

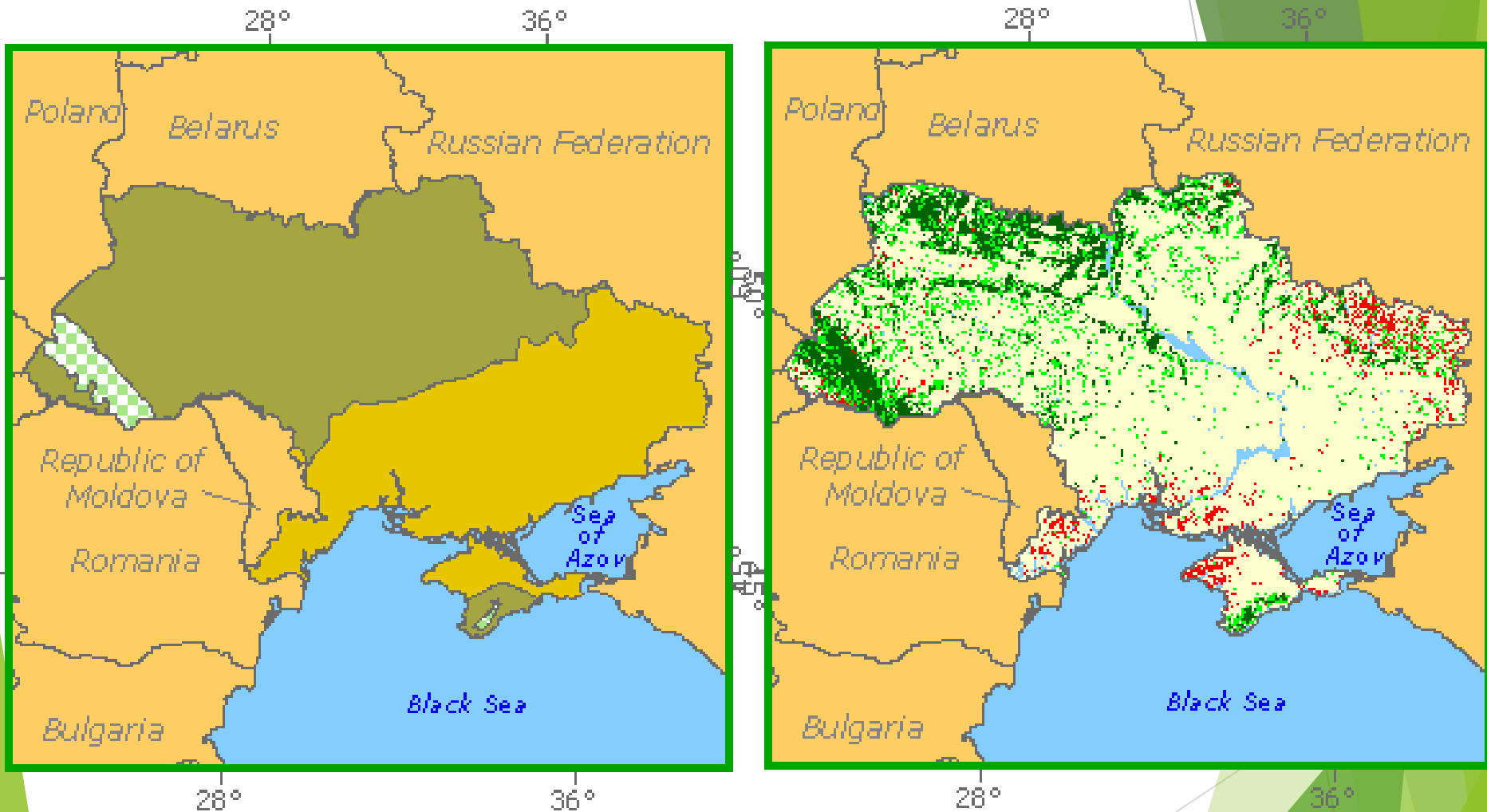


# CHALLENGES IN THE ECO-BASED FOREST MANAGEMENT OF COPPICE FORESTS IN UKRAINE

*Ivan Sopushynskyy, Vasyl Zayachuk, Vasyl  
Ryabchuk, Ivan Akryshora, Ruslan Maksymchuk,  
Valentina Dzuryk, Ivan Kharyton, Oleksandr  
Mnukh*

*Ukrainian National Forestry University*

# Ecological zone and Forest cover



Coppice forests vary in species composition, structure and management reflecting the regional site and climate conditions.

