



Gipuzkoako Foru Aldundia
Diputación Foral de Gipuzkoa



“Europe’s mountain bonus: how communities and land management provide positive externalities for European society and the related policies and opportunities”

Arantzazu, Onati, Basque country, Spain

Workshop 5 **“Challenges linked to raising awareness of the farmers on their role as providers of public goods”**

Raising awareness in the Stara Planina mountain of Serbia

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OUTLINE

- Rural Serbia
- Stara Planina mountain and Stara Planina Nature Park
- Overview of agri-environmental activities in Serbia (Stara Planina)
- Awareness about the negative (environmental) impacts associated with the decline of traditional types of farming
- Valuation of ecosystem services and functions of nature
- Strategy for Rural Development 2009 – 2013 based on IPARD Framework
- Agri-environment scheme applicable in the Stara Planina mountain
- Conclusions and recommendations

RURAL SERBIA

Areas with population density less than **150** inhabitants per km² (OECD)

Number of rural municipalities: **130** (165 in total)

Rural areas: **85 %**

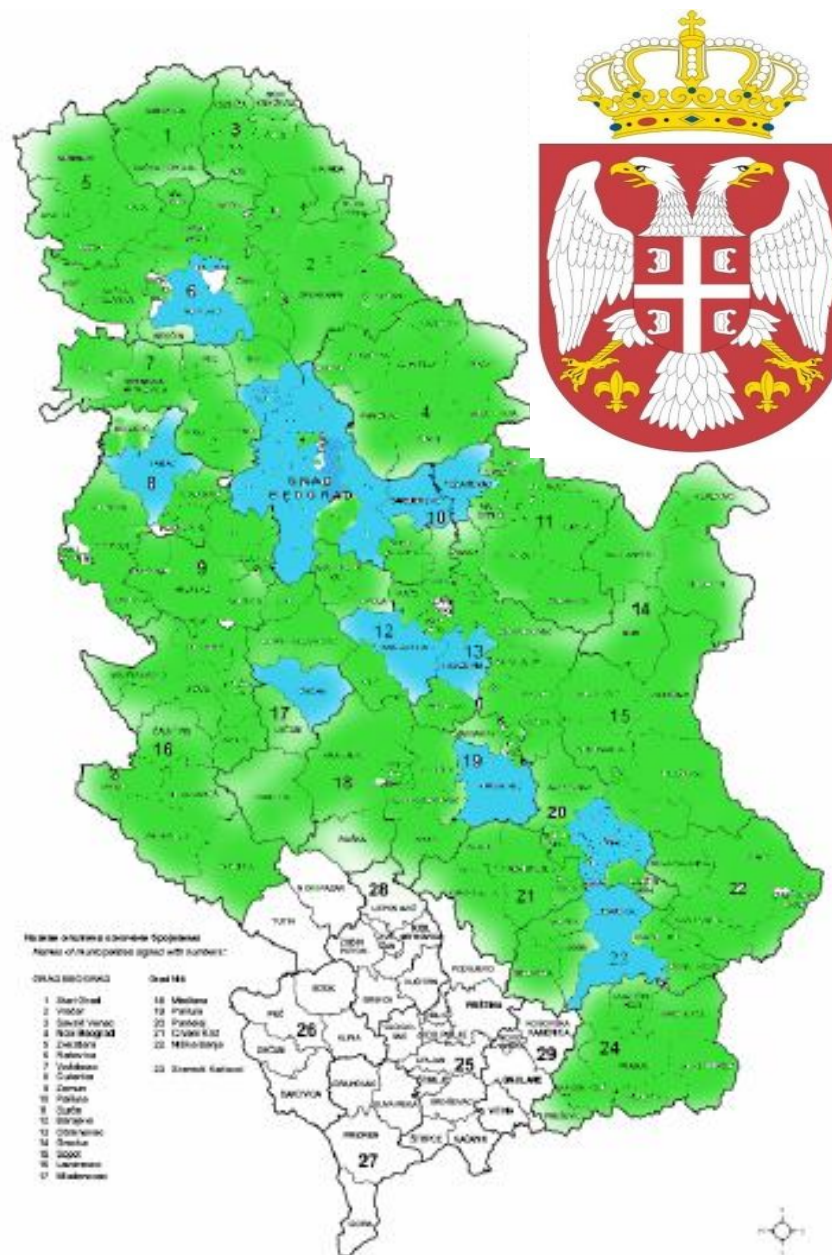
Number of villages: **4,706**

Rural population: **55%**

40% of the country's land is arable

21% is covered with permanent plantations

28% with forests



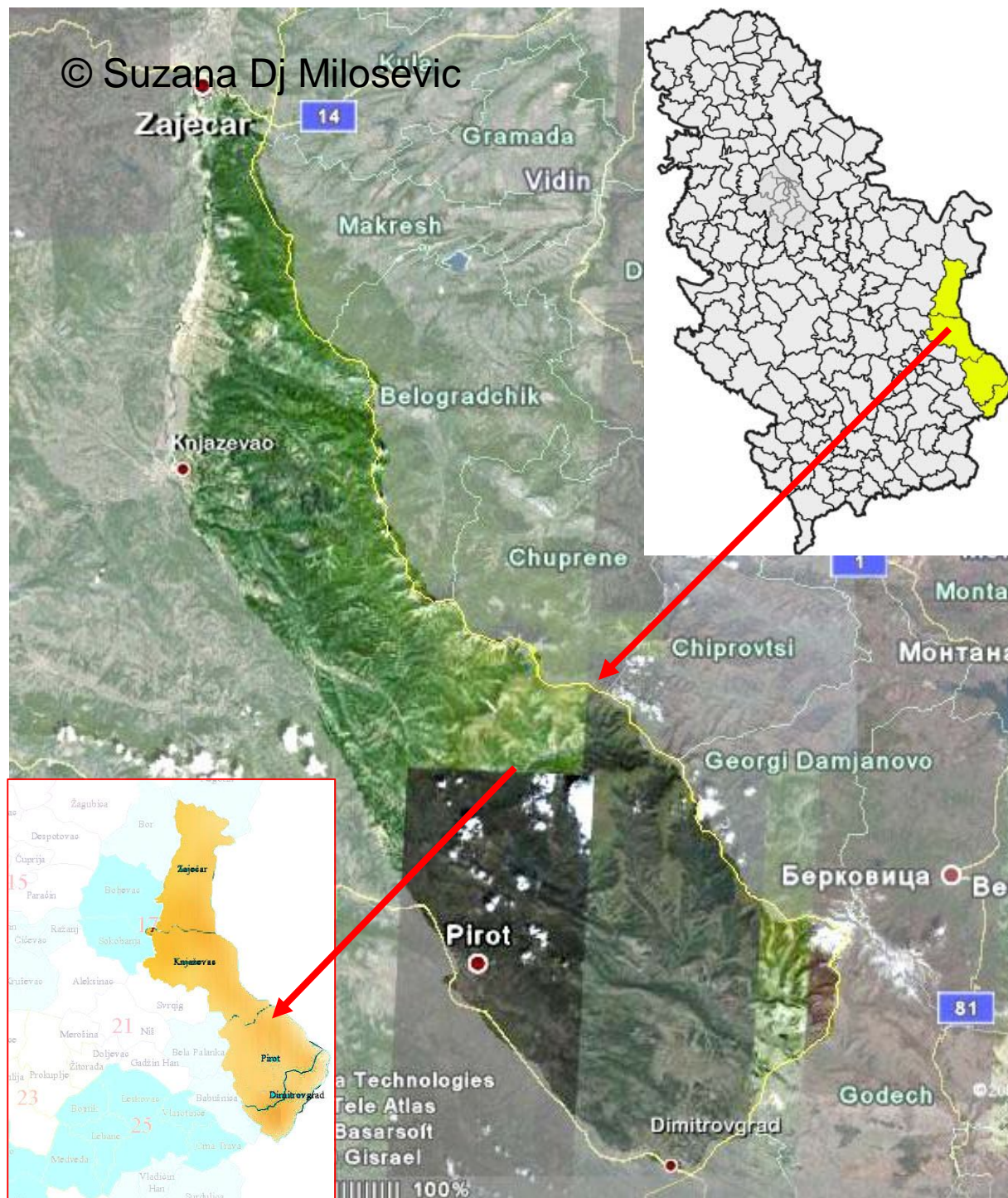
European Union Project: Europe Aid 119156/D/SV/YU "Support to Rural Development Programming and Payment System"

