Republic of Serbia
Ministry of Interior
Sector for Emergency Management

Disaster Loss Database in Serbia

Launch of the
Sendai Framework Monitoring Process
Technical Workshop
06 – 08 December 2017

Natural and man-made disasters undermine the safety and livelihood of whole settlements as well as regions

Republic of Serbia is devoted to the activities on Disaster Risk Reduction and Mitigation, besides Emergency management

Based on

- *The Law on Emergency Situations, 2009*
- *Draft Law on DRR and Emergency Management*
- *National Disaster Risk Management Program*
- *The National Strategy for protection and Rescue in Emergency Situations, 2011*

** The Hyogo Framework for Action 2005 – 2015*

** Sendai Framework for DRR 2015-2030*

-

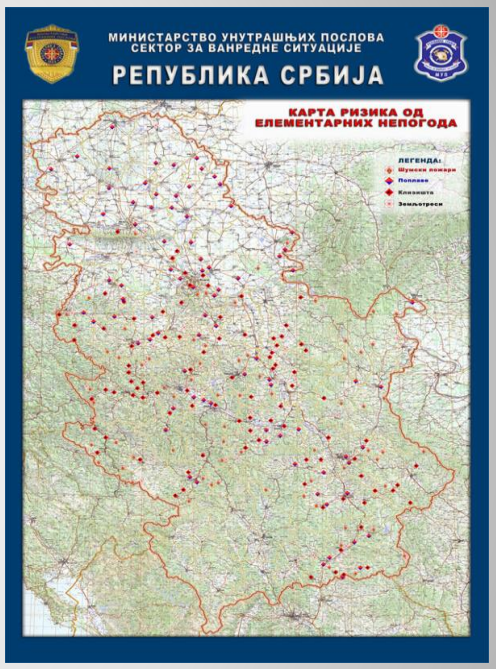
Priority

Identification, assessment and monitoring of disaster risks and enhancement of early warning systems

* National Risk Assesment is being prepared

Risks

Republic of Serbia is prone to many different both **Natural Hazard** (Forest Fires, Floods, flash floods, Earthquake, Landslides and mudslides, Severe weather conditions, Landslides and mudslides) and **Technical and Technological Accidents** (Fires and explosions, CBRN, etc)



<u>However, attention should be paid to their recurrence</u>

* **Need for tool that provides us with a better understanding of the disaster trends and their impacts based on which informed prevention, mitigation and preparedness measures can be planned.**

- **DesInventar** allows standardized collection, analysis and graphic representation of the information on disaster occurrences and losses they cause
- use as an input for risk analysis, risk mitigation, formulation of early warning systems, as well as a tool to help monitor the trends

- Project was **initiated in February 2013**

- **Funded** by United Nations Office for Disaster Risk Reduction (UNISDR)

- **Implemented** jointly by:

1. Sector for Emergency Management of the Ministry of Interior,
2. Statistical Office of the Republic of Serbia and
3. UNDP/SEESAC Office in Serbia.

- **Main goal** - establishing a database of disaster losses using the UNISDR developed tool DesInventar.

- **Duration**

- six months (two months of extensive research)

Disaster Loss Database in Serbia

Purpose

- increase the availability, accessibility and quality of data on the losses caused by these events at the national level

- **improve methods for measuring risk, with the aim of creating the institutional and national capacities for the risk information management systems**

PT SEM

- **Declared emergency situation**
- At least **1** person died
- At least **2** people missing
- At least **5** people injured
- At least **50** people affected
- At least **25** people are victims
- At least **25** people moved
- At least **25** people evacuated
- At least **10** hectares of crops destroyed or damaged
- At least **10** hectares of forest were destroyed or damaged

If at least one of these criteria is met, the event should be entered into the database.

Criteria for data entry

In accordance with the methodology of risk assessment

Република Србија
Министарство унутрашњих послова
Сектор за ванредне ситуације

Закон о ванредним ситуацијама („Сл. гласник РС", бр. 111/09, 92/11,93/12);
Закон о званичној статистици („Сл. гласник РС", бр. 104/09)

ДЕСИНВЕНТАР – База података о губицима изазваним катастрофама у Републици Србији

1. ИЗВЕШТАЈНА ЈЕДИНИЦА

Назив јединице: _____

. КАРАКТЕРИСТИКЕ ДОГАЂАЈА

Врста догађаја: _____

Град/општина: _____

Место догађаја *(општина/насеље)*: _____

Географска ширина: _____ **Географска дужина:** _____

Датум догађаја: ☐☐ ☐☐☐ ☐☐☐☐ *(дан, месец и година – обавезно уписати годину)* **Трајање догађаја** *(у данима)*: ☐☐☐

