



***SILVA Network Annual Conference***

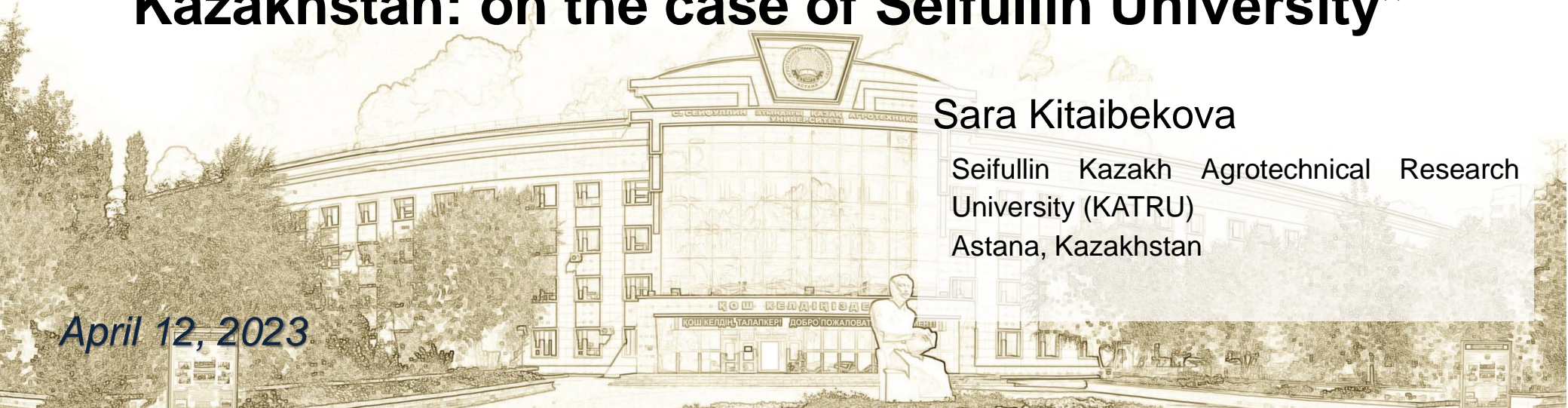
***Communication – a neglected topic in higher forestry education and further education***

# **“Sustainability of forest communication and contribution for sustainable forestry in Kazakhstan: on the case of Seifullin University”**

Sara Kitaibekova

Seifullin Kazakh Agrotechnical Research  
University (KATRU)  
Astana, Kazakhstan

April 12, 2023





# The Republic of Kazakhstan

---



- Region – **Central Asia**
- **#9 in the World** by territory: 2,724,900 km<sup>2</sup>
- The **largest landlocked country** in the World
- **Multicultural country** with more than **130 ethnic groups and nationalities**
- **Apples** are reputedly to originate from Kazakhstan and there are still wild apple gardens in the country.
- Kazakhstan hosted the **Expo 2017 ‘Future Energy’**
- The highest point in Kazakhstan is **Mt. Khan Tengri of the Tian Shan mountain range**. The lowest point in Kazakhstan is the bottom of the **Karagiye Depression** at 433 feet (132 m) below sea level.

