



# Evaluating management effectiveness:

Does wolf management in Croatia support long-term survival of wolf population?

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International Wolf conference, Postojna, Slovenia - September, 2013

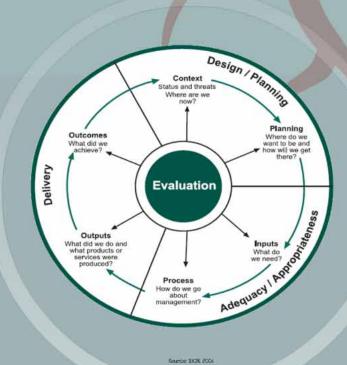
Management process assessment

Mostly carried according to the best standards

main Setbacks: Lack of developed annual plans, lack of adequate implementation monitoring systems and ineffective implementation of mechanisms for controlling illegal kill.

### **Foundation**





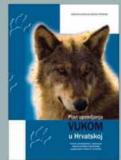
# Has wolf management been successful?











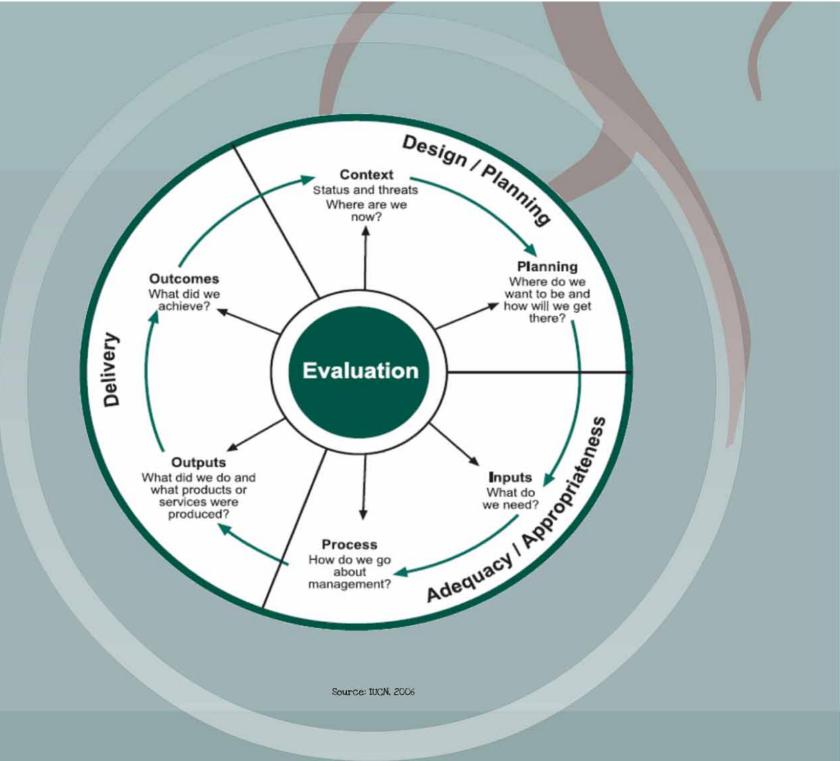






Strengths and weaknesses?

What needs to be done to improve the situation?



# Evaluation of wolf management effectiveness (until 2011)

- Results -

#### Context Assessment

#### 1. Values and objectives

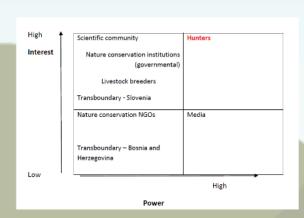
Wolf population, Positiva human assaptansa

Overall management objectives	Related specific objectives
Ensure long-term survival of the wolf population which is capable of survival in qualitative and	Improve knowledge about wolf population in Croatia
quantitative terms, in harmonious co-existence with humans as possible	Maintain wolf habitats continuity and quality
	Improve game management
	Mitigate illegal kill of wolves
	Improve livestock management
	Mitigate damages on livestock
	Improve cooperation among stakeholders
	Raise public awareness of wolf
	Enable economical benefit for local community from wolf
	conservation
	Improve cooperation with neighbouring countries (Slovenia
	and Bosnia and Herzegovina)

