



Sustainable development strategy

NUBiP of Ukraine

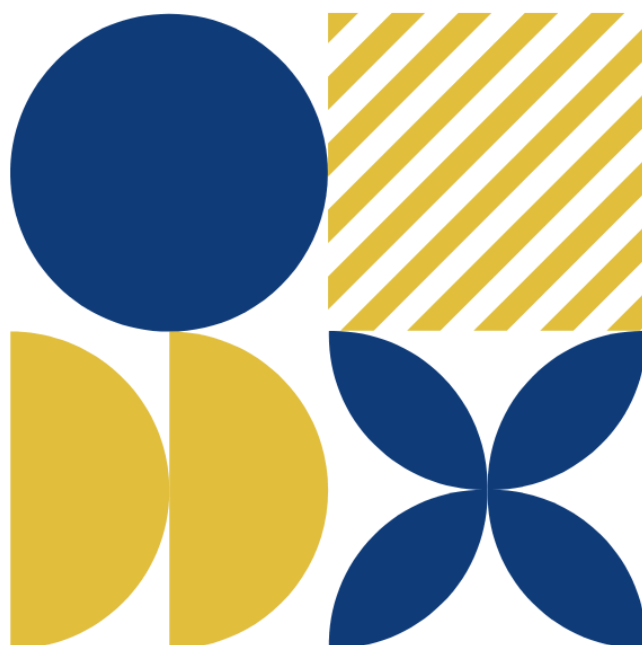
2030



Rector's Office

Heroiv Oborony Str.15
building 3, of. 207
Kyiv, Ukraine, 03041

nubip.edu.ua



The adoption of the Sustainable Development Goals (SDGs) at the global level in 2015 and their adaptation to the Ukrainian context in 2016 under the coordination of the Ministry of Economic Development and Trade represented a comprehensive, participatory process involving over 800 experts from diverse sectors. This inclusive national consultation culminated in the Presidential Decree "On the Sustainable Development Goals of Ukraine for the period up to 2030" in 2019, establishing 86 national development targets and 172 monitoring indicators specifically adapted to Ukrainian conditions and priorities. These developments have necessitated fundamental changes in strategic planning approaches across all Ukrainian institutions, requiring systematic integration of SDG principles into institutional frameworks.

The proposed draft Strategy serves as a framework document that will determine the strategic directions of the long-term development of NUBiP of Ukraine. The principal aspect of the development was to take into account both the SDGs adapted for Ukraine by 2030 and the main provisions of the EU's Updated Sustainable Development Strategy, ensuring alignment with both national priorities and European integration objectives. This dual alignment reflects Ukraine's commitment to European integration while addressing specific national development challenges, including post-conflict recovery, rural development, and agricultural modernization.

The developed Sustainable Development Strategy of the National University of Life and Environmental Sciences of Ukraine until 2030 can become an effective tool for implementing sustainable development both within the fundamental institution and across its separate subdivisions. By incorporating the main provisions of this comprehensive strategy into the development frameworks of individual institutes, departments, and research centers, NUBiP ensures systematic and coordinated implementation of sustainable development principles across all areas of university activity.

The National University of Life and Environmental Sciences of Ukraine plays a crucial role in achieving the Sustainable Development Goals through educational programmes, research and development, introduction of new technologies, and formation of an environmentally conscious society. The university's expertise in agricultural sciences, environmental management, rural development, and biotechnology positions it as a natural leader in addressing interconnected challenges of food security, climate change, biodiversity conservation, and sustainable resource management. The University's Strategic Plan must therefore be harmonised with the national SDGs defined in the above-mentioned state regulations while maintaining alignment with international frameworks and best practices.

Section 1. General principles, vision and mission

Principles.

- Interdisciplinarity, inclusiveness, focus on practical impact.
- Policy (rules and principles governing the university's activities in the field of sustainable development) and long-term vision (goals, priorities and mechanisms for implementing sustainable development) of the university's sustainable development.
- Coordination Center for Sustainable Development initiatives, incorporating sustainability principles into curricula and campus operations.
- A platform for interdisciplinary research, academic integrity and lifelong learning.
- A platform for interaction with the community and partners.
- Expanding English-language programs to attract a diverse student body and enhance global competitiveness.
- Building partnerships with leading universities worldwide through joint programs, academic mobility initiatives (e.g., ERASMUS+), and collaborative research projects.
- Ensuring the continuous improvement of academic programs through accreditation processes and adherence to updated higher education standards.
- Supporting flexible learning formats (in-person, hybrid, online) tailored to the needs of students during challenging circumstances like wartime conditions.
- Providing accessible education for individuals with disabilities through adaptive learning environments and inclusive practices.
- Encouraging self-directed learning and recognizing informal education achievements.
- Enhancing laboratory facilities with modern equipment to support practical training and research excellence.
- Actively pursuing international grant opportunities (e.g., Horizon Europe) to fund innovative projects addressing sustainability challenges.
- Strengthening partnerships with employers to align educational programs with labor market demands and ensure graduates are equipped with relevant competencies.
- Facilitating internships and hands-on training opportunities for students.
- Adapting educational processes to ensure continuity during crises such as wartime disruptions.
- Prioritizing the safety and well-being of students and staff by maintaining secure facilities.

Vision. NUBiP of Ukraine functions as a hub for transforming society through education, research and cooperation, green development, bioeconomy, and digital transformation of the agricultural sector, supporting innovation, environmental conservation, and sustainable regional policy within the country and globally. NUBiP aims to empower future leaders who will drive sustainable agricultural practices, environmental stewardship, and societal progress by embracing cutting-edge technologies, promoting inclusivity, and addressing global challenges.

Mission.

- Integrating the SDGs into all aspects of the university's activities, from campus management to curriculum.
- Providing high-quality education that integrates modern scientific knowledge with practical applications.

- Cultivating international partnerships to enhance academic mobility, research collaboration, and cultural exchange.
- Promoting inclusivity by ensuring access to educational opportunities for all, including individuals with special needs.
- Strengthening ties between academia and industry to address pressing environmental and agricultural challenges.
- Supporting innovative research that contributes to global sustainability goals.

Section 2. NUBiP of Ukraine contribution to the SDGs under the national strategy.



Strategic Goal 1. Good Health and Well-being - SDG3

Sustainable Development Goal 3 represents a critical intersection where NUBiP of Ukraine's unique strengths in agricultural sciences, environmental stewardship, and rural community engagement can make transformative contributions to national health outcomes. This elaborated framework builds upon the university's existing capabilities while aligning with Ukraine's ambitious healthcare transformation agenda.