# Astana- the capital of Kazakhstan



# Agriculture in Kazakhstan (KZ) - Production

- 17 Regions
- 84 Urban Settlements
- 160 Rural Districts



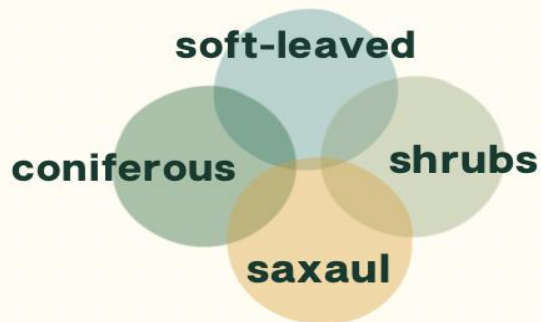
# FOREST OF KAZAKHSTAN



**13,6** MILLION HECTARES  
forest area

**5%**  
forest cover

## TYPES OF FORESTS OF KAZAKHSTAN



**6,7** MILLION HECTARES  
of the country's area  
is in Saksaul



**2,9** MILLION TONS of CO<sub>2</sub>  
per year are absorbed by  
the forests of Kazakhstan \*\*



Source: Forestry and Wildlife Committee of the Ministry of Ecology, Geology and Natural Resources, January 2022  
\*\* UNDP Biodiversity Financing Initiative (BIOFIN)

# REDUCTION OF THE "CARBON FOOTPRINT" IN KAZAKHSTAN

## AREA OF IDENTIFIED UNACCOUNTED FORESTS

**67,000**

HECTARES

mountain forests of the East Kazakhstan region

**47,000**

HECTARES

forest in Pavlodar region



**1990-2020**

**6** MILLION TONS CO<sub>2</sub>

were absorbed by unaccounted forests

**2020-2050**

**4,6** MILLION TONS CO<sub>2</sub>

estimated uptake by unaccounted forests

THE GOAL IS TO REDUCE THE "CARBON FOOTPRINT" BY

**15%**  
before 2030

Source: UNDP-Bitfuty-Government of Kazakhstan project, 2020-2021

# Higher Education Institutions in Kazakhstan



According to the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan, at the beginning of the 2022/2023 academic year, there are **128** higher education institutions in Kazakhstan: 11 universities are national, 1-international, 1-autonomous educational organization (AEO), 29-state, 17-joint-stock, 55-private and 14-non-civilians.

# Introduction to Seifullin University

- **Founded in 1957: FIRST** Higher Educational Institution in Astana, the capital of Kazakhstan
- **Mission:** generation, introduction, dissemination and application of advanced knowledge to improve the quality of life, increase labor productivity and competitiveness of the economy
- **More than 60 thousand alumni:** akims (governors and majors), deputies of various levels, heads of farms and enterprises, entrepreneurs
- **Basic University** for (1) Agricultural Engineering and (2) Food Processing



2012 - 2015: in **TOP-800** of the best universities in the World  
2023-British rating agency Quacquarelli Symonds- 4 stars

- Teaching staff: **849 Faculty members**, including:  
(1) **83** Doctors of Sciences, (2) **60** PhDs, and (3) **366** Candidates of Sciences
- **The Largest Agricultural University in Kazakhstan:** 5 Campuses, 8 Faculties and 85 programs:
  - Undergraduate - **36** programs, **10 282** students + **879** distance learning
  - Master's degree - **31** programs, **937** Master students
  - PhD degree - **23** programs, **112** PhD students

- **63 programs (70%)** in the TOP-3 of the National Ranking-2019, **19** are **#1\*\***



\* - [www.kazatu.kz](http://www.kazatu.kz)