Belgrade, October 2006

"Report on selecting pilot rural regions for rural development programming purposes", Belgrade, October 2006

Location of Stara Planina in Serbian administrative division and natural boundaries of Stara Mt. on the satellite map

- Municipal territory of Stara planina region covers 4.000 km²
- Total area of Stara planina in Serbia covers about 1.250 km²
- Nature park region (IUCN, Category V), covers the total surface of approximately 1.143,3 km²
- Protected by the Decree of the Government of the Republic of Serbia in 1997



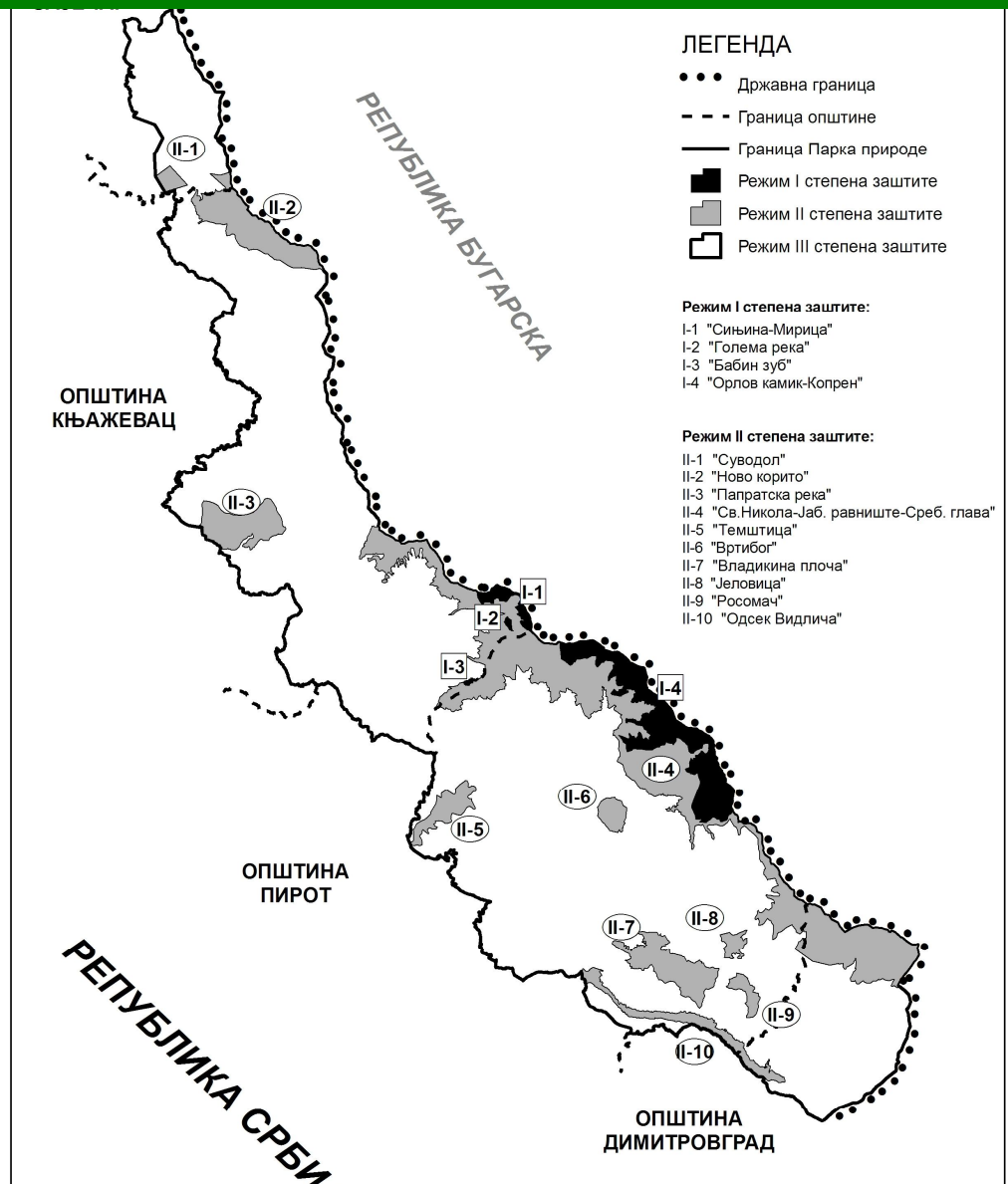
Nature Park Stara Planina

- **The history of agriculture**

West Stara Planina Mt. is characterized by interlaced Bulgarian and Serbian rural culture

- **Number of inhabitants** declined dramatically over the last 50 years from slightly over 30,000 (1948) to 5,000 (2002)

- **Decline in livestock numbers** from 1975 till 1990, the number of sheep, cattle, poultry and pigs decreased by more than 90%, 86%, 65% and 7% respectively





- **Biological and geological diversity** (variety of landscapes, plant and animal species, rivers and streams with throats)

- **Preserved traditional way of life** (farming systems and traditional way of life; food processing technologies preserved: “kachkaval cheese, white cheese, “urda” cheese; monasteries, “obroks/stone crosses”, churches...)

Biodiversity value of the area

- Diversity of flora: 1.190 plant and 51 moss species, or 34% of the respective nationally identified plant species