National Guideline and Policy Context

Ukraine's Healthcare System Development Strategy until 2030, approved by the Cabinet of Ministers in January 2025, establishes a comprehensive framework that directly intersects with NUBiP's mission. The national strategy defines three fundamental goals that create natural partnership opportunities for the university: ensuring universal access to high-quality medical services, strengthening intersectoral coordination of public policy affecting healthcare systems, and creating conditions for healthcare system development and potential realization.

The national approach emphasizes primary healthcare as the cornerstone of the system, with particular focus on developing multidisciplinary healthcare facilities and expanding access to the "Affordable Medicines" program. This creates significant opportunities for NUBiP to contribute

through its research capabilities in pharmaceutical botany, natural product development, and sustainable agricultural practices that support medicinal plant cultivation.

Ukraine's specific adaptation of SDG3 includes ambitious targets such as reducing premature mortality from non-communicable diseases by one-third by 2030, promoting mental health and well-being, and ensuring universal health coverage. The strategy particularly emphasizes the needs of war veterans, internally displaced persons, and residents of de-occupied territories, creating opportunities for NUBiP to develop specialized programs addressing rural health challenges and food security in conflict-affected areas.

The national framework also prioritizes innovative solutions covering biosafety, electronic health systems, improved quality management of medical care, and development of international medical partnerships. This technological emphasis aligns perfectly with NUBiP's capabilities in biotechnology, digital agriculture, and international cooperation networks.

Objectives of the NUBiP of Ukraine

Campus-Based Health Ecosystem Development. Beyond the current objective of providing healthy food for all on campus, NUBiP should establish itself as a model "healthy campus" that demonstrates integrated approaches to nutrition, physical activity, mental wellness, and environmental health. This includes creating comprehensive nutrition programs that showcase the connection between sustainable agriculture and human health, establishing on-campus fitness and wellness facilities that promote active lifestyles, and developing mental health support systems that address the unique stresses faced by agricultural students and rural communities.

Physical and Mental Wellness Integration. The university's approach to physical health should extend beyond traditional fitness programs to encompass occupational health for agricultural workers, ergonomic training for farm operations, and comprehensive wellness programs that address the mental health challenges prevalent in rural communities. This includes developing stress management programs specifically tailored to agricultural contexts, creating support systems for students from conflict-affected rural areas, and establishing peer support networks that address isolation and mental health stigma in farming communities.

Sustainable Food Systems for Health Outcomes. NUBiP's objective of developing environmentally friendly agricultural technologies should be expanded to create a comprehensive "farm-to-health" approach that demonstrates how sustainable agricultural practices directly contribute to improved nutrition and reduced disease burden. This includes developing and scaling pesticide-free cultivation methods using bioprotective agents, conducting extensive laboratory research on biological products and their health benefits, and creating demonstration farms that showcase the health co-benefits of ecological agriculture.

Food Safety and Quality Assurance. The university's existing food quality research through the Ukrainian Laboratory of Quality and Safety of Agricultural Products should be significantly expanded to become a national center of excellence for agricultural product health assessment. This includes developing comprehensive testing protocols for the impact of agrochemicals on human health, establishing monitoring systems for soil and water toxicity in rural areas that affect food safety, and creating certification programs for health-promoting agricultural products.

Nutritional Security Research and Education. Building on current educational programs on healthy eating, NUBiP should develop comprehensive nutrition education initiatives that bridge agricultural production and health outcomes. This includes creating curricula that teach students and farmers the principles of nutrition-sensitive agriculture, developing extension programs that promote dietary diversity through sustainable farming practices, and establishing community nutrition programs that address malnutrition and diet-related diseases in rural areas.

Environmental Health Protection Systems. The university's work on disease prevention through environmental safety should expand to encompass comprehensive environmental health protection that addresses the full spectrum of environment-health linkages. This includes developing advanced systems to prevent water pollution by agricultural runoff, creating community-based environmental monitoring programs, and establishing partnerships with local health authorities to address environmental determinants of health.

One Health Approach Implementation. NUBiP should adopt and operationalize the One Health approach that recognizes the interconnection of human, animal, and environmental health. This includes developing integrated research programs that address zoonotic disease prevention, antimicrobial resistance in agricultural settings, and the health impacts of climate change on agricultural communities.

Climate-Resilient Health Systems. Given Ukraine's vulnerability to climate change impacts, the university should develop programs that build resilience in both agricultural and health systems. This includes research on climate-adapted crop varieties that maintain nutritional value, development of early warning systems for climate-related health risks in agricultural communities, and creation of adaptation strategies for maintaining food security under changing climatic conditions.

Rural Health Infrastructure Development. Leveraging the university's strong connections to rural communities, NUBiP should develop programs that directly address the healthcare access challenges faced by rural populations. This includes establishing mobile health clinics that provide preventive care and health education in remote farming communities, developing telemedicine programs that connect rural patients with health specialists, and creating community health worker training programs focused on agricultural health and safety.

Health Workforce Development for Rural Areas. The university should establish comprehensive programs to train health professionals who are specifically prepared to serve rural and agricultural communities. This includes developing curricula that address the unique health challenges of farming communities, creating internship and residency programs in rural health settings, and establishing continuing education programs for health professionals working in agricultural regions.

Indicators:

- Number of patents for organic plant protection products; area of land used for ecological technologies.
- Number of trainings/seminars on healthy eating per year; audience coverage
- Publications in scientific journals; number of recommendations for farmers on food quality
- Number of implemented projects on water conservation technologies.

- Number of psychological counselling sessions; participation in international initiatives (e.g. WHO) in the field of psychological well-being of students and teachers

Strategic Goal 2. Quality Education - SDG4

Sustainable Development Goal 4 represents the cornerstone of NUBiP's mission as an institution of higher learning dedicated to transforming society through educational excellence. This strategic goal encompasses the university's commitment to ensuring inclusive, equitable, quality education and promoting lifelong learning opportunities for all stakeholders within and beyond the agricultural and environmental sciences sectors.

National Guideline and Policy Context

Ukraine's commitment to SDG4 is anchored in comprehensive national frameworks that prioritize equal access to quality education, inclusion, and lifelong learning. The country's education strategy focuses on ensuring that by 2030, all citizens have access to inclusive and equitable quality education at all levels. Ukraine's national benchmarks include maintaining completion rates of 99% for primary and lower secondary education and 95% for upper secondary education, while reducing out-of-school rates to 1% across all levels by 2030.