\*\* - <http://www.iaar.kz/ru/rejting/rejting-vuzov-2017>

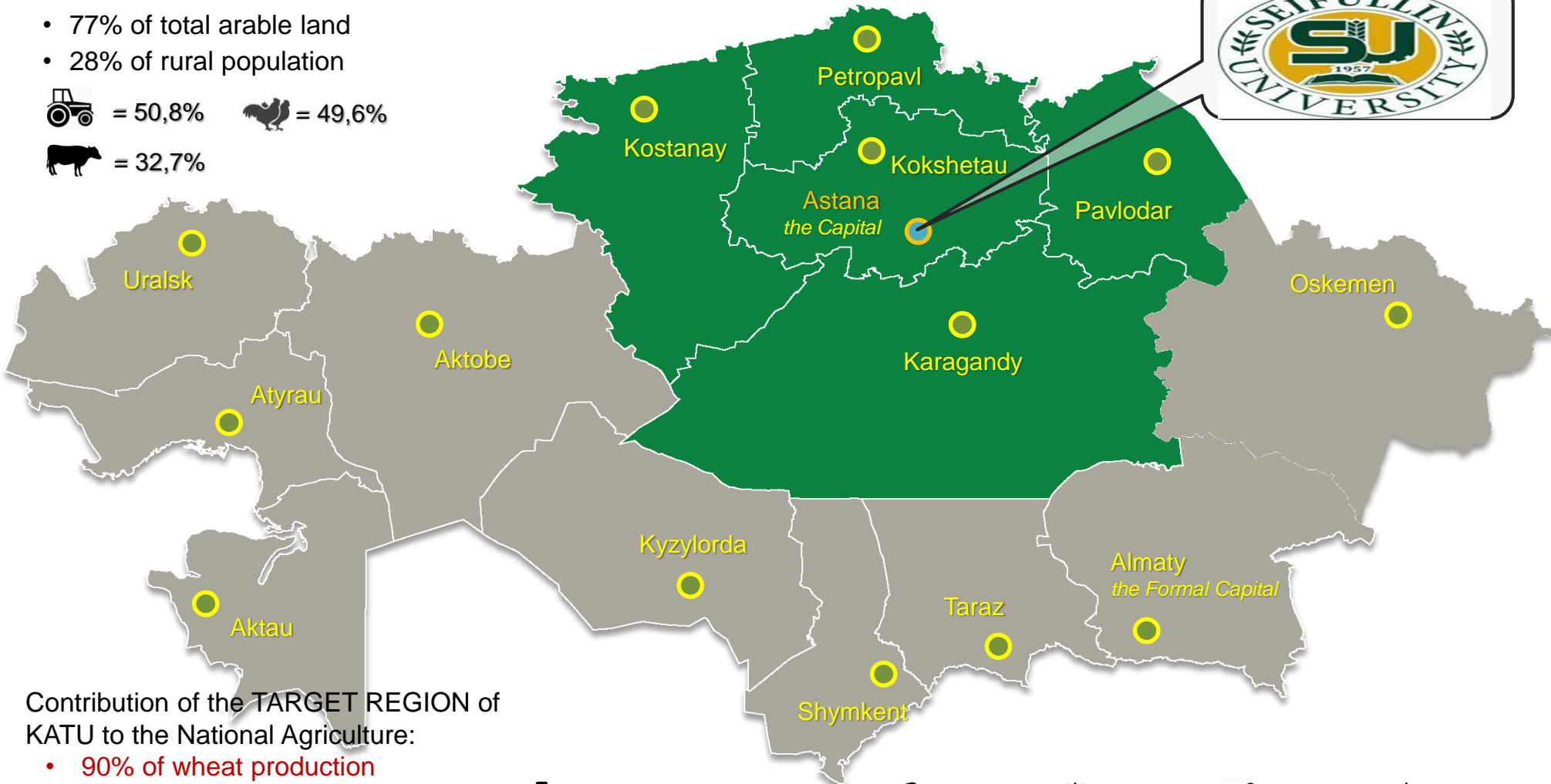


# The Target Region of Seifullin University

Recourses of the TARGET REGION of KATU:







- 77% of total arable land
- 28% of rural population

 = 50,8%   
  = 49,6%  
 = 32,7%



Contribution of the TARGET REGION of KATU to the National Agriculture:

- **90% of wheat production**
- 41% of gross agricultural output
- 50% of plant production
- 31% of animal production