Узрок догађаја: _____

Опис узрока догађаја: _____

3. ПОСЛЕДИЦЕ ДОГАЂАЈА

Ванредна ситуација: ☐ **Догађај од значаја** *(према процени одговорне особе)*: ☐

Настрадали *(број)*:	☐☐☐	**Нестали** *(број)*:	☐☐☐	**Повређени/болесни** *(број)*:	☐☐☐☐☐
мушкарци	☐☐☐	мушкарци	☐☐☐	мушкарци	☐☐☐☐☐
жене	☐☐☐	жене	☐☐☐	жене	☐☐☐☐☐
Од укупно настрадалих:		*Од укупно несталих:*		*Од укупно повређених/болесних:*	
деца	☐☐☐	деца	☐☐☐	деца	☐☐☐☐☐
стари	☐☐☐	стари	☐☐☐	стари	☐☐☐☐☐

Угрожени *(број)*:	☐☐☐☐☐	**Жртве** *(број)*:	☐☐☐☐☐
мушкарци	☐☐☐☐☐	мушкарци	☐☐☐☐☐
жене	☐☐☐☐☐	жене	☐☐☐☐☐
Од укупно угрожених:		*Од укупно жртава:*	
деца	☐☐☐☐☐	деца	☐☐☐☐☐
стари	☐☐☐☐☐	стари	☐☐☐☐☐
Домаћинства	☐☐☐☐☐	Домаћинства	☐☐☐☐☐
Пресељени *(број)*:	☐☐☐☐☐	**Евакуисани** *(број)*:	☐☐☐☐☐
мушкарци	☐☐☐☐☐	мушкарци	☐☐☐☐☐
жене	☐☐☐☐☐	жене	☐☐☐☐☐
Од укупно пресељених:	— — — — —	*Од укупно евакуисаних:*	— — — — —

деца	☐☐☐☐☐	деца	☐☐☐☐☐
стари	☐☐☐☐☐	стари	☐☐☐☐☐
Домаћинства	☐☐☐☐☐	Домаћинства	☐☐☐☐☐

Уништене куће/станови *(број)*:	☐☐☐	зидане/бетонске	☐☐☐	дрвене/остало	☐☐☐
Оштећене куће/станови *(број)*:	☐☐☐	зидане/бетонске	☐☐☐	дрвене/остало	☐☐☐
Уништене школе *(број)*:	☐☐☐	учионице	☐☐☐	угрожени ђаци	☐☐☐
Оштећене школе *(број)*:	☐☐☐	учионице	☐☐☐	угрожени ђаци	☐☐☐

Болнице *(број)*:	☐☐	уништене	☐☐	оштећене	☐☐
Домови здравља *(број)*:	☐☐	уништени	☐☐	оштећени	☐☐
Амбуланте *(број)*:	☐☐	уништене	☐☐	оштећене	☐☐
Религијски објекти *(број)*:	☐☐	уништени	☐☐	оштећени	☐☐
Јавни објекти *(број)*:	☐☐	уништени	☐☐	оштећени	☐☐

Усеви *(ha)*:	☐☐☐☐	уништени	☐☐☐☐	оштећени	☐☐☐☐
Шуме *(ha)*:	☐☐☐☐	уништене	☐☐☐☐	оштећене	☐☐☐☐
Путеви *(m)*:	☐☐☐☐☐	уништени	☐☐☐☐☐	оштећени	☐☐☐☐☐
Пруге *(m)*:	☐☐☐☐☐	уништене	☐☐☐☐☐	оштећене	☐☐☐☐☐
Мостови *(број)*:	☐☐	уништени	☐☐	оштећени	☐☐

Онемогућени пловни путеви *(m)*: ☐☐☐☐ **Погођени извори воде** *(број)*: ☐☐

Угинула стока и живина *(број)*: ☐☐☐☐☐

Остали губици/оштећења: _____

Погођени сектори:

Транспорт	☐	Комуникације	☐	Хитна служба	☐	Туризам	☐
Пољопривреда	☐	Водопривреда	☐	Канализација	☐	Рударство	☐
Енергетика	☐	Индустрија	☐	Образовање	☐	Трговина	☐
Здравство	☐	Други сектори	☐				

Укупна вредност губитака *(у хиљадама динара)*: ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐

Запажања о догађају:

Име и презиме одговорне особе: _____

Data disaggregation

- Form

1. Municipality
2. Specifics of the event – type, location, date of occurance, duration of the event, cause of the event, description of the cause of the event

Data disaggregation

- Form

3. Consequences

* declaired emergency situation,

* deaths, casualties, injured, missing, affected (gender based, children, elderly)