The national framework emphasizes the integration of global citizenship education and education for sustainable development into curricula, teacher education, and student assessment systems. Ukraine has committed to allocating 4-6% of GDP to education and 15-20% of public expenditure to education, demonstrating the nation's prioritization of educational development. The government has established robust quality assurance mechanisms through the National Agency for Higher Education Quality Assurance (NAQA) and other institutions to ensure educational excellence.

Ukraine's lifelong learning strategy, formalized through the revised Law on Education (2017) and the draft Law on Adult Education and Training, creates a comprehensive framework for continuous learning that aligns perfectly with NUBiP's educational mission. The national approach recognizes formal, non-formal, and informal education pathways, emphasizing the need for flexible, accessible learning opportunities that respond to personal needs, social development priorities, and economic demands.

Objectives of the NUBiP of Ukraine

Comprehensive SDG Integration in Curricula. Building on the current objective to integrate sustainable development principles into all curricula, NUBiP should develop a comprehensive educational transformation that positions sustainability science as the foundational framework for all academic programs. This includes creating interdisciplinary courses that demonstrate the interconnectedness of agricultural, environmental, and social systems, developing problem-based learning approaches that address real-world sustainability challenges, and establishing capstone programs that require students to propose and implement solutions to local and global sustainability issues.

Innovative Pedagogical Excellence. The university should expand beyond traditional educational delivery to embrace cutting-edge pedagogical approaches that enhance learning effectiveness and accessibility. This includes developing hybrid and online learning platforms that can reach diverse audiences, implementing experiential learning programs that connect theoretical knowledge with

practical application, and creating flexible learning pathways that accommodate different learning styles, schedules, and life circumstances.

Comprehensive Lifelong Learning Ecosystem. NUBiP's current objectives for lifelong learning should be expanded to create a comprehensive ecosystem that serves diverse learning needs throughout the region. This includes establishing community education centers that provide accessible learning opportunities for rural populations, developing professional development programs for agricultural and environmental professionals, and creating micro-credential and certification programs that allow learners to build skills incrementally over time.

Open Education and Digital Innovation. Building on the objective to develop an open education system, the university should create a comprehensive digital learning infrastructure that democratizes access to high-quality agricultural and environmental education. This includes developing massive open online courses (MOOCs) that reach global audiences, creating digital libraries and resources that support lifelong learning, and establishing virtual laboratories and simulation environments that provide hands-on learning experiences regardless of geographical location.

Community Outreach and Public Education. The university's off-campus outreach programs should be significantly expanded to create comprehensive community engagement initiatives that address local educational needs while promoting sustainability awareness. This includes developing mobile education units that bring university expertise directly to rural communities, creating partnerships with local schools to enhance science and environmental education, and establishing community gardens and demonstration sites that serve as outdoor classrooms for sustainable practices.

Comprehensive Inclusion and Accessibility. NUBiP should expand its current objective to create barrier-free conditions for inclusive education to encompass comprehensive accessibility that addresses physical, economic, technological, and social barriers to education. This includes developing adaptive learning technologies that accommodate different abilities and learning styles, establishing comprehensive financial support systems that ensure education accessibility regardless of economic background, and creating culturally responsive educational programs that respect and incorporate diverse perspectives and knowledge systems.

Support for Vulnerable and Underrepresented Groups. The university should develop targeted programs that address the specific educational needs of vulnerable populations, including internally displaced persons, veterans, rural women, and marginalized communities. This includes creating specialized scholarship and mentoring programs, developing trauma-informed educational approaches for conflict-affected populations, and establishing pathways for non-traditional learners to access higher education opportunities.

Educational Research and Innovation Center. NUBiP should establish a comprehensive center dedicated to researching and developing innovative educational approaches that enhance learning effectiveness while promoting sustainability awareness. This includes conducting research on best practices in sustainability education, developing assessment tools that measure not only knowledge acquisition but also behavioral change and sustainability competency, and creating models for community-engaged learning that can be replicated by other institutions.

Teacher and Educator Development. The university should develop comprehensive programs for training and supporting educators at all levels in sustainability education and innovative pedagogical approaches. This includes creating professional development programs for faculty and staff, establishing partnerships with teacher training institutions to integrate sustainability education into educator preparation programs, and developing mentoring networks that support continuous professional growth in educational innovation.

Indicators:

- Number of students receiving certificates in sustainable development
- Share of disciplines integrated with the SDGs in the curriculum

Strategic Goal 3. Gender Equality - SDG5

Sustainable Development Goal 5 represents a transformative opportunity for NUBiP of Ukraine to demonstrate leadership in achieving gender equality and empowering all women and girls through its unique position in agricultural and environmental sciences. This strategic goal builds upon the university's commitment to creating an inclusive, equitable institution that serves as a model for gender equality in higher education and rural development across Ukraine and internationally.

National Guideline and Policy Context

Ukraine's approach to SDG5 is grounded in comprehensive national frameworks that prioritize equal rights, participation of women in decision-making, and prevention of violence. The national strategy is anchored in the Strategy for Ensuring Equal Rights and Opportunities for Women and Men for the period until 2030, which provides a robust framework for gender equality initiatives across all sectors. This strategy emphasizes addressing intersectionality, recognizing that gender inequality in Ukraine is often compounded by other factors such as age, income level, rural/urban residence, sexual orientation, and disability.

Ukraine's Gender Equality Index demonstrates significant progress, with European integration viewed as an opportunity to enhance women's rights protection and increase their participation in various spheres. The national framework specifically addresses gender segregation in education through the Strategy for Implementing Gender Equality in Education until 2030, adopted in December 2022. This strategy recognizes that seemingly equal treatment of different genders does not provide equal opportunities under existing gender stereotyping conditions, requiring targeted interventions to overcome systemic inequalities.

The Strategy for Overcoming the Gender Pay Gap for the Period until 2030 identifies horizontal and vertical gender segregation in the labor market as key causes of inequality, with men dominating management positions while women are concentrated in fields with lower value added or compensation. This creates particular relevance for NUBiP, given the agricultural sector's traditional gender patterns and the university's role in preparing future agricultural leaders.

Ukraine's commitment to gender equality is further reinforced by the ratification of the Istanbul Convention in 2022 and implementation of comprehensive legal and institutional frameworks for combating gender-based violence. The national Women, Peace, and Security agenda has gained particular prominence during the ongoing conflict, with increasing female participation in security

and defense sectors and systematic integration of gender perspectives into post-war reconstruction planning.

Objectives of the NUBiP of Ukraine.