 = 38,9%   
  = 29,5%   
  = 30,9%   
  = 33,8%   
  = 57,7%   
  = 16,9%

# Academic Profile of KATU



## Faculties\* with Degrees:

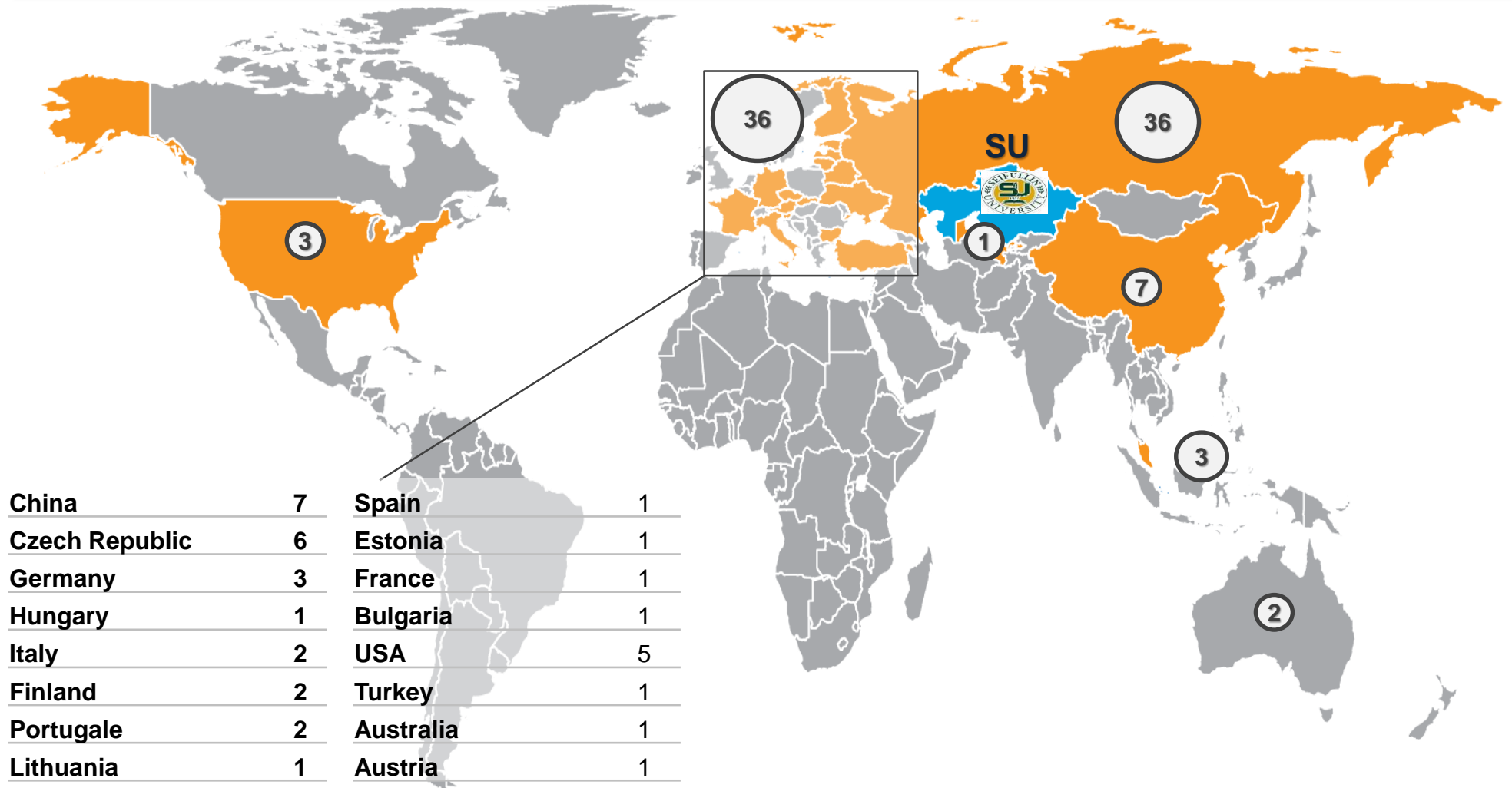
- Faculty of Agronomy - **#1 in Kazakhstan (KZ)**
  - Faculty of Forestry, Wildlife and Environment - **#2 in KZ**
  - Faculty of Mechanical Engineering - **#1 in Agricultural Engineering, #3 in Food Science in KZ**
  - Faculty of Land Using, Architecture and Design - **#3 in KZ**
  - Faculty of Veterinary and Animal Science - **#2 in KZ**
  - Faculty of Energy & Power Engineering
  - Faculty of Economics - **#6 in KZ**
  - Faculty of Computer Science and *Vocational Education* – **training of teachers for agricultural colleges, #9 in Computer Science in KZ**
- 

