# Sustainable farming in Ukraine



# Sustainable agriculture



#### Landscape restoration



#### RETURN OF

Giving people hope and a sense of purpose



Bringing back jobs, business activity, education and security



#### RETURN OF NATURAL CAPITAL

Restoring biodiversity, soil and water quality



#### RETURN OF FINANCIAL CAPITAL

Realizing long-term sustainable profit



#### NATURAL ZONE

Designed for restoring the ecological foundation and biodiversity COMBINED ZONE
Designed for restoring the topsoil and delivering

low and sustainable economic productivity

#### ECONOMIC ZONE

Designed for delivering high and sustainable economic productivity



A long-term approach is important as it takes approximately 20 years – or one generation – to restore a landscape

# **Conservation Agriculture**

#### **Principles of Conservation Agriculture**

1 minimum soil disturbance

2 permanent soil cover: crop residue or live mulch

3 crop rotation and or intercropping



# **Climate Smart Agriculture**

Climate-smart agriculture (CSA) is an approach that helps to guide actions needed to transform and reorient agricultural systems to effectively support development and ensure food security in a changing climate.

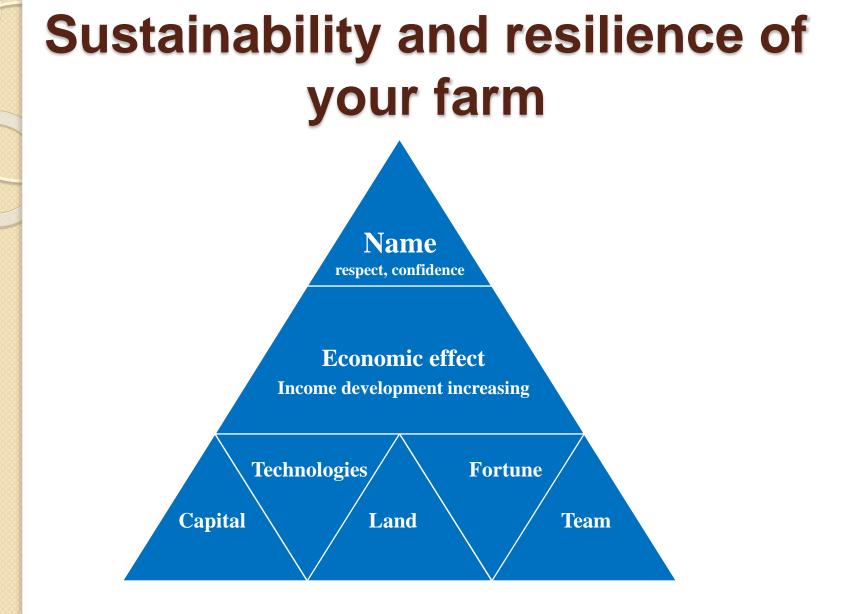
CSA aims to tackle three main objectives:

I. Sustainably increasing agricultural productivity and incomes;

2. adapting and building resilience to climate change;

3 reducing and/or removing greenhouse gas emissions, where possible.

CSA is an approach for developing agricultural strategies to secure sustainable food security under climate change. CSA provides the means to help stakeholders from local to national and international levels identify agricultural strategies suitable to their local conditions.

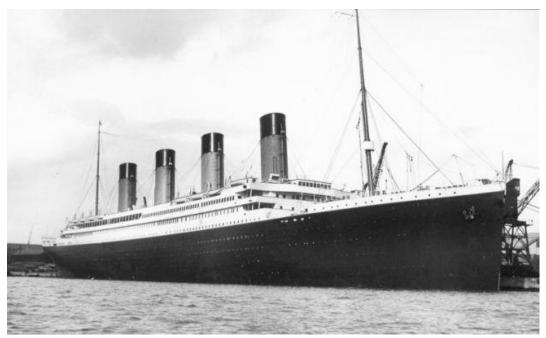


# Technologies vs people

The main task: to do everything in time







• One of the main difference between agriculture and industry is unpredictable weather, one of the main factor in growing plants





### Unpredictable fail



# profitability of corn 2013 year

гібрид	Yield, Ton/ha	Cost, Hrn/ha	lncome Hrn/ha	profitability, %
Dekalb 4685	10	7000	10000	43
Khmelnytska	8	5200	8000	54
Dikman PAN 350	5	6000	5000	-17
Middle in enterprise	6,5	6000	6500	8

Different level of precipitation during a year

#### FE Zhuravel, Poltava region

### Where is the key to success?

- Intensive tillage
- No-till
- Mini-till
- Strip-till
- Precise agriculture
- Organic
- Contour tillage
- Sustainable agriculture





### No-till

Planting without tillage, but with cover crops







# 30-50% of surface is cultivated, residues between rows



#### **Contour tillage:**

- Tillage along hills
- different varieties on one field, winter and spring crops



### causes of collapse in agribusiness

#### Objective

- Natural disasters
- Debts
- Lack of money
- non-compliance with technologies
- Management
- Legal issues (raders)
- Market volatility
- Theft and corruption

#### <u>Subjective</u>

- Unprepared beginners
- Too high ambitions
- Absence of successors
- Drugs and alcohol



### Conclusion

- **Conclusion I.** The main thing in business is your name or your own brand.
- **Conclusion 2.** The main issue in agriculture is TIME
- Time for technologies, just hours. There are very narrow windows for agricultural operations (sowing, spraying, harvesting), only few days during a year
- - Time for building business- several years
- Time for creating your personal brand- all your life
- Time to restore degradated ecosystem 20 years



### Dreams come true!