Comprehensive Gender Mainstreaming Across University Operations. Building upon the current objective to implement gender policy at the university, NUBiP should establish comprehensive gender mainstreaming that permeates all aspects of institutional operations. This includes developing gender-responsive budgeting practices that ensure resource allocation addresses gender inequalities, implementing gender impact assessments for all major policy decisions, and establishing gender equality as a core institutional value integrated into strategic planning, performance evaluation, and organizational culture development.

Leadership Development and Women's Representation. The university's current objective to ensure gender balance in governance structures should be expanded to create comprehensive leadership development programs that prepare women for decision-making roles across academic, administrative, and research domains. This includes establishing mentorship programs that connect senior women leaders with emerging female professionals, creating leadership training programs specifically designed to address barriers women face in agricultural and environmental science leadership, and implementing succession planning processes that ensure gender diversity in senior positions.

Anti-Discrimination and Inclusive Culture Development. Building on current objectives for training and campaigns on gender equality and non-discrimination, NUBiP should develop comprehensive cultural transformation initiatives that create truly inclusive environments. This includes implementing robust anti-harassment policies with clear reporting mechanisms and support services, establishing diversity and inclusion committees at all organizational levels, and creating safe spaces for dialogue about gender issues, discrimination experiences, and inclusive practices.

Curriculum Transformation and Gender-Sensitive Pedagogy. The university's objective to create gender-oriented study programs should be expanded to encompass comprehensive curriculum transformation that integrates gender perspectives across all academic disciplines. This includes developing interdisciplinary courses that examine the intersection of gender with agricultural sciences, environmental sustainability, and rural development, implementing pedagogical approaches that address different learning styles and eliminate gender bias in classroom interactions, and creating assessment methods that fairly evaluate all students regardless of gender identity or expression.

Breaking Gender Barriers in STEM and Agriculture. Building on objectives to encourage women to enter underrepresented specialties, NUBiP should develop comprehensive programs that actively combat gender segregation in agricultural and environmental sciences. This includes creating targeted recruitment programs that encourage women to pursue traditionally male-dominated fields such as agricultural engineering and precision agriculture, developing support networks and study groups that help women succeed in technical disciplines, and establishing research opportunities that demonstrate women's contributions to agricultural innovation and environmental science.

Gender Research and Knowledge Production. The university should establish comprehensive research programs that advance knowledge about gender equality in agricultural and environmental contexts. This includes creating research centers focused on gender and agriculture, supporting faculty research on women's roles in rural development and environmental conservation, and developing partnerships with women's organizations and gender studies programs to enhance research capacity and impact.

Rural Women's Empowerment and Leadership Development. NUBiP should leverage its connections to rural communities to develop comprehensive programs that empower rural women and address gender inequalities in agricultural contexts. This includes establishing agricultural extension programs specifically designed to serve women farmers and rural entrepreneurs, creating training programs on financial literacy, business development, and agricultural technology for rural women, and developing support networks that connect rural women with markets, resources, and leadership opportunities.

Addressing Gender-Based Violence in Rural Communities. The university should develop comprehensive programs that address gender-based violence in rural and agricultural contexts, recognizing the unique challenges faced by women in isolated rural areas. This includes training community leaders and agricultural extension agents to recognize and respond to gender-based violence, establishing support services and referral networks for rural women experiencing violence, and conducting research on the prevalence and impact of gender-based violence in agricultural communities.

Women's Economic Empowerment in Agriculture. Building on Ukraine's national priorities for women's economic empowerment, NUBiP should develop comprehensive programs that enhance women's economic opportunities in agricultural and environmental sectors. This includes creating business incubators specifically for women-led agricultural enterprises, providing access to microfinance and credit for women farmers and rural entrepreneurs, and developing market linkages that connect women producers with buyers and value chains.

Indicators:

- The ratio of women to men at the university
 - The ratio of women to men in academic groups by gender, position, academic rank and academic degree
 - The ratio of women to men among management staff
 - The ratio of women to men in research projects
 - The ratio of women to men in foreign internships
 - The ratio of women to men in foreign internships
 - The ratio of women to men by faculty (speciality)
- Number of leadership trainings held at the university
- Number of gender-oriented study programmes developed and support for social equality research

Strategic Goal 4. Clean Water and Sanitation - SDG6

Sustainable Development Goal 6 represents a critical domain where NUBiP of Ukraine can leverage its unique expertise in agricultural and environmental sciences to address one of the most

pressing challenges facing the nation. This strategic goal builds upon the university's foundational strengths in water resource management, agricultural technology, and environmental conservation to create transformative solutions for water security and sanitation across Ukraine and beyond.

National Guideline and Policy Context

Ukraine's commitment to SDG6 is anchored in comprehensive national frameworks, most notably the Water Strategy of Ukraine for the period up to 2050, which represents the only national document fully aligned with SDG6 tasks and indicators. This strategy provides the foundational framework for addressing Ukraine's complex water challenges, including the reality that the country faces significant water resource limitations with approximately 80% of drinking water supply coming from surface sources that are often classified as polluted or highly polluted.

The national context is further complicated by Ukraine's status as a water-stressed country, where water resources are spatially and seasonally uneven, a situation exacerbated by climate change. The ongoing conflict has dramatically impacted water infrastructure, with preliminary World Bank estimates indicating losses of \$1.3 billion in the water management and sanitation sector, including destruction of 24 water treatment facilities, 38 water pumping stations, and more than 800 km of water supply networks.

Ukraine's adoption of nine River Basin Management Plans (RBMPs) in 2024 represents a major milestone toward sustainable water management aligned with EU Water Framework Directive requirements. These comprehensive plans cover over 600,000 km² and benefit more than 40 million Ukrainians, with an estimated investment need of €7.7 billion over six years. The national approach emphasizes integrated water resource management, addressing urban and industrial wastewater, agricultural water abstraction, and ecosystem health through basin-wide approaches rather than sector-specific interventions.

The country faces significant disparities in water access, with 99.2% of urban populations having access to centralized water supply compared to only 30.1% of rural populations, and even more dramatic disparities in sanitation services. This rural-urban divide creates particular opportunities for NUBiP to contribute through its extensive rural networks and agricultural expertise.

Objectives of the NUBiP of Ukraine

Comprehensive Water Management Systems. Building upon the current objective to promote conscious water use on campus, NUBiP should establish the university as a living laboratory for integrated water management that demonstrates best practices in water conservation, treatment, and reuse. This includes implementing comprehensive rainwater harvesting systems that capture and utilize precipitation for irrigation and non-potable uses, developing advanced greywater treatment and recycling systems that demonstrate feasible technologies for rural applications, and establishing demonstration wetlands and bioswales that showcase natural water treatment approaches while providing educational and research opportunities.

