



THE ECONOMICS OF
LAND DEGRADATION

A Global Initiative for
Sustainable Land
Management

MOOC 2015

Massive Open Online Course:
'Options and pathways for action:
Stakeholder Engagement'

#eldmoooc

May 5 - June 29, 2015



Economic and ecological efficiency of soil wind erosion control methods Example of Ukrainian Western Polissya

TEAM EAST EUROPE 1



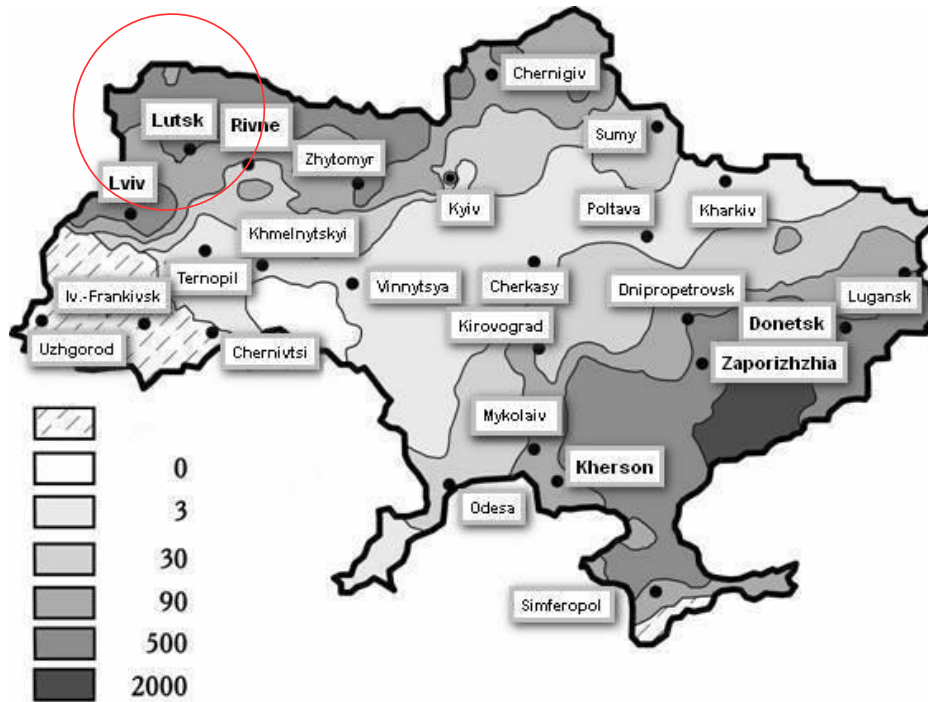
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Study site and problem definition



Soil losses through wind erosion
(45 ton of soil from 1 hectare per year)

Nutrients losses:

P - 6,54 kg/ha

K- 5,08 kg/ha

Largest threat:

Loss of humus (3,05 t/ha/year)

↓ fertility of soil

↑ further risk of erosion

Adequate management is needed!

Figure 1. Possible soil loss from wind erosion on plain lands of Ukraine, (t/ha per year)



Study site and problem definition

Table 2. Comparative effectiveness of deflationary measures in the Pishcha village, Shatsky district, Volyn region during 2008-2012 (Kolyada V., Kucher L., Kazakova I., 2015)

Name of measure	The environmental cost (expenses), UAH / ha	Effect / loss		
		economic, UAH / ha	environmental (abstract loss / recovery)	
			sod gley soils	sod carbonate soils
1st option. Use of organic fertilizers	5808,00 275 dol/ha	x	Humus – 11,5 t/ha; N – 250 kg/ha; P –125 kg/ha; K–300 kg/ha	Humus – 3,76 t/ha; N – 80 kg/ha; P –40 kg/ha; K–96 kg/ha
2nd option. The use of mineral fertilizers	663,27 32 dol/ha	x	N – 5,26 kg/ha; P – 26,3 kg/ha; K–17 kg/ha	N – 1,24 kg/ha; P – 6,19 kg/ha; K–9,9 kg/ha
3rd option. Growing perennial grasses	2649,6 126 dol/ha	1523,90 UAH/ha from sales of products 73 dol/ha	termination of deflation; 15.9 c/ha biological nitrogen annually Humus – 11/5t/ha P – 26.3 kg/ha K – 17.55 kg/ha	
				Humus – 3.76 t/ha P – 6.19 kg/ha K – 9.9 kg/ha