# Ukrainian Coppice

- ▶ Underbrush
- ▶ Woodlet
  
- ▶ Understory trees
- ▶ Shoot reafforestation



# Main Species of Low forests

- ▶ *Quercus robur* L., *Quercus rubra* L.
- ▶ *Carpinus betulus* L.
- ▶ *Fraxinus excelsior* L.
- ▶ *Robinia pseudoacacia* L.,
- ▶ *Fagus sylvatica* L.
- ▶ *Betula verrucosa* Ehrh.
- ▶ *Populus tremula* L.
- ▶ *Alnus glutinosa* (L.) Gaerth., *Alnus incana* (L.) Moench
- ▶ *Salix alba* L, *Salix caprea* L.
- ▶ *Sorbus aucuparia* L.
- ▶ *Malus sylvestris* Mill.
- ▶ *Corylus avellana* L.

***Ecosystem-Based Management*** is to sustainably manage both target and non-target species by preserving or restoring ***habitat quality*** to maintain ecosystem services



# *Coppice forests are to...*

- !! emphasize **connectivity** within and between systems
- !! focus on the **consequences** of human actions within a specific ecosystem
- !! emphasize the **protection** and restoration of ecosystem structure, function and key processes
- !! integrate **biological, socioeconomic** and governance perspectives

# Challenges in coppice

- ⅓ strong reliance on forest resources, especially in **poor** rural communities
- ⅓ limited **local** government capacity for effective natural resource management
- ⅓ **traditional** forest management systems