Sustainable Water Extraction and Conservation. The university's current objective regarding sustainable water extraction should be expanded to create comprehensive demonstration systems that showcase water-efficient technologies applicable to agricultural and rural contexts. This includes installing precision irrigation systems that demonstrate water-efficient agricultural

practices, implementing smart water monitoring systems that provide real-time data on water use efficiency and quality, and developing water storage and management systems that demonstrate resilience approaches for drought and flood management.

Advanced Wastewater Treatment Innovation. Building on the current objective to develop wastewater treatment technologies, NUBiP should establish comprehensive research programs that address the full spectrum of water treatment challenges facing Ukraine's agricultural and rural communities. This includes developing nature-based wastewater treatment solutions that are cost-effective and appropriate for rural contexts, creating decentralized treatment systems that can serve small communities and agricultural operations, and researching innovative approaches to nutrient recovery and reuse from agricultural and domestic wastewater streams.

Water-Efficient Agricultural Technology Development. The university's research on efficient irrigation methods should be significantly expanded to address Ukraine's agricultural water challenges while contributing to national food security and rural development. This includes developing precision agriculture technologies that optimize water use while maintaining or increasing crop yields, creating drought-resistant crop varieties and cultivation practices that reduce water dependency, and establishing water-smart agricultural systems that integrate conservation, efficiency, and productivity objectives.

Water Quality Monitoring and Assessment. NUBiP should develop comprehensive water quality research programs that address the monitoring and assessment needs identified in national strategies while building the country's technical capacity for water management. This includes establishing water quality laboratories that can provide testing and analysis services for agricultural and rural communities, developing low-cost, user-friendly water quality monitoring technologies appropriate for widespread deployment, and creating water quality assessment protocols specifically designed for agricultural contexts and rural water systems.

Rural Water Infrastructure Development. Leveraging the university's strong rural connections, NUBiP should develop comprehensive programs that directly address rural water access challenges while building local capacity for sustainable water management. This includes implementing pilot projects on water reclamation and supply systems in rural communities, providing technical assistance and training for community-based water management organizations, and developing financing mechanisms that support rural water infrastructure development and maintenance.

Agricultural Water Security Enhancement. The university should establish programs that address the intersection of water security and agricultural productivity, recognizing that water challenges directly impact rural livelihoods and national food security. This includes developing watershed management approaches that protect agricultural water supplies while maintaining ecosystem services, creating farmer training programs on water conservation and efficient irrigation practices, and establishing water user associations that promote collective management of agricultural water resources.

Sanitation and Public Health Integration. Building on the university's health-related objectives, NUBiP should develop comprehensive programs that address sanitation challenges in rural and agricultural contexts while promoting public health outcomes. This includes developing appropriate sanitation technologies for rural communities that address both human and agricultural waste management, creating public health education programs that address water-related disease

prevention and hygiene practices, and establishing integrated approaches to water, sanitation, and agricultural productivity that maximize co-benefits across sectors.

Water Governance and Policy Research. NUBiP should establish comprehensive research programs that support the development and implementation of effective water governance frameworks at local, regional, and national levels. This includes conducting research on water governance models appropriate for Ukrainian contexts, providing technical support to local governments and communities in developing water management capacity, and contributing to policy development processes through evidence-based research and stakeholder engagement.

International Water Cooperation. Building on current international cooperation objectives, the university should develop specialized programs that position it as a leader in international water cooperation and knowledge exchange. This includes participating in international water research networks and initiatives, developing partnerships with international institutions working on similar water challenges, and contributing to global knowledge development on water security in agricultural and post-conflict contexts.

Indicators:

- Number of patents for water saving technologies

Strategic Goal 5. Affordable and Clean Energy - SDG7

Sustainable Development Goal 7 represents a transformative opportunity for NUBiP of Ukraine to leverage its unique expertise in agricultural sciences, rural development, and environmental stewardship to address Ukraine's energy security challenges while pioneering innovative solutions for clean, affordable energy access. This strategic goal positions the university at the forefront of Ukraine's energy transition, particularly in rural and agricultural contexts where traditional energy infrastructure faces significant challenges.

National Guideline and Policy Context

Ukraine's commitment to SDG7 is anchored in the comprehensive National Energy and Climate Plan (NECP) extending through 2030, endorsed by the Cabinet of Ministers in June 2024. This foundational framework encompasses five key areas: decarbonization, energy efficiency, energy security, electricity, and gas (including biomethane, hydrogen, and oil), creating a comprehensive roadmap for energy system transformation. The National Renewable Energy Action Plan until 2030 sets ambitious targets of achieving at least 27% renewable energy in total final consumption by 2030, with specific sectoral targets of 33% in heating and cooling systems, 29% in electricity generation, and 17% in the transport sector.

The national strategy emphasizes the critical role of bioenergy, which currently represents about 98% of all renewable thermal energy in Ukraine, with 2,797 thousand tons of oil equivalent produced in 2020. The bioenergy sector's development trajectory includes increasing biomass contribution to 5,749 thousand tons of oil equivalent per year and biogas to 235 thousand tons of oil equivalent per year by 2030, representing nearly 81% of all renewable energy sources in the heating and cooling sector. This creates exceptional opportunities for NUBiP to contribute through its agricultural expertise and rural networks.

Ukraine's energy sector faces unique challenges due to the ongoing conflict, which has resulted in significant infrastructure damage and highlighted the critical importance of energy independence and resilience. The national approach emphasizes distributed generation and micro-generation to increase power system resilience while reducing dependence on large centralized facilities. The Strategy for Digital Transformation in the Energy Sector identifies the urgent need to modernize scientific and educational institutions used to train specialists in the energy sector and create international partnerships.

The biomethane sector represents a particular strategic priority, with Ukraine having the potential to meet up to 20% of the European Union's planned production target of 35 billion cubic meters per year by 2030. The total energy potential for biogas/biomethane production in Ukraine is estimated at 21.8 billion cubic meters per year, representing 18.7 million tons of oil equivalent annually.

Objectives of the NUBiP of Ukraine

Comprehensive Green Campus Energy Systems. Building upon the current objective to create a model green campus with energy-saving lighting, insulation, and solar panels, NUBiP should establish the university as a comprehensive demonstration site for integrated renewable energy systems that showcase best practices applicable to agricultural and rural contexts. This includes developing hybrid renewable energy systems that combine solar, wind, and biomass resources to demonstrate energy resilience and independence, implementing smart grid technologies that optimize energy distribution and storage while providing educational and research opportunities, and creating energy-positive buildings that generate more energy than they consume while demonstrating sustainable construction practices.