- Diversity of fauna: 116 species of butterflies, 18 species of herpetofauna, 6 amphibian species, 12 species of reptiles, 203 bird species, and more than 30 mammal species



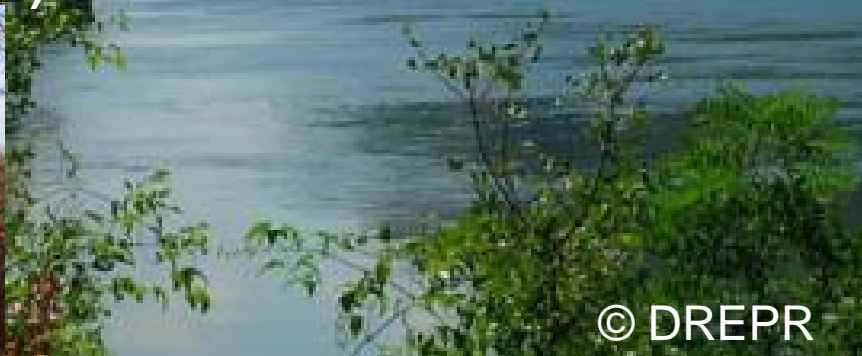
Overview of agri-environmental activities in Serbia (Stara Planina)

- **Development Projects of the NGO Sector**
 - AVALON/TERRAS – support for organic farmers
 - REC/NATURA BALKANIKA:
 - Interactive Farm
 - Sustainable development of agriculture on Stara Planina - recommendations
 - Natural dying of wool
 - Conservation of the Imperial Eagle - *Aquila heliaca Savigny*
 - Agri-biodiversity Fair (2003-2008)
- **Projects of the Standing Working Group for Regional Rural Development of South Eastern Europe (SWG RRD)**
 - Land of shopska Project
 - Drina-Tara Project
- **Projects of the Institute for Nature Protection**
 - Feeding spots for vultures (Uvac, Stara planina)
 - Golija Biosphere Reserve



Serbia Danube River Enterprise Pollution Reduction Project WB, GEF, SIDA, EAR

- 13 million dollars (4 years, started 2005)
- Targets nutrient pollution from livestock farms, notably pig and cattle farms, as well as nutrient discharging industries
- To reduce and effectively manage hazardous waste effluent by realigning Waste and Water Management in accordance to the EU Water Framework Directive
- To increase the prevalence of environmentally friendly practices among polluting enterprises in the Danube Basin (awareness raising and education of farmers)



