they will return to, moreover, the

state of their local communities and homes. Apart from the uncertainty, primarily caused by lack of information, the absence of activities to fill the free time had a negative effect on the psychological well-being of the evacuees.

This situation was considerably more difficult for women than for men, for two reasons:

- Gender patterns existing in the “private sphere” were translated to the collective centres, where women were passive, withdrawn, while men struck up friendships, stepped out into the “public sphere” of the collective centres, took leading and organizational roles, left the centres, moved about looking for alternative accommodation solutions and work. Women, on the other hand were more isolated and passive;
- Women mostly looked after their children and did not always have proper professional support, primarily psychological, which they later described as necessary.

Men, thereby, participated more in the decision-making processes at the micro level within the collective centres and due to their greater mobility, took stronger involvement and were more integrated, both in the collective center community and in the new local, social society. Thus, they had more of an illusion of a “normal” life. On the other hand, men were more impatient and proactive regarding the return home, while women were more passive in this area, too, and more aware that they could not contribute much on site of the damaged home, either.

The volunteers were unanimous that the activities, initiated by them, related to landscaping the green area around the collective centres – mowing lawns, planting flower beds, as well as board games and social activities including watching movies, exchanging books, proved to be useful in a number of ways. In addition to engaging in physical activities, beneficiaries were in better spirit, because it allowed them to briefly escape from their bleak thoughts of their flooded homes. The greening and cleaning works in areas surrounding the collective centres contributed to stronger and more relaxed communication of local residents with the beneficiaries. These activities proved to be more successful in smaller collective centres than in sports halls, housing a large number of beneficiaries. Smaller reception centres also proved to be more suitable for preventing and treating infectious diseases that frequently occur in large evacuation centres following emergencies.

Large collective centres can be a security threat for women, especially those situated in isolated areas (such as the reception centre in Železnik), without proper lighting and continuous presence of organized support services, because of risk of human trafficking, sexual assaults and harassment. Also, an obstacle in collective centres that affected women more often than men was illiteracy and a language barrier among the evacuated Roma women, who did not speak Serbian, but communicated predominantly in Romani. The presence of Romani-speaking volunteers should have been ensured in the collective centres, which housed predominantly members of the Roma community.

Key research findings and recommendations

INFORMATION LEVEL

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| Key findings | <ul style="list-style-type: none">• Emergency plans for protection and rescue in municipalities observed by this research, were not developed.• Communities were unprepared, uniformed and untrained on how to act during the state of emergency and evacuation.• Men who served the army had advantage over women, because of their basic knowledge of how to respond during emergencies, rescue and evacuation.• The alert system was silent and the information about how to act during the imminent flood was not broadcasted on the local radio or television.• Information that reached only a limited number of endangered citizens was disseminated in informal ways. |
| Recommendations | <ul style="list-style-type: none">• Protection and rescue plans during emergencies should include activities related to disseminating information and community education on how to act during emergencies. Activities of the civil protection units should also incorporate outreach activities into their work. Increased participation of women in trainings should be encouraged.• In situations when early warning systems are activated, as are cases of natural disasters, it is necessary to convene meetings with local community members or residents of particular settlements and inform them.• Distribute written instructions or provide information in other ways. Develop tailored outreach campaigns focusing on disseminating information or develop brochures adapted to the needs of the illiterate, with particular attention to the Roma population.• In cooperation with municipal representatives, organize public campaigns aimed at raising awareness of the community on how the emergency warning system works and ensure the participation of women.• In cooperation with local radio stations, launch radio shows, broadcasted periodically, that would focus on activities during the state of emergency and ways of informing the public, particularly targeting women and the elderly. |

EXPOSURE TO RISK, PROTECTION AND RESCUE

- Key findings**
- During imminent danger, men were at an advantage because they owned boats, possessed basic knowledge of defence and rescue procedures (especially older men), and were more physically fit than women, consequently to which, single women or women with children were at greater risk than those with male household members. Families with no adult male members were much more dependent on both organized assistance and informal support from neighbours, relatives and friends.
 - Men were more engaged in flood-protection activities, they had more information, while women, in greater numbers were alone with children at the time of flooding.
 - There were no significant differences in the emotional state of women and men during and after the period of imminent danger; however, women emphasized that they would have benefited from psychological support after evacuation, while men stated that they did not need this type of support. Women's need for psychological support was determined by their care of children and the children's emotional state.
 - Research findings related to the evacuation process demonstrated that due to the lack of resources, biological differences and levels of skills, women are in greater need of formal and professional support. Professional and organized support related to evacuation and rescue was especially important for women.