Advanced Energy Efficiency and Conservation Systems. The university's current objective regarding energy-efficient reconstruction and construction should be expanded to create comprehensive demonstrations of cutting-edge efficiency technologies and practices. This includes implementing advanced building management systems that optimize energy use through intelligent controls and automation, developing thermal energy recovery systems that capture and reuse waste heat from various campus operations, and establishing comprehensive energy monitoring systems that provide real-time data on consumption patterns and efficiency improvements.

Comprehensive Bioenergy Research and Development. Building on the current objective to research bioenergy crops and establish biogas laboratories, NUBiP should develop comprehensive research programs that address the full spectrum of bioenergy opportunities in Ukrainian agricultural contexts. This includes conducting advanced research on energy crop cultivation and optimization for Ukrainian climatic and soil conditions, developing innovative biogas and biomethane production technologies that maximize energy output while minimizing environmental impact, and creating integrated biorefineries that produce multiple energy products and valuable co-products from agricultural biomass.

Agricultural Energy Systems Integration. The university should establish research programs that address the intersection of agricultural production and energy systems, recognizing the unique opportunities for energy-agriculture integration in rural contexts. This includes developing agrivoltaic systems that combine solar energy generation with agricultural production, creating energy-efficient greenhouse and controlled environment agriculture systems, and researching precision agriculture technologies that optimize energy use while maintaining or increasing productivity.

Rural Energy Access and Microgrid Development. NUBiP should develop comprehensive research and demonstration programs focused on addressing energy access challenges in rural and remote areas through innovative microgrid and distributed energy solutions. This includes designing and testing community-scale renewable energy systems appropriate for rural Ukrainian contexts, developing energy storage technologies that enable reliable rural energy access using local renewable resources, and creating financing and business models that make clean energy accessible and affordable for rural communities.

Comprehensive Rural Energy Extension and Training. Building on the current objective to develop training courses on renewable energy and energy saving, NUBiP should establish comprehensive extension programs that build rural capacity for clean energy adoption and entrepreneurship. This includes creating farmer and rural entrepreneur training programs on renewable energy technologies and business opportunities, developing technical assistance programs that support rural renewable energy project development and implementation, and establishing energy cooperatives and community-owned renewable energy initiatives that keep energy benefits within rural communities.

Agricultural Sector Energy Transformation. The university should develop targeted programs that address the specific energy needs and opportunities within Ukraine's agricultural sector, leveraging its extensive networks and expertise in agricultural systems. This includes providing energy audits and efficiency recommendations for agricultural operations, developing renewable energy solutions specifically designed for agricultural applications such as grain drying and irrigation, and creating demonstration farms that showcase integrated agricultural and energy production systems.

Energy Poverty Alleviation and Social Equity. NUBiP should develop comprehensive programs that address energy poverty and ensure equitable access to clean, affordable energy, particularly in rural and underserved communities. This includes designing and implementing programs that provide clean energy access to low-income rural households, developing financing mechanisms that make renewable energy accessible to small farmers and rural entrepreneurs, and creating energy efficiency programs that reduce energy costs for vulnerable rural populations.

Clean Energy Policy Research and Development. Building on current objectives related to policy development for clean energy technology, NUBiP should establish comprehensive policy research programs that support effective energy transition policies at local, regional, and national levels. This includes conducting research on optimal policy frameworks for rural renewable energy development, providing technical expertise to government agencies on bioenergy and rural energy policies, and developing recommendations for energy sector reforms that support rural development and agricultural competitiveness.

Industry Partnerships and Technology Transfer. The university's objective regarding energy efficiency services for industry should be expanded to create comprehensive partnerships that advance clean energy technology development and deployment across multiple sectors. This includes establishing research partnerships with energy companies to develop and test innovative renewable energy technologies, creating technology incubators that support clean energy startup development and commercialization, and developing licensing and technology transfer programs that bring university innovations to market.

Indicators.

- Share of renewable energy in the university's energy mix

Strategic Goal 6. Decent Work and Economic Growth - SDG8

Sustainable Development Goal 8 represents a pivotal opportunity for NUBiP of Ukraine to leverage its unique position in agricultural education, rural development, and innovation to address Ukraine's employment challenges while fostering sustainable economic growth. This strategic goal positions the university at the center of efforts to create decent work opportunities, promote entrepreneurship, and build economic resilience in agricultural and rural contexts across Ukraine.

National Guideline and Policy Context

Ukraine's commitment to SDG8 is anchored in comprehensive national frameworks, most notably the Employment Strategy of Ukraine until 2030, currently under development by the Ministry of Economy. This strategic framework is designed to become a practical tool for economic development, aimed at reducing unemployment, expanding access to work, and increasing labor market flexibility. The strategy identifies four priority areas: increasing economic activity of citizens, eliminating imbalances between labor demand and supply, strengthening institutional capacity and implementing digital tools, and implementing European Union standards in employment policy.

The national context reflects significant challenges and opportunities. Ukraine's SDG8 monitoring report indicates that during 2015-2018, reforms, European integration, and business reorientation from Russian to Western markets fostered economic recovery, with GDP growing on average by 2.7%, improved labor productivity dynamics, and increased share of value added from small and medium enterprises. However, structural development disproportions remain, with slow innovation development, high informal employment rates, gender wage inequality, and insufficient access to financial resources for SMEs.

The national framework particularly emphasizes youth development, recognizing that young people's creativity and activity drive economic development. Current challenges include under-utilization of labor resources aged 15-24, with 17.2% of youth not in employment, education, or professional training in 2015, and increased migration of active Ukrainian youth abroad. The strategy aims to create "green jobs" as part of post-conflict reconstruction, with expectations that recovery programs could provide up to 4.2 million new jobs, of which about 1.2 million will be related to sustainable development.

Ukraine's agricultural and rural development strategy through 2030 creates particular opportunities for NUBiP, emphasizing the need for structural transformation of rural economies, development of agricultural value chains, and creation of decent work opportunities in rural areas. The strategy recognizes that rural employment challenges stem not only from insufficient income sources but from absent entrepreneurial spirit, low motivation, insufficient awareness of opportunities, and inadequate qualification levels.

Objectives of the NUBiP of Ukraine.

