

# CONTEXT PROFILE





# **FARMER**

Răzvan Raduca- family farm



## **INNOVATION**

Fenced grazing in the Romanian Carpathians





# MAIN DOMAIN OF THE INNOVATION

Workload reduction



## **AGROCLIMATIC AREA**

Alpine



# CLIMATE

Moderate rainfall



### **SOIL TYPE**

Clay



## **MANAGEMENT**

Pasture beef



# **TECHNICAL**

Easy



# FINANCE/INVESTMENT

Low



# **MARKET**

Global



### **SOCIAL**

Part-time farmer





Case Study: RO_02	Agroclimatic Zone								
Item (Key Innovation Elements)	Alpine	Atlantic Central	Atlantic North	Atlantic South	Boreal	Continental North	Continental South	Mediterranean North	Mediterranean South
Concrete steel poles	+++	+++	+++	+++	+++	+++	+++	+++	+++
Insulators	+++	+++	+++	+++	+++	+++	+++	+++	+++
Electric fence wire	+++	+++	+++	+++	+++	+++	+++	+++	+++
Power for fence	+++	+++	+++	+++	+++	+++	+++	+++	+++
Rotational grazing	+++	+++	+++	+++	+++	+++	+++	+++	+++
Temporary fences	+++	+++	+++	+++	+++	+++	+++	+++	+++













# **Implementation Gaps**

- Need time to prepare the poles;
- Need to be able to weld;
- Transportation suitable for specific terrain in different agroclimatic zones to place the poles. Walking is going to be too much effort in many cases

# **Research Gaps**

• Big carnivores protection;

# **Suggestions to Adapt**

- These type of poles can be purchased from fencing suppliers; e.g. Sweden: <a href="https://www.bole.se/fjaderstalstolpe-foga-original-30-pack">https://www.bole.se/fjaderstalstolpe-foga-original-30-pack</a>. E.g. Netherlands: <a href="https://www.agrishop.nl/schrikdraad/mobiele-e-schrikdraadpalen/metalenpalen.html">https://www.agrishop.nl/schrikdraad/mobiele-schrikdraadpalen/metalenpalen.html</a>. However in the Netherlands we don't really have robust poles with the possibility to add two wires.
- Solar energy power supply
- In dry, clay or loamy soils, the poles with the blunt tip maybe difficult to insert; adapting the tip of the poles may help.
- Suitable to be used with other animals adapting the height and spacing of wires: eventually, use additional commercial insulators
- Best used as line posts in combination with corner posts. In fact, there is the need for special poles in the angles of the fence to increase its strength (i.e. placed deeper in the soil? Or use of close-range poles?)





# **COST-BENEFIT ANALYSIS**

### **INVESTMENT COSTS**

Total initial investment costs at start up:	low	
Initial authorisation costs (e.g. sanitary, veterinary, etc.)	not applicable/not known	
Initial advisory costs	not applicable/not known	
Initial buildings and machineries	not applicable/not known	
Initial certification costs	not applicable/not known	
Initial working capital (personal qualification, marketing and promotion, etc.)	low	

### **ON-GOING COSTS**

On-going advisory costs	not applicable/not known
On-going certification costs	not applicable/not known
On-going buildings and machinery costs	not applicable/not known
On-going working capital	not applicable/not known

#### **BENEFITS RELATIVE TO ORIGINAL SYSTEM**

#### Economic

Reduction in energy consumption (electricity; fuel consumption)	not applicable/not known
Reduction in input use (fertilizers; pesticides; feed) etc.	mid
Payback period	high
Product value added	not applicable/not known
Additional farm income through agroecological/agri-environmental payment schemes	not applicable/not known

### Environmental

Animal feed self-sufficiency increase	mid
Biodiversity increase	not applicable/not known
Improved nitrogen cycling	not applicable/not known
Soil regeneration	not applicable/not known
Animal health and welfare improvement	not applicable/not known

### Social

Workload reduction	mid
Engagement of young generation	mid



# Literature

# **English**

- https://doi.org/10.2111/1551-501X-31.5.11
- https://doi.org/10.1071/CP16396