

**Ministry of Agriculture and Rural Development**

***Fight against soil erosion and watershed  
management***



## **Fight against soil erosion and watershed management**

- The activity of watershed management in Romania:
  - is a very close to the forestry field
  - it contributes to the ecological reconstruction of the environment,
  - and it gives economical and social benefits

# Fight against soil erosion and watershed management



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Climate changes hardly affected the geographical area of Romania in the last years by

- severe droughts in some years and flooding in others,
- snow melting in the spring.

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## **Fight against soil erosion and watershed management**

The study *“Fighting against soil erosion and watershed management in forestry area ”*

- was elaborated by Forestry Research and Management Institute Bucharest in 2007
- it aimed to analyze how the fighting against soil erosion and degraded land improvement could be performed within forestry area in 10 hydrographical basins at the national level, which are administrated by National Administration Of Romanian Waters.

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- The analysis within the hydrographical basins was performed at the level of study units composed by large rivers and their affluent and in some cases on the slopes of Danube River
- In order to establish the works which have to be performed they were taken into account the followings:
  - inventory of torrential correction works at the level of large hydrographical basins, assumed by National Forest Administration Romsilva,
  - any other studies which are relevant to the analysis,
  - recommendations of National Forest Administration.

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- The works proposed to be performed along torrential hydrographical network, aim at:
  - carrying out the security of existing works (stream channels, dams, dam stones) which they were distressed as follow of normal usage during operating time and which are showing important degradations, together with the ones hardly affected by floods.
  - further actions of torrent control within hydrographical basins, through establishment of new works, both in torrential basins and other torrential systems.

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In order to fulfill the requirements:

- It was imperative to estimate the volumes of concrete, relief work, stone masonry, gabions which target to bring back the works to the normal conditions of performance.
- It was estimated the lengths of hydrological torrential network which need to be consolidated, both in hydrological basins where the works exist and in hydrological basins where the torrential phenomenon are new.

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- In both cases it was taken into account the up to date hydrological network, the intensity of torrential phenomenon and the importance and the affection rate of the infrastructure.
- As a most important measure to be taken is to consolidate the alluvial deposits sources on the banks through forest vegetation and hydro technical works, as well as the measures which aimed at lower intensity of discharge.

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	Hydrographic area					
	ARGES VEDEA	BANAT	BUZAU	CRISURI	JIU	MURES
the length of river bed consolidate by watershed management works (km)	256	60	259	120	167	246
the length of river bed damaged (km)	151	76	712	284	563	218
carrying out the security of existing works through reconstruction of distressed parts (cubic meters)	9.666	1.412	35.851	2.050	8.020	4.549
The length of torrential network recommended for consolidation, out of which:	78	76	320	135	270	125
• new works in the torrential basins where there were works before (km)	52	46	174	17	100	37
• new works in new torrential basins (km)	26	30	146	118	170	88

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	Hydrographic area				TOTAL
	OLT	PRUT	SIRET	SOMES TISA	
the length of river bed consolidate by watershed management works (km)	554	16	397	101	2.176
the length of river bed damaged (km)	945	20	775	463	4.207
carrying out the security of existing works through reconstruction of distressed parts (cubic meters)	29.466	580	31.824	3.605	127.021
The length of torrential network recommended for consolidation, out of which:	290	20	442	191	1.947
▪ new works in the torrential basins where there were works before (km)	109	10	165	14	724
▪ new works in new torrential basins (km)	181	10	277	177	1.223

## Fight against soil erosion and watershed management

- The beneficiaries of watershed management are:
  - - the water courses administrators,
  - - the hydroelectrically power plants administrators,
  - - railways administrators,
  - - public roads administrators,
  - - municipalities,
  - - the forestry area administrators.

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## **Fight against soil erosion and watershed management**

- 130 objectives there will be financed from national budget and
- 42 objectives there will be financed from external credits (BDCE) and national budget.

## **Fight against soil erosion and watershed management**

New opportunities will arise along with the implementation of National Rural Development Program for the period 2007-2013, measure 125 which targets on the infrastructure development

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**Thank you !!**

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