Comprehensive Career Development and Employment Services. Building upon the current objective to organize internships for students in partner organizations and agricultural enterprises, NUBiP should establish comprehensive career services that prepare students for successful

transition to meaningful employment while addressing labor market needs. This includes developing industry-specific career guidance programs that connect students with emerging opportunities in sustainable agriculture, environmental technology, and rural development sectors, establishing comprehensive internship and cooperative education programs that provide real-world experience while building employer relationships, and creating job placement services that actively connect graduates with employment opportunities in agricultural, environmental, and rural development organizations.

Graduate Entrepreneurship and Innovation Support. The university's current objective to support start-ups in the agribusiness sector should be expanded to create comprehensive entrepreneurship ecosystems that foster innovation and job creation across multiple sustainability-focused sectors. This includes establishing business incubators that provide comprehensive support for student and graduate entrepreneurs, including workspace, mentoring, and access to capital, developing entrepreneurship education programs that integrate business development skills across all academic disciplines, and creating networks connecting student entrepreneurs with successful business leaders, investors, and potential partners in agricultural and environmental sectors.

Comprehensive Rural Employment and Economic Development. Building on the current objective to conduct career guidance activities for young people from rural areas, NUBiP should develop comprehensive programs that address rural employment challenges while promoting sustainable economic development. This includes establishing rural career centers that provide employment counseling, skills assessment, and job placement services for rural populations, developing programs that connect rural residents with employment opportunities in emerging green economy sectors, and creating training programs that prepare rural workers for jobs in sustainable agriculture, renewable energy, and environmental conservation.

Microbusiness Development and Financial Inclusion. The university's objective to support microbusiness formation through mentoring and microfinance should be expanded to create comprehensive small business development programs that address the specific needs of rural and agricultural entrepreneurs. This includes establishing microfinance institutions or partnerships that provide accessible credit for small agricultural and rural businesses, developing comprehensive business training programs that address the specific challenges faced by rural entrepreneurs, and creating cooperative development programs that help small producers access markets and achieve economies of scale.

Comprehensive Digital Skills and Technology Training. Building on the current objective to train farmers in digital technologies, NUBiP should establish comprehensive digital literacy and technology training programs that prepare diverse audiences for participation in the digital economy. This includes developing digital skills training programs for students, faculty, and community members that address basic digital literacy, advanced technological applications, and digital entrepreneurship, establishing centers for agricultural technology innovation that provide training on precision agriculture, remote sensing, and data analytics applications, and creating partnerships with technology companies to provide access to cutting-edge training and certification programs.

Innovation and Technology Transfer. The university should develop comprehensive programs that facilitate the translation of research and innovation into economic opportunities while

promoting technological advancement in agricultural and environmental sectors. This includes establishing technology transfer offices that help faculty and students commercialize innovations and research findings, developing partnerships with industry that create opportunities for applied research and technology development, and establishing innovation hubs that bring together researchers, entrepreneurs, and investors to develop and deploy new technologies.

Comprehensive Workplace Standards and Rights Promotion. Building on current objectives related to policies against forced labor and ensuring equal employment rights, NUBiP should establish comprehensive programs that promote decent work standards and labor rights across agricultural and rural contexts. This includes developing training programs for employers and workers on labor rights, workplace safety, and fair employment practices, establishing monitoring and advocacy programs that address labor conditions in agricultural and rural industries, and creating support services for workers facing discrimination, harassment, or unsafe working conditions.

Gender Equality and Inclusive Employment. The university's commitment to pay equality and eliminating gender pay gaps should be expanded to create comprehensive programs that promote inclusive employment and address barriers to decent work faced by marginalized groups. This includes developing targeted employment programs for women, people with disabilities, and other underrepresented groups in agricultural and environmental sectors, establishing mentorship and leadership development programs that promote career advancement for diverse professionals, and creating policies and practices that ensure inclusive and equitable workplace environments.

Indicators.

- Number of graduates who have started their own business

Strategic Goal 7. Reduced Inequalities - SDG10

Sustainable Development Goal 10 represents a fundamental commitment for NUBiP of Ukraine to leverage its unique position in agricultural education, rural development, and community engagement to address systemic inequalities that persist across Ukrainian society. This strategic goal positions the university at the forefront of efforts to reduce inequalities within and among communities, with particular emphasis on rural-urban disparities, educational access barriers, and social inclusion challenges that intersect with agricultural and environmental development.

National Guideline and Policy Context

Ukraine's approach to SDG10 is grounded in comprehensive national frameworks that address multifaceted inequality challenges spanning economic, social, territorial, and demographic dimensions. The national context reveals significant disparities between urban and rural populations, with rural poverty rates reaching 1.7 times higher than urban areas, and 38% of rural households classified as poor compared to 19% of urban households. These disparities extend beyond income to encompass access to essential services, with only 26% of rural children attending kindergartens and rural graduates consistently underperforming on standardized tests compared to urban counterparts.

The National Baseline Report on SDGs identifies inequality as a cross-cutting challenge that affects all sustainable development dimensions. The report emphasizes that achieving SDG10 requires

addressing intersectionality, recognizing that inequality in Ukraine is often compounded by multiple factors including age, gender, disability status, rural/urban residence, economic status, and conflict-affected status. The national framework specifically highlights the vulnerability of children and families, noting that about half of Ukrainian households with children live below the national poverty line, with families having three or more children facing poverty rates of up to 63.3%.

Ukraine's conflict context has exacerbated existing inequalities while creating new forms of disadvantage, particularly affecting internally displaced persons, veterans, people with disabilities, and conflict-affected communities. The national response emphasizes the need for inclusive policies that ensure no one is left behind while building resilience and social cohesion across diverse communities.

The higher education sector faces particular challenges related to accessibility and inclusion, with reforms in the Ministry of Education and Science potentially limiting access for vulnerable groups through university mergers, privatization of facilities, and market-oriented financing mechanisms. Research indicates that while 48.9% of university staff identifying with vulnerable groups perceive institutional inclusivity as high, significant work remains to create truly inclusive educational environments.

Objectives of the NUBiP of Ukraine

Comprehensive Rural Educational Equity. Building upon the current objective to develop programs for students from rural areas, NUBiP should establish comprehensive initiatives that address the multifaceted barriers rural students face in accessing and succeeding in higher education. This includes developing targeted recruitment programs that actively identify and engage talented rural students, creating preparatory programs that address educational gaps resulting from resource disparities between rural and urban schools, and establishing comprehensive support systems that address not only academic needs but also social, cultural, and economic challenges that rural students encounter in university environments.