Stakeholder Analysis Results

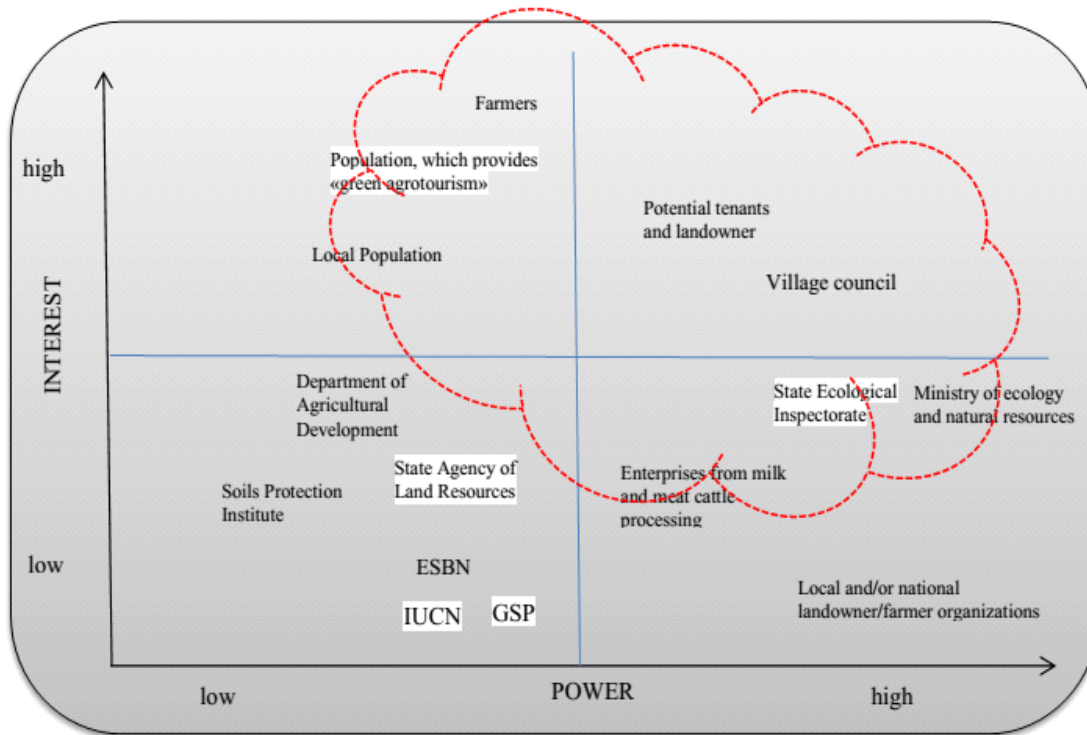


Figure 2. Interest-Power-Matrix

Key stakeholders (after prioritization):

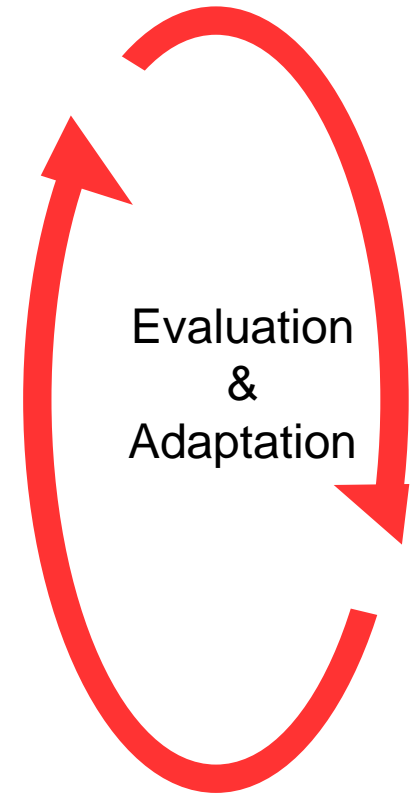
- Farmers/Households
- Village council
- Potential tenants and landowners
- “Green agrotourism” providers
- Milk, meat and cattle processing enterprises
- State organisations