#### 2. Threats

Threat (issues)	Impact	Significance
Construction of roads and other infrastructure	Habitat fragmentation, degradation and loss Reduction of number of wolves (road kill)	High
Illegal kill of wolves	Reduction of number of wolves	High
Negative attitude toward wolves	Support to the wolf kill (legal and illegal)	Medium-high
Unsustainable hunting of wildlife prey	Reduction of wildlife prey	Medium
Distrust between stakeholders	Lack of support to wolf conservation activities, Support the wolf kill	Low-medium
Not sufficient representativity of some	Lack of support to wolf conservation	Low-medium
important local stakeholders in decision-	activities,	
making	Support the wolf kill	
Direct takes of wolf from nature	Reduction of number of wolves	Low
Construction of new settlements and facilities (f.e. industrial zones in Dalmatia, weekend settlements in Gorski	Habitat fragmentation, degradation and loss	Low

#### 3. Stakeholders and their involvement



#### 4. International and national policy contest

#### Strongths

- Wolf conservation (relevant) legislation framework is established. Wolf management plans adopted
- · All relevant international agreements ratified
- Government supports conservation institutional framework established, funding for compensation ensured

#### Weaknesses (international and national levels)

- · Poor law enforcement (lack of control of illegal kill)
- · Low priority compared to other sectors.
- Lack of human and financial capacitie

# 1. Values and objectives

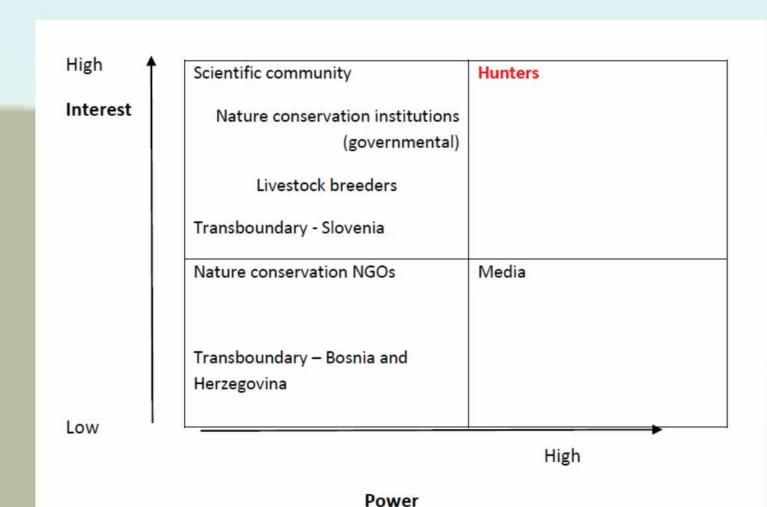
Wolf population, Positive human acceptance

Overall management objectives	Related specific objectives
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## 3. Stakeholders and their involvement



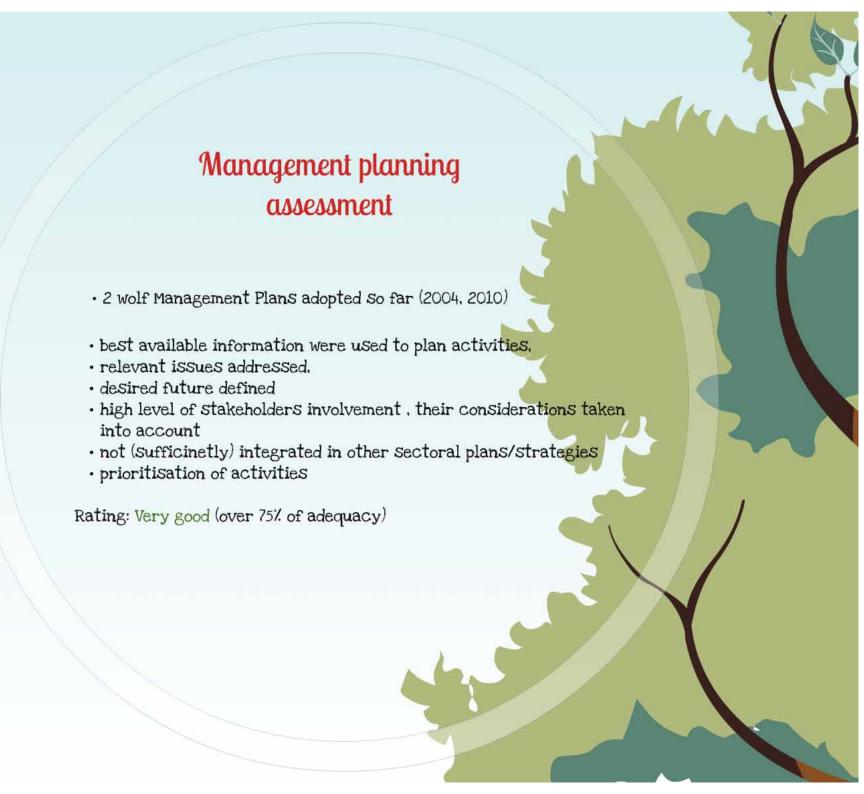
# 4. International and national policy contest