Serbian Transitional Agriculture Reform (STAR) Project

IBRD (International Bank for Reconstruction and Development – the World Bank)
and GEF (Global Environment Facility)

- **25 million EUR (8 years, started 2007)**
- **To improve management of the Stara Planina Nature Park (SPNP)**, including its flora and autochthonous livestock breeds, in partnership with local communities and other stakeholders
- Provision of competitive grants to support the global objectives of **promoting sustainable land use** (particularly well-managed extensive grazing), **ecological restoration, sustainable rural tourism** and related enterprises, and **preservation of natural and agro-biodiversity**, including using the LEADER approach where appropriate



Support for Agri-environment Policies and Programming in Serbia

- **27-month bilateral BBI-Matra project**
- To assist Serbia in the development of **two pilot agri-environment schemes** for contrasting protected areas where the continuation of traditional agricultural practices is important for the conservation of biodiversity associated with HNV farming systems and farmland (**Stara Planina and Banat**)
- To develop a more comprehensive and targeted **National Agri-environment Programme (NAEP)** with the objective of encouraging greater biodiversity conservation and sustainable natural resource management on agricultural land throughout Serbia
- To establish **Agri-environment Working Group**, a typology of HNV farming systems, a draft map of HNV farmland and various technical documents in the Serbian language
- **Training on Agri-environment Policy Design and implementation:** The importance of High Nature Value (HNV) Farming
- **Stara Planina agri-environment study 2009**

Support for Agri-environment Policies and Programming in Serbia



Training on Agri-environment Policy Design and implementation: The importance of High Nature Value (HNV) Farming

Coining the term HN VF in Serbian

- Poljoprivreda visoke prirodne vrednosti
- Poljoprivreda, najbolji nacin vrednovanja prirode
- Poljoprivreda obazriva prema prirodi
- Poljoprivreda neskodljiva za prirodu
- Prirodno vredna poljoprivreda
- Poljoprivreda usmerena prirodnim vrednostima
- Poljoprivredna proizvodnja visokog stepena ocuvanja prirodnih vrednosti
- Poljoprivredne prakse od znacaja za prirodu
- Poljoprivredne prakse od znacaja za biolosku raznovrsnost
- Poljoprivreda u korist prirode
- Poljoprivredne oblasti visoke vrednosti
- Bioloski znacajna poljoprivreda
- Farma u prirodi
- Farma sa postovanjem vrednosti prirode
- Poljoprivreda u okruzenju prirode
- Poljoprivreda u visoko vrednoj prirodi
- Prirodi bliska poljoprivreda
- Poljoprivreda koja cuva prirodu
- Farmerstvo za prirodu
- Ekoloski održivi farmski sistemi (Ekoloski farmski sistemi)
- Ekoloski pogodna poljoprivreda
- Ekoloske farmske prakse
- Prirodi odgovorna poljoprivreda
- Poljoprivreda u skladu sa prirodnim vrednostima podrucja
- Poljoprivreda na podrucjima visoke prirodne vrednosti
- Prirodno farmerstvo

| | |
|--|---|
| Poljoprivreda visoke prirodne vrednosti | Agriculture with high respect towards natural values |
| Poljoprivreda, najbolji nacin vrednovanja prirode | Agriculture – the best approach to attach value to nature |
| Poljoprivreda u korist prirode | Agriculture in the service of nature |
| Poljoprivreda koja cuva prirodu | Agriculture saving/protecting nature |
| Poljoprivreda u skladu sa prirodnim vrednostima podrucja | Agriculture in harmony with the natural values of regions |

Awareness about the negative (environmental) impacts associated with the decline of traditional types of farming

