“Agroecology” PE

CEO Gleb Lukyanenko
Every spring
Every summer
Reasons

• Technological
• Economical
• Legal
Technological reasons

• Facilitation of hay harvesting, improving its quality
• Crop rotations of companies
  winter wheat – rape
  corn – soybean
• Creation an optimal soil structure for sowing
• Low level of farmers qualification
Economical reasons

- Saving of the time, money and machinery
- Companies technologies are focused on reducing of the cost, but not on optimal technologies
- Low level of access of small farmers to financial resources
Legal reasons

• Absence of actual control
• Absence of actual penalty
Consequences

- Air pollution with smoke and mixture of gases CO, NO, NO₂
- Destruction of biota in 5-centimeter layer of soil
- Reduce of carbon content (a source for the formation of new plats)
- Dying of bacteria that feed on cellulose (this bacteria are turning the substances into available forms for plants)
- The structure of soil is changing (it is losing ability to fix moisture)
- Reducing of soil fertility and humus content
- Absence of natural soil fertility regeneration
Solutions

• Using of straw for animal husbandry
• Using of straw as energy source
• Application of destructors
• Using of correct machinery
Solutions

Pellet harvester
Solutions
“Agroecology” PE experience
Our history

Founfer –
Semyon Antonets

Healthy soil –
Healthy people
Our history

• 1975 implementation of minimal tillage system
• 1978 refusing of usage of chemical plant protection
• 1988 stopped to use mineral fertilizes
Our basic 8 field crop rotation

Winter wheat
Озима пшениця

Sainfoin
Еспарцет

Sunflower
Соняшник

Green manure
Сидерат грецка + вика

Занятий пар вика + овес з послідуючим внесенням органічних добрив

Ячмінь + еспарцет
Barley + sainfoin

Озима пшениця
Winter wheat

Кукурудза на силос
Silage corn
Work with straw and stubble
Work with green manure
Work with sunflower and sainfoin
Our results 2017

• Humus content on our fields – 6,2 - 6,5 average at the region – 4
• Quality analysis of winter wheat:
gluten 24 – 28, protein 13 - 14
German experience
German experience
German experience

Cover crop
Kazakhstan experience
We need to make “землеробство” (create soil), but not to exploit the soil
Thank you for attention!