Stakeholder Engagement Plan



- Beginning of the engagement process
 - ✓ Initial engagement, explanatory work
 - ✓ Contact with all stakeholder groups
- During the process
 - ✓ Main engagement with village council, government and representatives of relevant stakeholder groups
 - ✓ Establishment of local village forums (consultative meetings)
 - ✓ Capacity building for implementation and monitoring of project results
- Following-up of engagement process
 - ✓ Final project evaluation
 - ✓ Facilitating implementation of results



Stakeholder Engagement Plan



Example: Invitation poster for local stakeholder meetings

The poster features a header with the ELD logo and text: "MOOC 2015 Massive Open Online Course 'Options and pathways for better Stakeholder Engagement' #eldmooc May 5 - June 29, 2015". Below this is a small image of a seedling growing from a cracked, dry earth. The main body of the poster has a green and teal geometric background with icons of clouds, a sun, mountains, trees, and a car. The text is in Ukrainian and reads: "Шановні мешканці с. Піща! Давайте берегти нашу землю, бо вона є нашим майбутнім! Як ми можемо зберегти наші пасовища? Які переваги ми отримаємо від цього? Що потрібно робити, щоб зберегти наші родючі ґрунти? Давайте об'єднаємося і збережемо землю для нашого майбутнього, бо лише разом ми можемо діяти ефективно! Зробіть перший крок – прийдіть на зустріч для обговорення цих та інших питань про землю! Зустріч відбудеться у неділю, 21 червня 2015 р. біля місцевого Будинку Культури!"

Шановні мешканці с. Піща!

Давайте берегти нашу землю,
бо вона є нашим майбутнім!

Як ми можемо зберегти наші пасовища?
Які переваги ми отримаємо від цього?
Що потрібно робити, щоб зберегти наші родючі ґрунти?
Давайте об'єднаємося і збережемо землю для нашого майбутнього, бо
лише разом ми можемо діяти ефективно!
Зробіть перший крок – прийдіть на зустріч для обговорення цих та
інших питань про землю!

Зустріч відбудеться у неділю, 21 червня 2015 р. біля
місцевого Будинку Культури!

Conclusions

- The total project cost is 62549,98 dollars
- Project increases current weak interaction between stakeholders
- Model approach for further stakeholder engagement, also supraregional



Ways to develop the work in order to improve the feasibility of the work and securing funding:

1. There are other areas of land in the Volyn region that face wind erosion issues.
-will increase cost effectiveness and the strength and applicability of the analysis.
2. The project will look at the development of green agritourism enterprise with the local population.
- the profits from it will count as local as the state budget.
3. Collaboration with international partners facing similar and related issues may allow for the development of a larger project that *can attract funding from different sources.*



References

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- <http://eusoils.jrc.ec.europa.eu/library/themes/erosion/winderosion/>

Thank you for your attention!



Greetings from the team Europe East 1



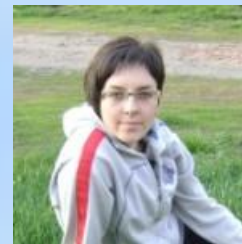
Warren



Antonia



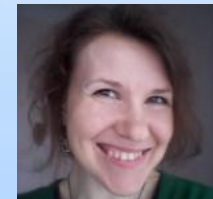
Hekuran



Lesya



Anatoliy



Iryna