# Forest Products in Coppice Forest

## ► Fire Wood



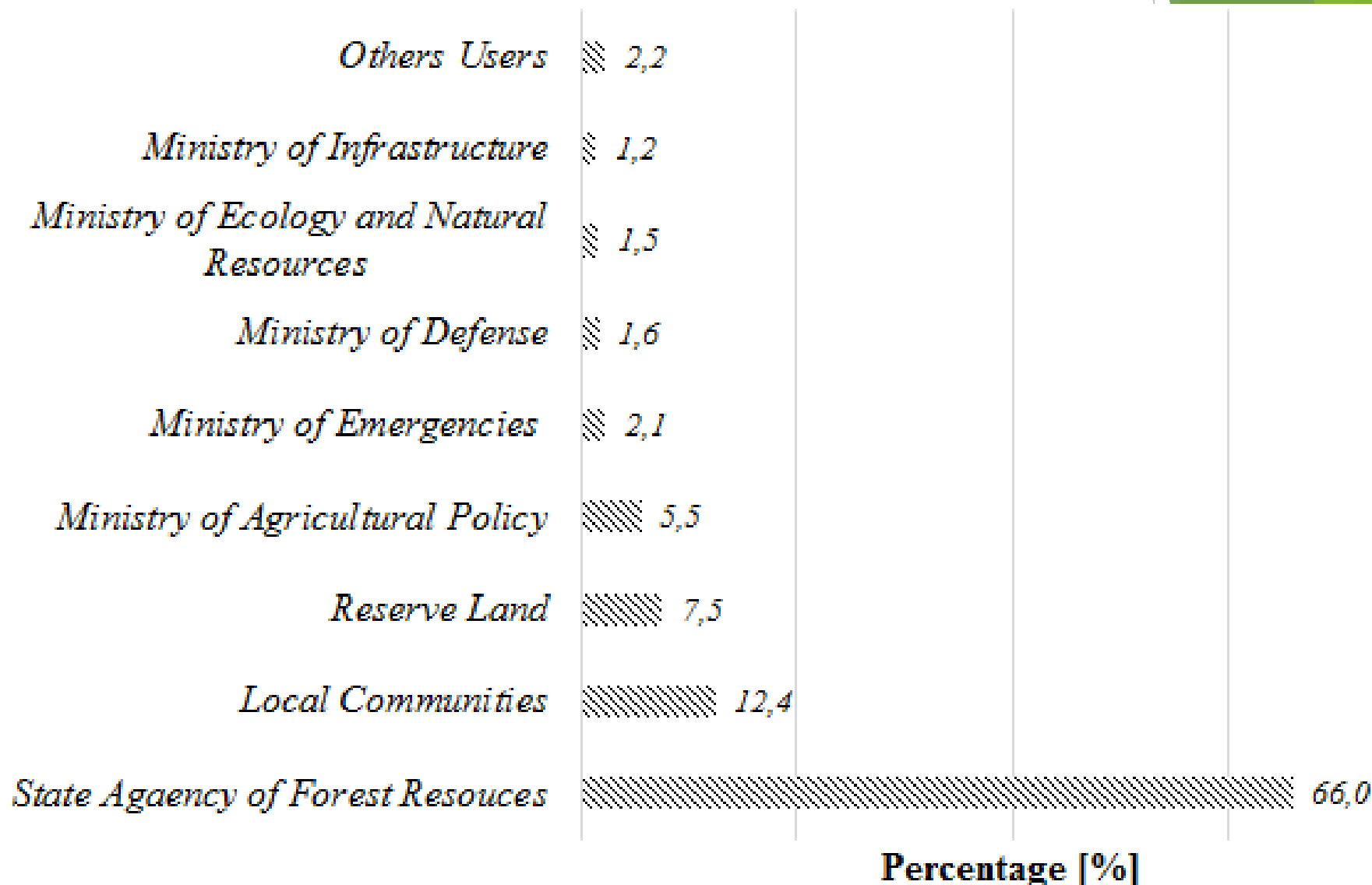


► **Charcoal**

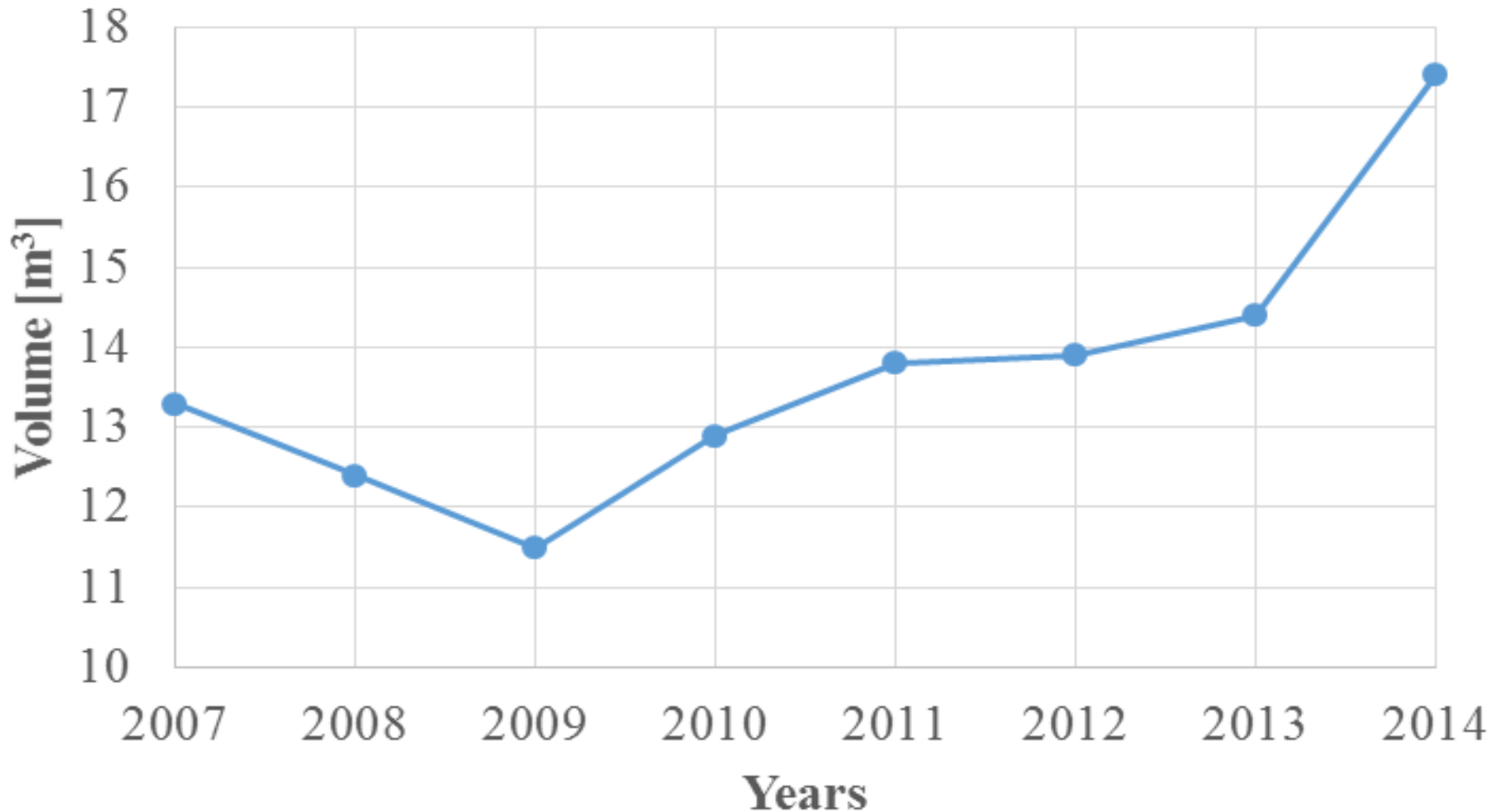


# Distribution of forest land owners

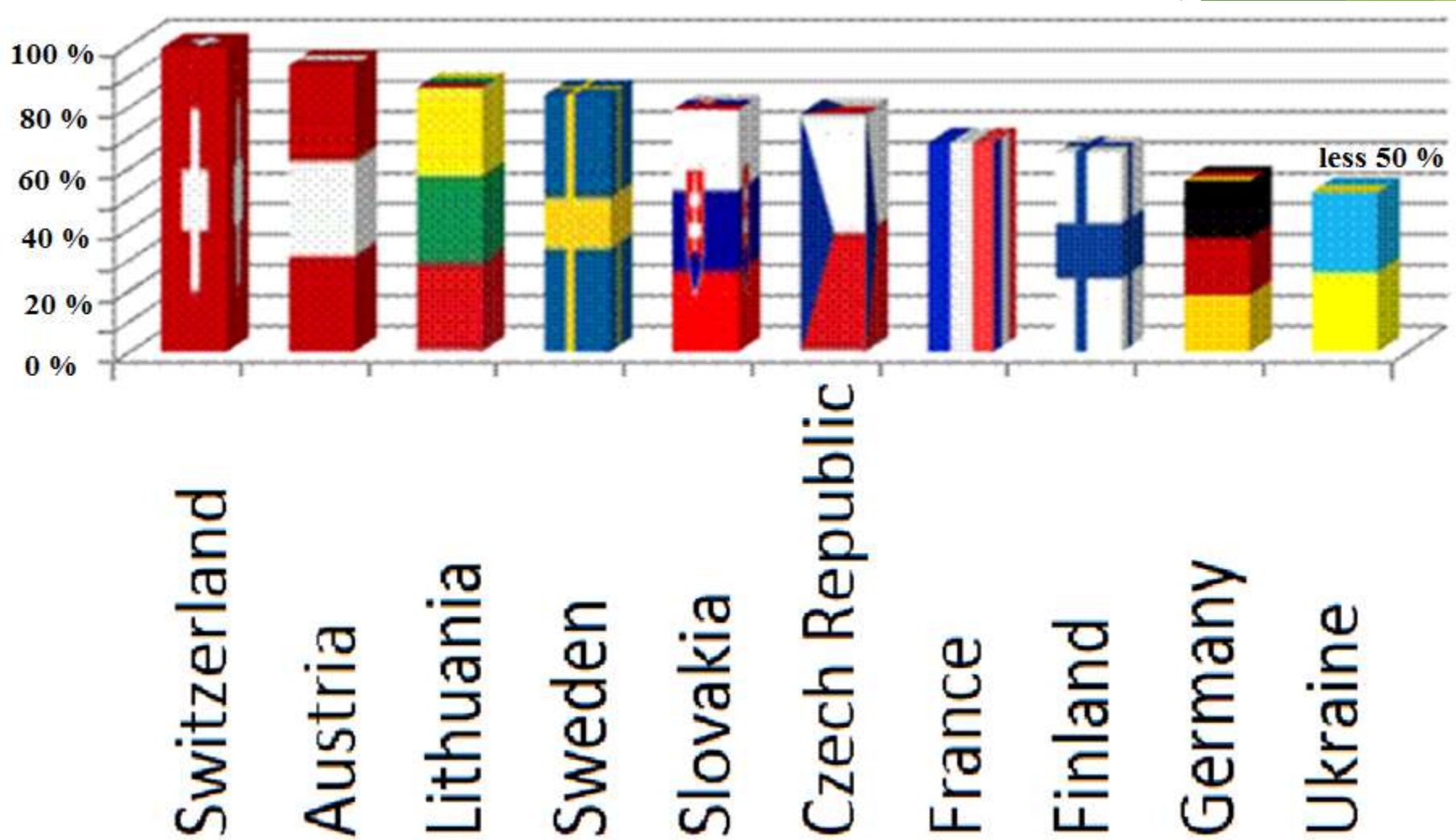
Woodlandowners



# Annual removal by woodland of 9,5 Million ha ?



# Ukrainian Forestry in the EU ?



# Key research objectives in low forests are

- ▶ to focus on the structure of coppice stands to maintain ecosystem services;
- ▶ to incorporate social dimensions of forest resource use (wood and non-wood forest products);
- ▶ to recognize the high level of uncertainty and variability in the coppicing;
- ▶ to reflect a common vision among stakeholders;
- ▶ to inform and adapt from learning based on forest science and local knowledge.

# CHALLENGES IN THE FOREST MANAGEMENT OF COPPICE FORESTS

**Forestry:** Ecosystem-based Sustainable Forest Management, Utilization of Forest Residues, Use of Non-Wood Forest Goods and Services, Bio-Economy Development

**Smart:** Flexible and integrated utilization of forest resources - a *smart* utilization of bioenergy

**Region:** Regionally integrated and sustainable concepts for forestry resources recovery, technologies and concepts

# Ukraine – EU – Coppice

Assess their status quo regarding *infrastructure* and *sustainability*

Develop and build their capacity through a viable 5...10 year *business strategy*