## Non-Degree Faculties:

- Humanitarian Faculty (History, Philosophy, Language)
  - Faculty of Arts - **#1 in Astana**
-

# INTERNATIONAL COOPERATION

Cooperation with **78 partner-organizations** from more than **20 countries**



# “Extension – KATU”

## Extension Center for Greenhouses Technologies (2016)



## Extension Center for Fish Production and Aquaculture (2017)

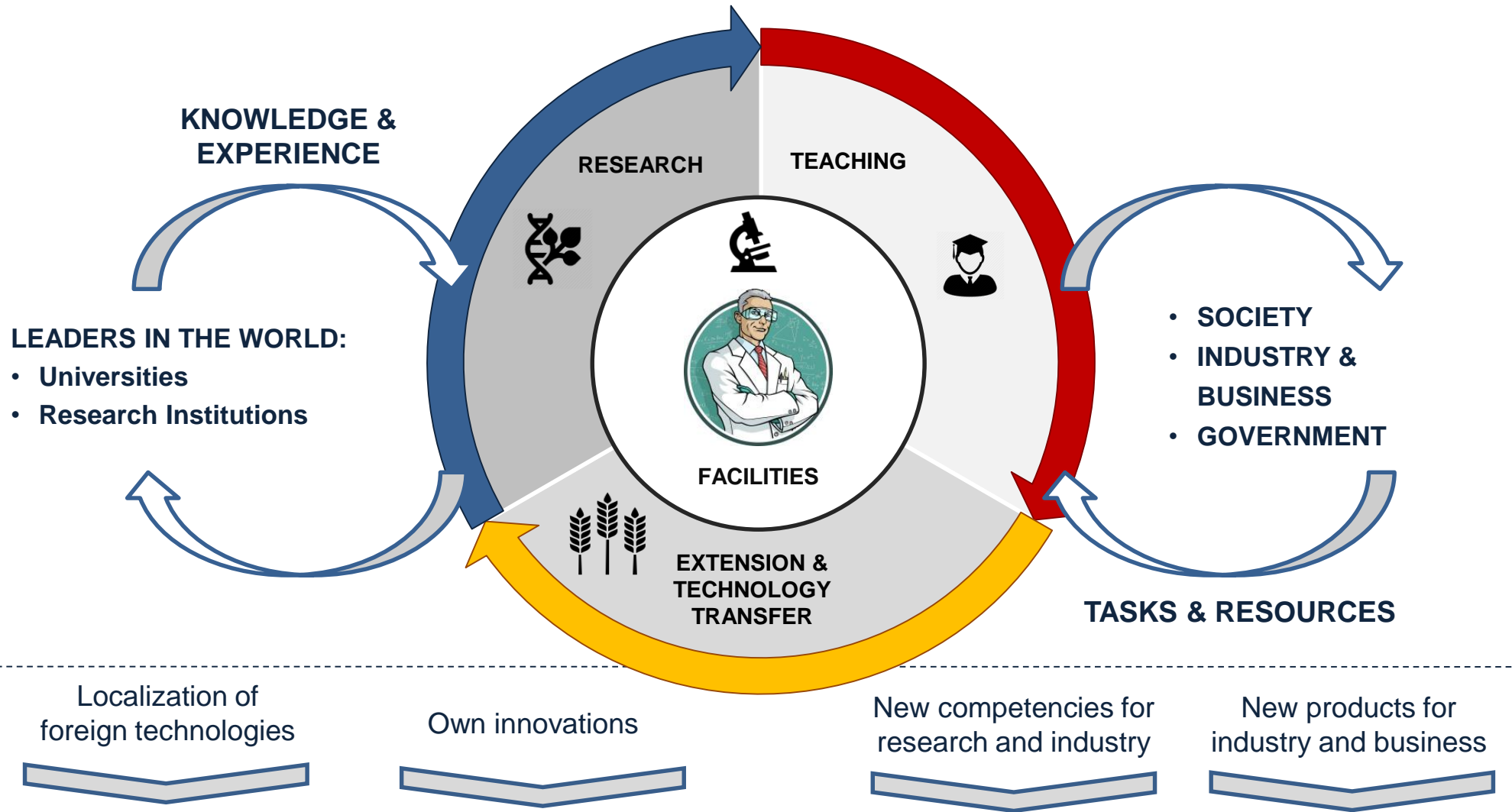


## Precision Agriculture Program (2018, designed with the assistance of UC Davis Faculty members)

- 9 pilot farms in 3 regions, 9 seminars, and 411 trainees



# New Strategy “KATU-2025”\*: Transformation to the “Western Type” Research University in the Field of Agriculture



\* Was approved by the KATU’s Board of Directors on December 13, 2015

# Sustainability of forest communication

- Ministry of Agriculture of the Republic of Kazakhstan
- Ministry of Science and Higher Education of the Republic of Kazakhstan
- **Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan**  
Forestry and Wildlife Committee

The area of state forest owners subordinate to the Committee is **7450.9 thousand ha**, of which 7335.9 thousand ha are **pecially protected natural areas** with the status of a legal entity, which include:

- 10 state nature reserves;
- 14 state national natural parks;
- 7 state nature reserves

The Committee is subordinate to: State Enterprise "Republican Forest Selection and Seed Center", Sandyktau Training and Production Forestry and Republican State Enterprise on the REM "Zhasyl Aimak".

# Educational programs in the field of forestry

## ***Forest Resources and Forestry Department:***

Landscaping and Gardening, Protective Afforestation- **BSc**;

Aesthetic forestry- **MSc**;

Sustainable Management of Forest Resources – **PhD**