* Households/families – evaucuated, relocated (gender based, children, elderly)

Data disaggregation

- Form

3. Consequences
destroyed / damaged
*homes
*schools +affected students
*hospitals
*health centers
*religious objects
*public objects
*Roads
*Bridges
*Railroads
*River traffic

destroyed / damaged
*crops
*forestry
*Water wells/springs
*etc

Data disaggregation

- Form

4. Affcted Sectors

*Transport
*Agriculture
*Energy
*Health
*Communication
*Education
*Water Management
*Industry
*Emergency Services
*Mining
*Tourism

- Form

5. Total economic loss

*additional explanation

Data disaggregation

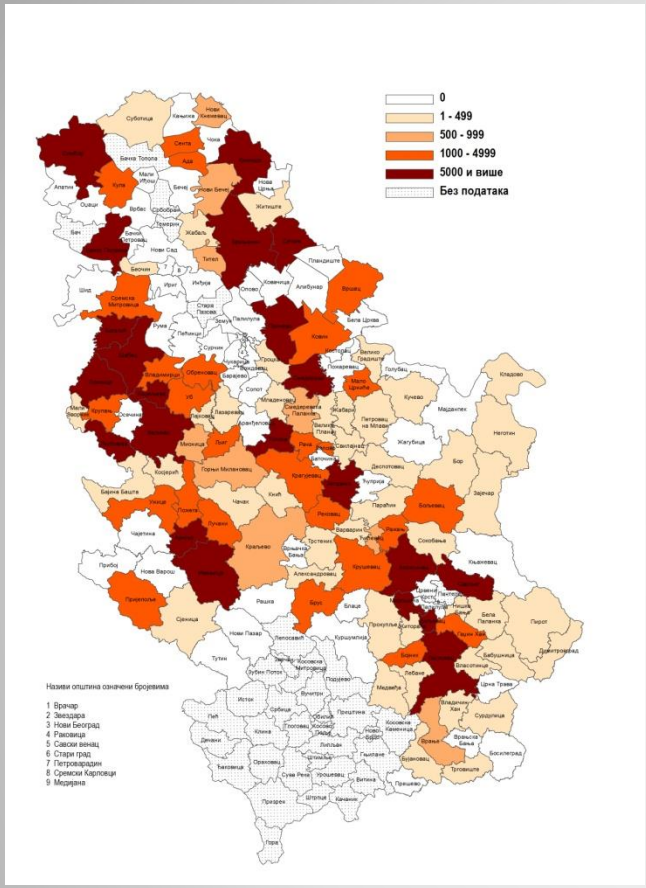
- **Result**
- Collected information on **1,485 disaster events** that took place in **Serbia** during the **27-year period (1986 to the present)**

- **Collected by** –
- Sector for Emergency Management – 913 events (61,6%)
- Departments for Emergency management on local level – 20.2% events
- Other – 18.2% events

Out of 33 different events observed – 21 types of emergency events were recorded.

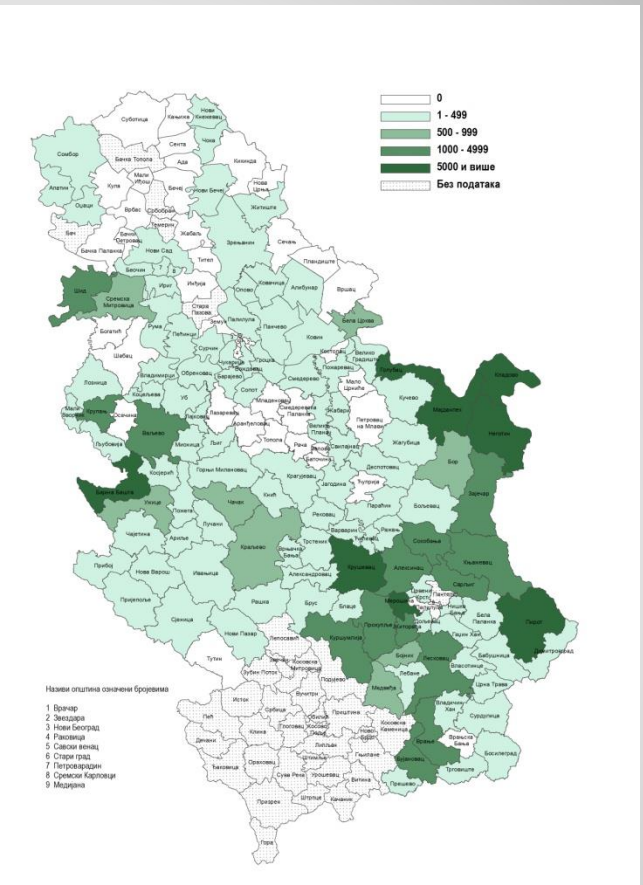
note:
- 51,7% of events are Fires and Forest Fires.