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- Recommendations**
- It is necessary to enhance the civil defence system, to enable timely evacuation throughout the affected area;
 - Provide evacuees, especially children, with professional medical and psychological assistance.
 - At the level of settlements, collect information on (multiple) vulnerable citizens, with priority during rescue in emergencies, that will facilitate the evacuation process in the community.
 - Provide support to the establishment of a system of general purpose civil defence units at local level, which would involve active participation of women, ready to respond promptly skilfully during an emergency situation, by participating in continuous training.

REPAIR WORK AND NEUTRALIZATION OF THE EFFECTS OF FLOODS

- Key findings**
- Although men and women were equally engaged in cleaning works of their homes (removal of mud, flooring and repairing walls) women more often did the cleaning, while men discarded bulky debris.
 - Information on post-flooding health risks was available in the media, but the most efficient system of disseminating information was demonstrated at the level of local community offices, through the distribution of promotional material and disinfectant products.
 - To provide equal conditions for all community members, it is necessary to organize charge-free clean-up assistance to remove the debris from residential buildings and surrounding plots. Assistance could perhaps be organized by the local self-government office through public works that would involve both men and women.

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- Recommendations**
- At the municipal level, conduct a gender-sensitive assessment of the economic impact of floods: determine the number of businesses, farms, and other commercial property that suffered damage and its effect on working men and women, and record the strategies, developed by households to compensate for the financial loss and loss of agricultural produce. The assessment should also address the impact of the temporary absence of social and health services on men and women and reveal other social and economic consequences of floods on the status of women and men.
 - The provision of paid assistance, in form of public works, should be allocated to families that are unable to repair the damage on their own (elderly households, single parents, etc.), ensuring that both men and women take part in public works.
 - Record gender-sensitive statistics on the distribution of aid and financial assistance, to monitor and ensure equality in the disbursement of donations and aid.
 - Promote and develop activities, during reconstruction of settlements and communities on the whole, in which both men and women will play an active role that would particularly support and strengthen the participation of women.

GENERAL RECOMMENDATIONS FOR MAINSTREAMING A GENDER PERSPECTIVE INTO PREVENTION PLANNING AND RISK MANAGEMENT

While planning activities related to prevention and management of emergencies or natural disasters, it is crucial to conduct an analysis of the capacities and vulnerabilities of different community groups. Vulnerability, in this context, is considered as restricted access to resources essential for survival and recovery after natural disasters. This research has shown that the most vulnerable groups during natural disasters are the elderly, people with disabilities, single mothers and women who live alone in their households. Illiterate people (most of which are women and Roma) are also among the vulnerable categories. The research also revealed that the underlying cause of the vulnerability of the entire population in emergency situations is the lack of accessible information and an underdeveloped systematic approach to dissemination of information, but also insufficient public training on how to act during emergencies.

Records on gender aggregated data as regards the participation of women in emergency management are unavailable, but also information on the effect of flood-damage on men and women and distributed aid during repair and reconstruction, which would enable the analysis of the impact of floods on gender and ensure equality throughout the rehabilitation period.

Within the framework of activities related to prevention planning and risk management, a vulnerability assessment needs to be developed at local level, compile a resource database of their availability, and ensure proper functioning of the early warning system and plan initial response mechanisms at local level.

To ensure gender equality and apply a gender-sensitive approach it is essential to:

1. Establish a system of compulsory engagement of women in institutions and bodies responsible for emergency management (crisis squads at local level), local civil defence units and all structures within the Sector for Emergency Management.
2. Develop gender-sensitive protection and rescue plans at local level in consultation with women and men, through a participatory process engaging women's organizations and organizations representing marginalized groups.
3. During the development of local protection and rescue plans, identify vulnerable categories of the community, draft plans for evacuation and accommodation of evacuees in consultation with women and men.
4. Define ways to effectively disseminate information and warn the community about a natural disaster, ensure that information is accessible to citizens that don't have electricity in their homes, the illiterate, disabled persons and women who spend most of their time at home.
5. At both national and local levels, define measures for achieving gender equality during post-flood recovery efforts and define indicators to monitor risks for women and men, but also the impact of reconstruction and rehabilitation on the status of women and men. Accordingly, data on community risks and damage caused by natural disasters should be classified according to gender and analysed, with the aim of identifying gender aspects of the impact.
6. Enhance activities to involve, inform and motivate the community, especially women in decision making and managing natural resources, environmental protection and risk prevention, during natural disasters.