## **Ecology Department:**

Natural Resource Management – **BSc**

Agroecology- **BSc**

Sustainable Management of Natural Resources – **MSc**

## **Hunting and fishing Department:**

Hunting - **BSc**

Aquaculture and water bioresources- **BSc**

Effective use of natural biological resources- **MSc**

Intensive fishing- **MSc**

Wild nature- **PhD**

# Communication with stakeholders

- Development of educational programs (Protective Afforestation with AgroParistech)
- Students' production and studying internship at parks, reserves, botanical gardens, large enterprises
- Delivering lectures
- Members of state exams
- Topics of diploma papers are discussed
- Committee invites scientists for giving recommendations (forest fire in Kostanay region-2022), for developing professional standards
- Round tables with stakeholders (International Summer Schools since 2014)
- Joint publications
- Participants of international EU Erasmus+ projects SUSDEV "Lifelong Learning for Sustainable development"; UnWaste "Development of the circular economy in partner countries through the development and implementation of the master's program Waste Management"



# Communication with stakeholders

- Dual education
- Employment of graduates (Alumni Fair)
- Advanced training of the specialists of forestry, ecology and wildlife sectors at the Center of Competence “Green Skills”
- Participation at the meetings of the Professional English Speaking Club “Green future”
- Practice-oriented orientation of the educational process and the expansion of practice bases





# Thanks for Your Attention!

---



Sara Kitaibekova

Faculty of Forestry, Wildlife and  
Environment

Coordinator of International Cooperation

62, Zhenis avenue, Astana, 010000

+7 7014579319

[saraorazbek@mail.ru](mailto:saraorazbek@mail.ru)