# Strengths

- Wolf conservation (relevant) legislation framework is established. Wolf management plans adopted
- · All relevant international agreements ratified
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#### Weaknesses (international and national level)

- Poor law enforcement (lack of control of illegal kill)
- · Low priority compared to other sectors.
- Lack of human and financial capacities



# Inputs assessment

#### Human capacities

- 12 categories of wolf conservation and management staff analyzed (researchers, damage assessment experts etc.)
- Altogether 72.2 % of needed human capacities fulfilled
- Least capacities: researchers, regional coordinators
   (representatives of n.c. institutions at local level, nature protection inspectors)

#### Financial capacities

- Estimated annual financial needs cca. 600.000
   EUR mostly fullfiled in 2005 2008, decrease
   for 30% in 2009 trend continued
- The finances mostly ensured from the State budget. In addition, the EU LIFE III - Third countries programme provided significant funds for the project "Conservation and management of wolves in Croatia" (2002-2005).

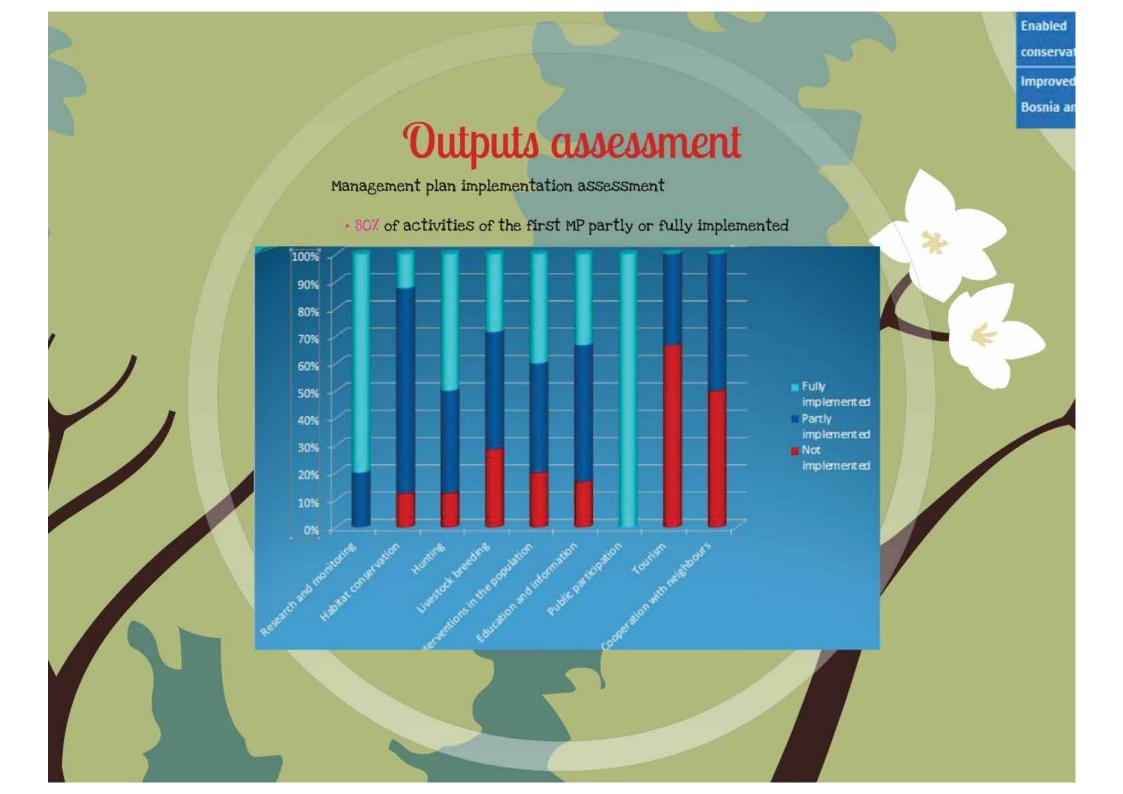
# Management process assessment

Mostly carried according to the best standards,

Main setbacks: Lack of developed annual plans, lack of adequate implementation monitoring systems and ineffective implementation of mechanisms for controlling illegal kill,