- **Loss of grassland biodiversity** - invasion of many mountain grasslands by junipers and other shrubs and the loss or decline of a number of economically important species - spontaneous spreading of undesirable shrubs, mainly dwarf juniper (*Juniperus nana*), trees and herbaceous weeds. The expansion of grasses of bad quality, such as *Nardus stricta*, *Calamagrostis arundinacea*, *Brachypodium pinnatum*, *Festuca spadicea* and others, additionally reduces grassland quality and yield
- **Landscape degradation and land abandonment** (biodiversity degradation of high mountain meadows caused by disappearance of pasturing practices in the higher areas)
- **Livestock numbers decrease and loss of local/autochthonous livestock breeds**
- **High depopulation rate** - dwindling population - involved in traditional crafts and in production of local food products (milk and meat products, specialties, etc.)
- **Slow disappearance of cultural heritage** (introduction of new, exotic architectural styles, etc.)
- **Changes in peat bog vegetation** - early signs of eutrophication caused by inadequate management in livestock farms (uncontrolled effluents)

Juniper bushes and cattle on high mountain pasture near Babin Zub.



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Traditional products:
PDO/PGI (Protected Designation of Origin/Protected
Geographical Indication)

TSG (Traditional Specialty Guaranteed)



Source: Suzana Dj Milosevic

Typology and Definitions of Ecosystem Functions, goods & Services *Millennium Ecosystem Assessment (2003) & de Groot et al (2002)*

Provisioning Services (= *Production and some Carrier functions*)

These are the **products** obtained from ecosystems, including water, food, fiber, medicines, genetic material, and ornamental resources

Regulating Services (= *Regulation Functions*)

Direct benefits obtained from the regulation of **ecosystem processes**, incl. climate regulation, water purification and biological control

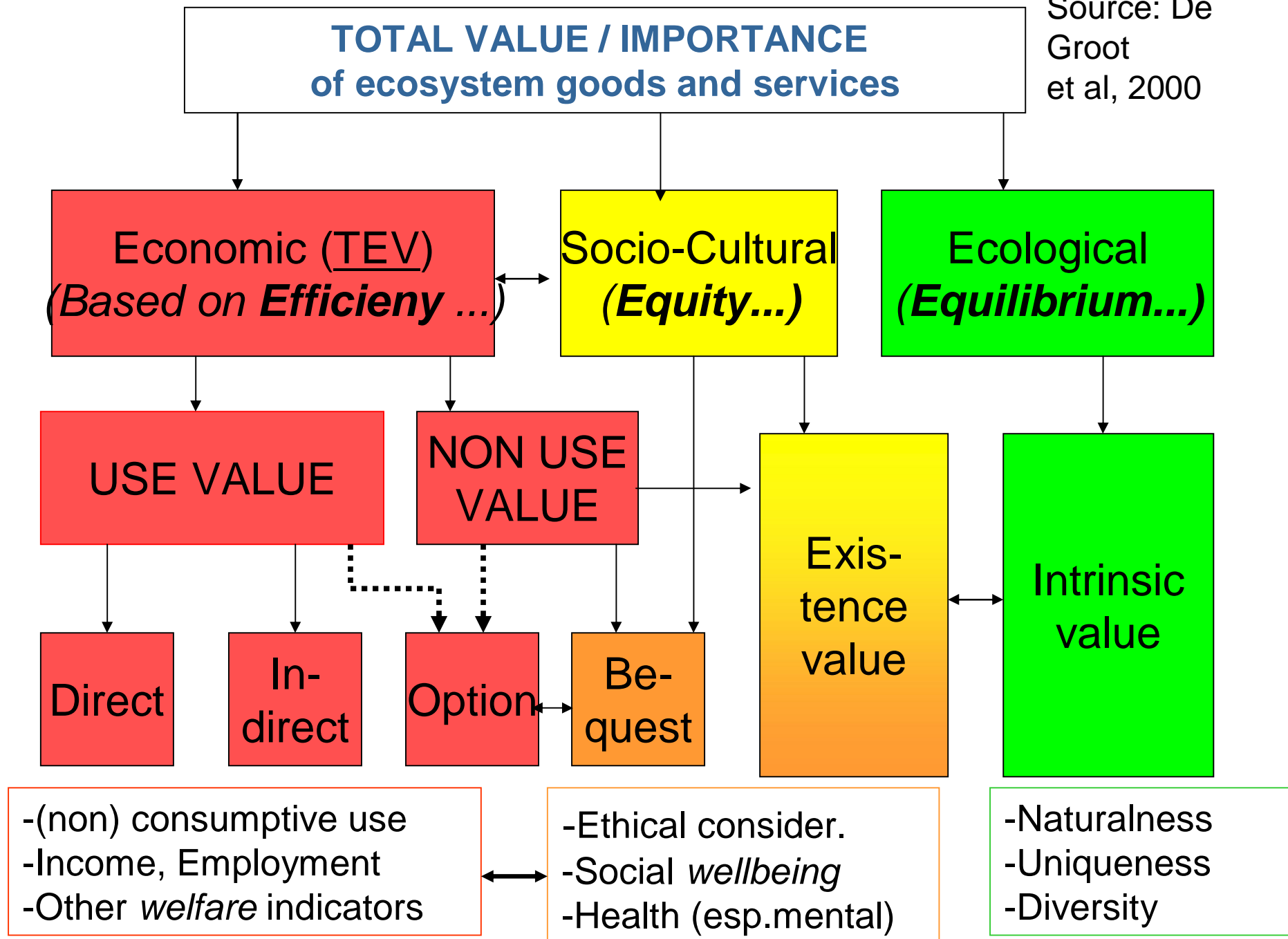
Supporting services (= *Habitat and some Regulation Functions*)