Event	Entered events	%
Forest Fire	492	33,2
Fire	275	18,5
Flood	267	18,0
Hail	134	9,0
Snow storm	106	7,1
Drought	45	3,0
Landslide	42	2,8
Storm	30	2,0
Explosion	26	1,8
Frost	13	0,9
Epidemics	12	0,8
Leaks	12	0,8
Flash floods	6	0,4
Contamination	5	0,3
Accident	5	0,3
Overrun	3	0,2
Other	3	0,2
Thunder	2	0,1
Earthquake	2	0,1
Tornado	2	0,1
Technological hazard	1	0,1
Total	**1483**	**100,0**



Affected crops

Sombor, Leskovac, Pančevo, Zrenjanin, Smederevo, Valjevo



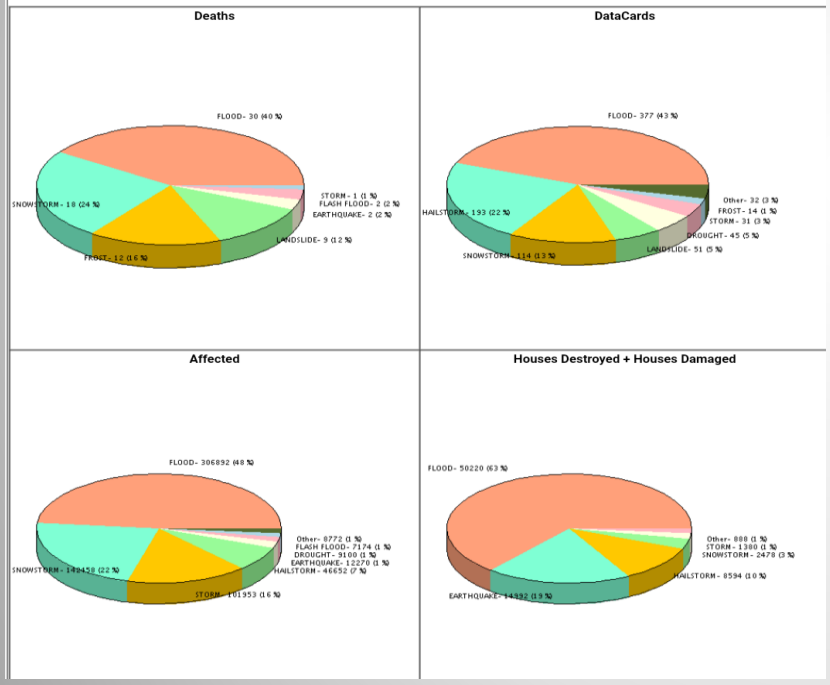
Affected Forests:

Majdanpek, Golubac, Negotin, Kladovo, Merošina, Pirot, Bajina Bašta i Kruševac.

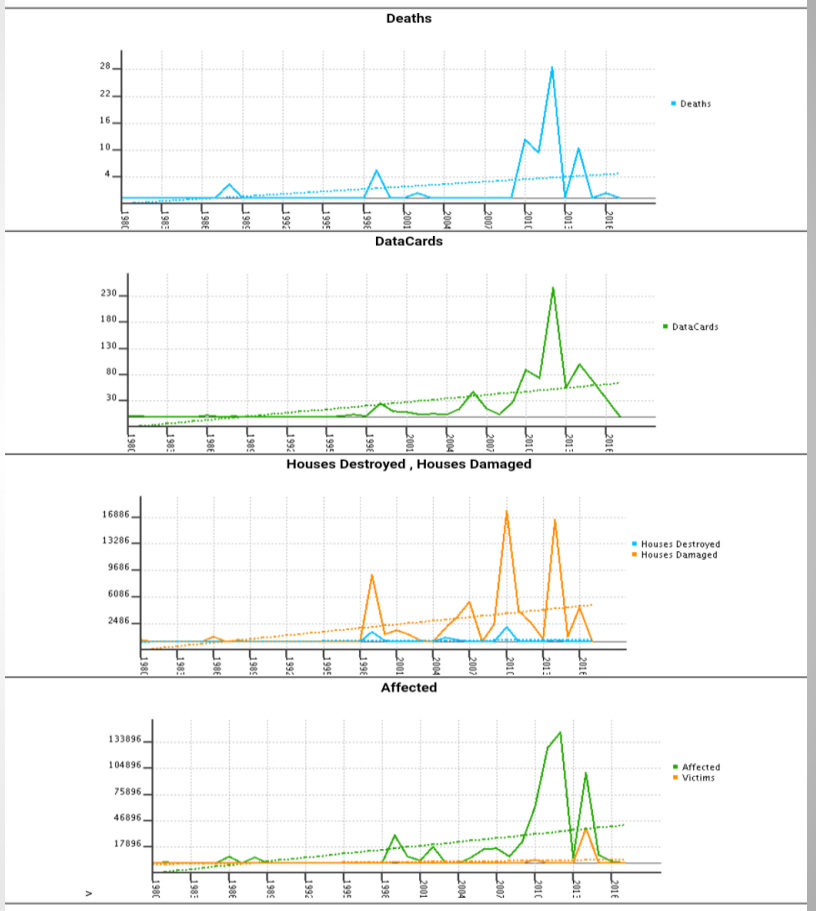
Profile:

This Country Profile shows a set of typical results known as "Preliminary Analysis" comming from the disaster database. Charts, Maps and tables below will provide you with a basic understanding of the effects of many types of natural disasters occurred in the region. Click here for more info

Composition of Disasters



Temporal Behaviour



Data by 2017

Serbia

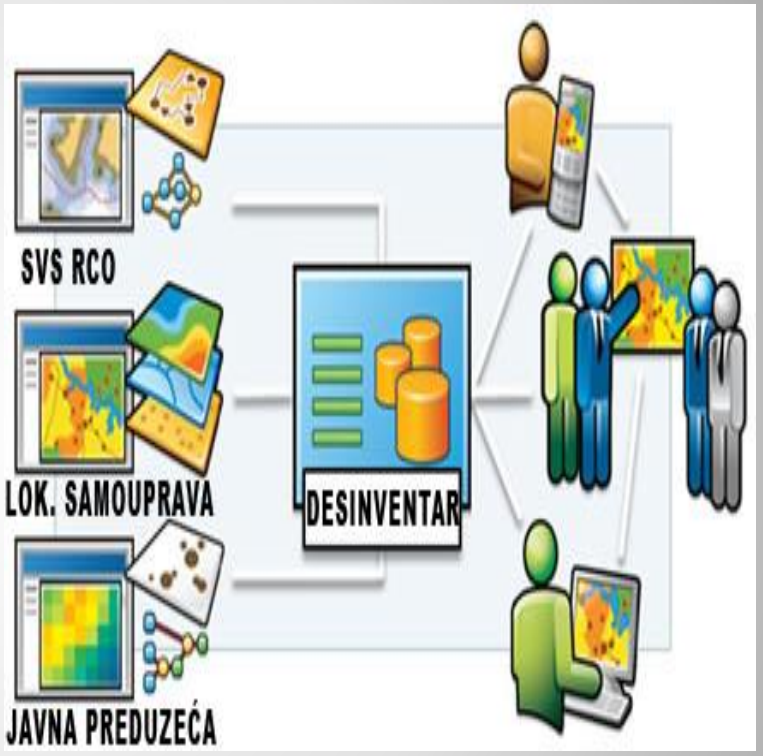
- Summary:
- DataCards: 857
- Period:1980 - 2017

- Highest Mortality:
- FLOOD: 30 Deaths; 377 DataCards
- SNOWSTORM: 18 Deaths; 114 DataCards
- FROST: 12 Deaths; 14 DataCards

- Highest Housing Damages:
- FLOOD: 50220 Houses; 377 DataCards
- EARTHQUAKE: 14992 Houses; 2 DataCards
- HAILSTORM: 8594 Houses; 193 DataCards

- **The database serves**
- general public,
- local municipalities,
- academia and
- all parties interested in exploring the disaster risk patterns in more depth.

It provides **critical insight** into the relation between risk and development, and legitimizes demands for greater accountability by the responsible institutions.



- Based on the collected data human and material losses caused by the disasters can be analyzed:

Casualties, affected, evacuated

Damaged and destroyed houses, schools, roads, bridges

Affected crops, forests, etc..

Most commonly affected parts of society,

Losses

Data analysis

Regional Program on Disaster Risk Assesment and Mapping (IPA DRAM)
- One of main focuses – Disaster Loss Data

*Risk assessments require accurate recording of previous disasters and associated losses in terms of human casualities, property and environment damage as well as economic loss

*Further developing and improving national system for Disaster loss data based on the Sendai Framework for DRR and its targets, developed EU guidelines and good practices

Additional activities

Jelena Dimic
Sector for Emergency Management
Ministry of Interior
Republic of Serbia

Thank you for your attention