Legal framework

Infrastructure

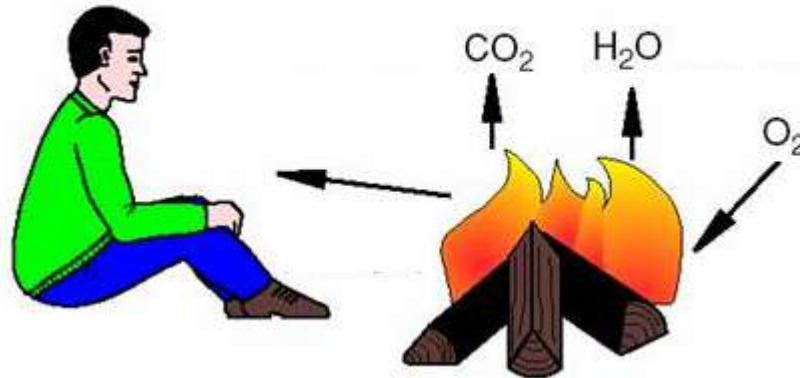
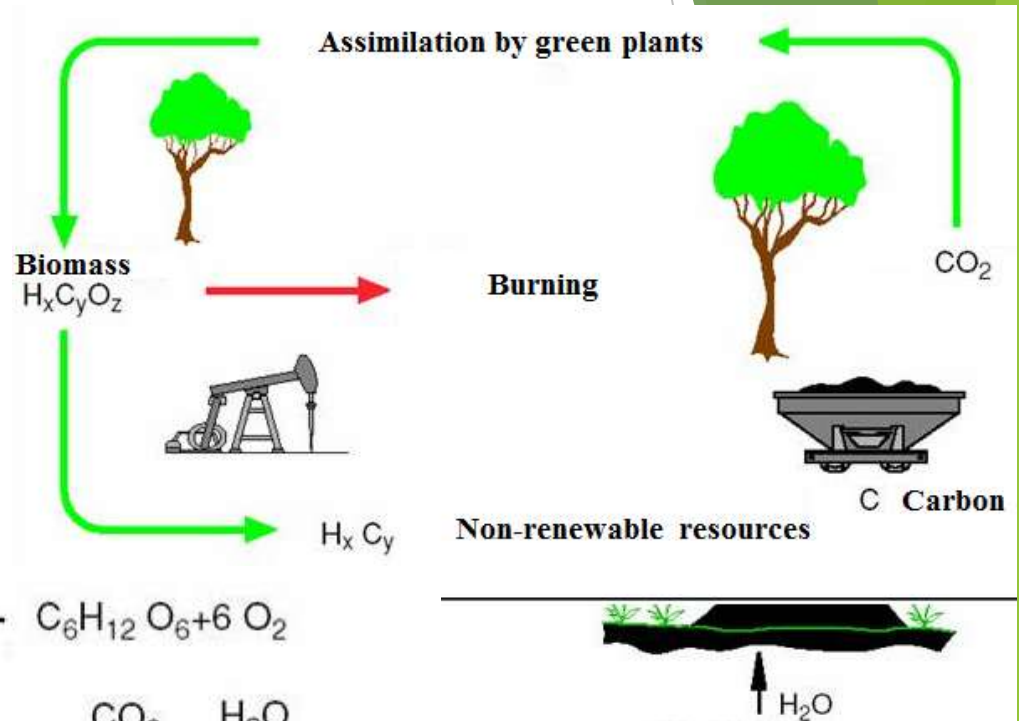
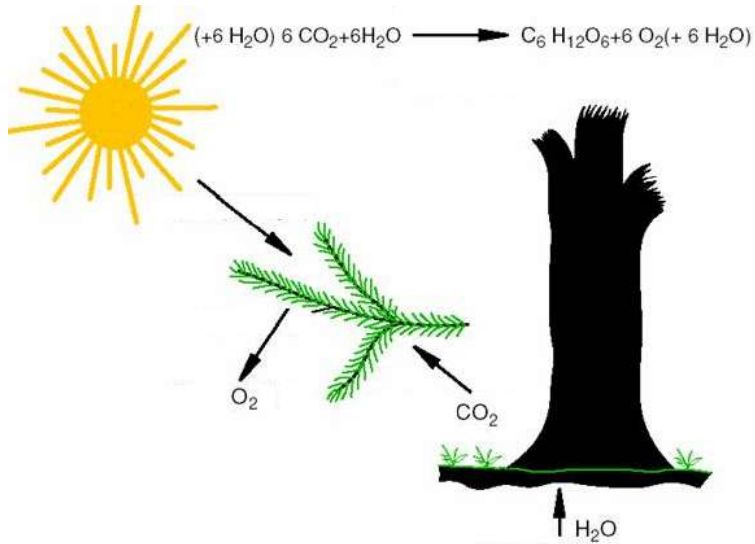
Business strategy

Socio-economic strategy

Sustainability

Improve their *legal* and *administrative frameworks* to allow growth of the forestry sector (FSC, PEFC etc.)

# Looking for Trade-Off!







***Thank you!***