Life support systems needed to maintain all other services, e.g. biogeochemical cycling, soil formation and habitat provisioning

Cultural & Amenity Services (= *Information Functions*)

These are the **non-material benefits** people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences

Source: De Groot et al, 2000





Strategy for Rural Development 2010 – 2013 (draft)



- Serbia – a “**potential candidate country**” for EU accession
- **Priority axes – objectives:**

Axis 1 - the objective of improving market efficiency and implementation of high quality (Community) standards

Axis 2 - Preparatory actions for implementation of the agri-environmental measures and local rural development strategies (Leader)

Measures:

- Actions to improve the environment and the countryside
- Support to activities related to education of farmers about environmental protection, animation and setting up of local partnerships and creation of local rural development strategies aided by the rural development network

Axis 3 - the objective of developing the rural economy

Agri-environment scheme applicable in the Stara Planina mountain

- **Extensive grazing in high mountain grasslands**
- **Agrobiodiversity conservation (rare local breeds and plant varieties)**
- **Organic farming**
- **Actions in areas of special biodiversity/nature interest** (short grazing - 2 weeks maximum; delayed first cut - after July 15; neither mineral nor organic fertilizers are allowed; no pesticide use)
- **Maintenance of the countryside and landscape features** (traditional stone objects of cultural value - crosses, statues, signposts, remarkable trees and stonewalls)
- **Maintenance of existing sustainable and extensive systems producing characteristic farmed landscapes** (agricultural landscape features which have cultural, scenic or environmental value, especially for biodiversity)
- **Public access to agricultural land of environmental interest** (footpaths, cycle and/or bridleways)
- Measures to **complement HNV farming measures** within broader agriculture and rural development policies (scrub clearance, maintenance of shepherd huts and livestock enclosures, breeding of traditional sheep dogs to protect livestock from predators, compensation for livestock losses from predators, etc.)



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Conclusions and recommendations

- **General awareness** about positive externalities of farmers as providers of public goods is on a **fairly low** level, although a lot of pilot **projects and activities** are organized albeit **without much integration**
- **Concept of High Nature Value Farming** is new and still vague for comprehension
- **Abundance of natural resources** to be conserved, especially in mountain regions
- **Stara planina mountain as a good case study** and pilot region to start introducing appropriate agri-environmental measures
- Both over- and under-exploitation could lead to **negative environmental impacts** such as: loss of habitats, biodiversity, and of components of the traditional agricultural landscape, if appropriate agri-environmental measures are not introduced on time
- It is a **true challenge for Serbia** to lay the foundation for an **efficient and environmentally friendly agriculture** in the transition period on the road to accessing EU



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Thank you!



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