SUSTAINABLE DEVELOPMENT GOAL NO. 2 “ZERO HUNGER. SUSTAINABLE A GRICULTURE DEVELOPMENT”

The problem of hunger in the modern world has long ceased to be solely an issue of food shortage. In the twenty-first century, it is increasingly associated with unequal access to resources, the consequences of armed conflicts, climate change, ecosystem destruction, soil degradation, and the global instability of agri-food systems.

For Ukraine, these challenges are of particular significance. The full-scale war has substantially affected food security, logistics, agricultural territories, and the functioning of the agricultural sector. Some territories have suffered destruction, contamination, or temporary occupation, creating additional risks to the stability of food production.

Under these circumstances, universities play an important role as centers of scientific analysis, environmental monitoring, interdisciplinary research, and the development of new approaches to sustainable development.

In 2025, V. N. Karazin Kharkiv National University continued implementing Sustainable Development Goal No. 2 by combining:

- scientific research;
- environmental monitoring;
- educational activities;
- international cooperation;
- awareness-raising initiatives;
- humanitarian support.

For Karazin University, overcoming hunger involves creating a long-term model of responsible coexistence between humanity, nature, and technology.

SCIENTIFIC RESEARCH IN THE FIELD OF FOOD SECURITY AND ENVIRONMENTAL SUSTAINABILITY

In 2025, the University continued developing interdisciplinary research related to:

- food security;
- soil conditions;
- climate change;
- environmental risks;
- sustainable use of natural resources.

Special attention was devoted to studying the consequences of war for Ukraine's agricultural ecosystems. University researchers conducted:

- analyses of soil degradation;
- assessments of the impact of military actions on agricultural territories;
- studies of land contamination;
- monitoring of biodiversity changes.

University research increasingly focused on integrating natural sciences, ecology, geography, and socio-economic approaches.

EDUCATION FOR SUSTAINABLE DEVELOPMENT AND ENVIRONMENTAL RESPONSIBILITY

In 2025, the University continued integrating the principles of sustainable development into the educational process.

Special attention was paid to developing students':

- environmental awareness;
- understanding of global food challenges;
- knowledge of climate change;
- interdisciplinary analytical skills.

Educational programs in natural sciences, ecology, geography, biology, and socio-economic disciplines included topics such as:

- sustainable agriculture;
- rational use of natural resources;
- environmental safety;
- food systems;
- climate adaptation.



RESEARCH ON CLIMATE CHANGE AND ITS IMPACT ON FOOD SYSTEMS



In 2025, Karazin University continued scientific research in climatology, meteorology, and geoecology.

University researchers analyzed:

- the impact of climate change on the agricultural sector;
- drought risks;
- changes in temperature regimes;
- territorial water balance;
- adaptation strategies for agriculture.

Particular attention was devoted to the regions of Ukraine most vulnerable to:

- land degradation;
- water scarcity;
- extreme weather events.

University science is increasingly oriented toward creating risk forecasting models and developing adaptive mechanisms for future generations.

BIOLOGICAL RESEARCH AND BIODIVERSITY PRESERVATION

In 2025, the University continued research in biology, botany, ecology, and environmental protection.

The University regards biodiversity as one of the fundamental conditions of food security and ecosystem stability.

Research teams conducted:

- *monitoring of natural ecosystems;*
- *studies of anthropogenic impacts;*
- *analyses of plant adaptation mechanisms;*
- *assessments of changes in ecological landscapes.*

The University also continued supporting botanical and environmental initiatives aimed at preserving natural heritage.



THE HUMANITARIAN DIMENSION OF FOOD SECURITY

In 2025, the Karazin community continued participating in humanitarian and volunteer initiatives.

Students and university staff contributed to:

- *collecting humanitarian aid;*
- *supporting internally displaced persons;*
- *social initiatives for vulnerable population groups;*
- *charitable activities.*

The university community regards solidarity and mutual support as essential elements of social resilience.

CONCLUSIONS

The year 2025 became a period of further development of Karazin University's interdisciplinary approach to implementing Sustainable Development Goal No. 2.

The University's activities in the field of overcoming hunger and ensuring food security encompassed:

- scientific research;
- environmental monitoring;
- educational programs;
- international cooperation;
- humanitarian initiatives;
- the development of environmental culture.

The University proceeds from the understanding that the problem of hunger in the modern world is inseparably connected with issues of:

- environmental sustainability;
- responsible resource management;
- global security;
- social justice;
- humanity's responsibility toward future generations.

INTERNATIONAL COOPERATION AND THE GLOBAL CONTEXT

2 ZERO HUNGER

In 2025, the University continued participating in international scientific and educational projects dedicated to:

- *sustainable development;*
- *environmental policy;*
- *food security;*
- *climate research.*

International cooperation contributed to:

- *academic exchange;*
- *the development of interdisciplinary research;*
- *the integration of Ukrainian science into the global context;*
- *the exchange of sustainable development practices.*

Karazin University considers global food security challenges to be a shared responsibility of the international academic community.

THE UNIVERSITY AS A SPACE FOR DEVELOPING ENVIRONMENTAL AWARENESS

In 2025, Karazin University continued fostering a culture of environmental responsibility. Awareness-raising activities, public lectures, scientific discussions, and interdisciplinary forums were aimed at:

- *increasing environmental awareness;*
- *promoting the principles of sustainable development;*
- *fostering responsible attitudes toward natural resources.*

The University increasingly recognizes its role as a space for shaping a new culture of interaction between humanity and the environment.