Through functioning of the Committee for Monitoring Large Carnivore Populations of the competent ministry, mechanism exists to enable active participation of stakeholders in management decisions (f.e. annual legal kill)

Rating: Good (over 50% of adequacy)



# Outcomes assessment

Specific management objectives achievement - ? fair (25 - 50% achievement)
- lack of indicators and data

The state of the s		
Improved knowledge about wolf population in Croatia	Very good	
Maintained wolf habitats continuity and quality	?	
Improved game management	Fair	
Mitigated illegal kill of wolves	?	
Improved livestock management	? Fair	
Mitigated damages on livestock	Good	
Improved cooperation among stakeholders	Very good	
Raised public awareness of wolf	Good	
Enabled economical benefit for local community from wolf conservation	Poor	
Improved cooperation with neighbouring countries (Slovenia and Bosnia and Herzegovina)	Poor-Fair (lack of cooperation with BiH, with Sloveniapartly – improving)	

\*poor, (less then 25% achievement.) fair, 25-50%) good (50 - 75%), very good (75% - 100%)

acce



# Outputs assessment (until 2011) Overall management objective achievement

	Over att	management obje	ective achievenie	7111	
Wolf population in Croatia	Overall population trend  Known wolf mortality rate	Telemetry, evidence of tracks in snow, estimation of local experts, damages on livestock, mortality monitoring	Estimation: 200 – 260  Slight increase in 2006 and stable  Average of 15 annually	VG	Wolf population is maintained at biologically and socially acceptable level.
Positive human acceptance	toward wolves	Michigan Amella and Am	Slightly positive (in particularly in comperance to previous years )  Most of illegally killed wolves not recorded (?twice as much as recorded).  Cases of injured wolves reported by local	G	Acceptance is slightly positive; there is a space for improvement.

#### So, how is wolf management doing?

(At least ) until early 2011 - it was assessed as efficient - contirubted to long-term existence of wolf posternghts:

- established legislation and institutional framework.
- · fair human and financial capacities,
- · high motivation of part of nature conservation sector and researchers.
- high level of stakeholders participation in management planning and decision-making,
- existence of officially adopted management plans.
- existence of functioning advisory body on large carnivores,
- · availibility and inflow of funds from the European Union.

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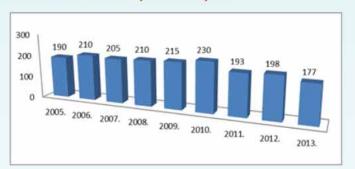
#### Weaknesses:

- weak political position of nature conservation sector, in particularly in comparence to hunting,
- · heterogenity of institutions and organisations involved in wolf management in terms of capacities, finances and power,
- lack of human capacities to control illegal kill, provide thorough and systematical research of entire wolf distribution are continuous communication with local communities.
- · lack of stronger mechanisms to ensure the wolf management actions are adequately integrated into sectoral policies.
- · lack of officer/or distribution of responsibility for overall management plan implementation coordination.
- · lack of presence or interest of certain stakeholders group; livestock breeders and nature conservation NGOs,
- · high dependence to one Source of funding.
- · lack of capacities for stronger transboundary cooperation, in particularly with Bosnia and Herzegovina
- · lack of interest and capacities for development of tourism based on large carnivores.

# And today?

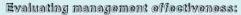
- We can only speculate, but some previous strengths became weaknesses (particularly decrease in funding)
- · Identified weaknesses mostly at status quo

State of population: still favourable conservation status, but in 2013 population size decreased for 10.6% (Annual State of Wolf Population Report)



Important to have results of intensive research in Slovenia (genetical research!), particularly transboundary area -Slo-Wolf project

Reason of concern - decrease of population in Croatian - Slovenian transboundary area - Urgent need for cooperation in implementation of management measures (quota?)



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# Thank you for your attention!

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