Comprehensive Accessibility and Universal Design. The university's current objective regarding disability accommodation should be expanded to create a comprehensive framework for universal access that anticipates and addresses diverse needs across all aspects of university life. This includes implementing universal design principles in all educational programs, facilities, and services, developing assistive technologies and adaptive learning approaches that support students with diverse learning styles and abilities, and creating comprehensive support networks that address not only accommodation needs but also promote full participation and leadership development among students with disabilities.

Vulnerable Group Integration and Empowerment. Building on current objectives for scholarships and support services, NUBiP should develop comprehensive programs that address the specific needs of various vulnerable groups while promoting their leadership and full participation in university life. This includes creating specialized support programs for internally displaced students, veterans, orphans, and students from conflict-affected areas, developing mentorship and peer support networks that connect vulnerable group students with successful role models and advocates, and establishing pathway programs that facilitate transitions from secondary education, technical training, or military service into university study.

Comprehensive Rural Economic Empowerment. The university should develop extensive programs that address economic inequalities affecting rural communities while promoting sustainable livelihood development and entrepreneurship opportunities. This includes establishing microfinance and cooperative development programs that provide accessible credit and business development support for rural entrepreneurs, creating value chain development initiatives that help small rural producers access markets and achieve fair prices for their products, and developing comprehensive training programs in business development, financial literacy, and cooperative management specifically designed for rural contexts.

Income Generation and Skill Development. NUBiP should expand its current focus on education to encompass comprehensive programs that address income inequality through skill development and economic opportunity creation. This includes establishing workforce development programs that prepare rural residents for emerging employment opportunities in green economy sectors, creating continuing education programs that help working adults develop new skills and advance their careers, and developing partnerships with employers and industry organizations that create pathways to decent work for university program participants.

Comprehensive Anti-Discrimination and Inclusion Programming. Building on current objectives regarding ethical values and anti-harassment policies, NUBiP should develop comprehensive programs that actively promote social inclusion and combat discrimination across all forms of diversity. This includes implementing comprehensive diversity, equity, and inclusion training for all faculty, staff, and students, establishing bias incident reporting and response systems that address discrimination and promote accountability, and creating inclusive programming that celebrates diversity while building bridges across different social, cultural, and identity groups.

Community-Based Inclusion and Social Cohesion. The university should leverage its community connections to promote social inclusion and reduce inequalities in surrounding communities while building social cohesion across diverse groups. This includes developing community engagement programs that bring together diverse populations around shared interests and goals, establishing conflict resolution and peace-building programs that address community tensions and promote understanding, and creating public education campaigns that challenge stereotypes and promote acceptance of diversity.

Comprehensive Digital Equity and Access. Recognizing the digital divide as a significant contributor to inequality, NUBiP should develop comprehensive programs that ensure equitable access to technology and digital literacy across diverse populations. This includes establishing community technology centers that provide access to high-speed internet and modern equipment for rural and underserved populations, developing digital literacy training programs specifically designed for different demographic groups and skill levels, and creating technology lending programs that provide students and community members with access to devices and connectivity needed for educational and economic participation.

Information and Communication Equity. The university should address information inequalities that limit opportunities for rural and marginalized populations to access services, opportunities, and participation in decision-making processes. This includes developing multilingual and multimodal communication strategies that ensure information accessibility across different language groups and communication preferences, creating information navigation and advocacy programs that help

community members access services and opportunities, and establishing community media and communication networks that amplify marginalized voices and perspectives.

Indicators.

- The proportion of students from rural areas in total enrolment

Strategic Goal 8. Sustainable Cities and Communities - SDG11

Sustainable Development Goal 11 represents a unique opportunity for NUBiP of Ukraine to leverage its distinctive expertise in agricultural sciences, rural development, and environmental stewardship to bridge the gap between urban and rural communities while promoting sustainable development across all settlement types. This strategic goal positions the university at the forefront of creating integrated approaches to territorial development that ensure no community is left behind in Ukraine's sustainable transformation.

National Guideline and Policy Context

Ukraine's approach to SDG11 is anchored in comprehensive frameworks addressing both urban development and rural-urban integration challenges that are particularly relevant for NUBiP's mission. The national context emphasizes ensuring access to adequate housing, developing settlements based on integrated planning and participatory management, protecting cultural and natural heritage, ensuring public safety through innovative technologies, reducing environmental pollution, and implementing local development strategies aimed at economic growth and job creation.

The Ukrainian national framework for sustainable cities and communities recognizes the importance of positive economic, social, and environmental links between urban, peri-urban, and rural areas through strengthened national and regional development planning. Lviv's pioneering Voluntary Local Review demonstrates practical approaches to localizing SDGs at the community level, emphasizing the role of territorial communities in achieving sustainable development through decentralized governance and community-driven initiatives.

Post-conflict reconstruction planning emphasizes eco-innovative transformation of urban infrastructure, requiring proper planning, state support, and favorable market conditions to implement green principles across all aspects of Ukrainian city development. The national strategy identifies nine key principles for eco-innovative infrastructure transformation. maximum energy efficiency, energy transition, zero waste, environmental sustainability of buildings, climate change adaptation, green lifestyle promotion, resource conservation, citizen involvement, and circular economy implementation.

Ukraine's rural development strategy recognizes the critical need for addressing rural-urban disparities while promoting sustainable agricultural and rural territorial development. The Strategy for Agriculture and Rural Development until 2030 emphasizes creating competitive, sustainable, and diversified agri-food systems while strengthening socio-economic balance in rural areas.

Objectives of the NUBiP of Ukraine

Comprehensive Green Campus Development. Building upon the current objective to develop green campus concepts, NUBiP should establish the university as a comprehensive demonstration of sustainable community principles that can be adapted and scaled for both urban and rural contexts. This includes developing the campus as a model eco-district that demonstrates integrated approaches to sustainable building design, renewable energy systems, waste management, water conservation, and biodiversity protection, creating demonstration neighborhoods within the campus that showcase different models of sustainable community development appropriate for various Ukrainian contexts, and establishing the campus as a testing ground for innovative technologies and practices in sustainable community development.

Community Integration and Public Access. The university's current objectives regarding public access to buildings, libraries, museums, and green spaces should be expanded to create comprehensive community integration that positions the campus as a vital community resource. This includes developing comprehensive programs that make university facilities accessible to surrounding communities for educational, cultural, and recreational purposes, establishing community centers within campus facilities that serve as focal points for local engagement and programming, and creating shared spaces that bring together university and community members around common interests and challenges.

Comprehensive Rural-Urban Planning and Development. Building on the current objective to research ecological planning of villages, NUBiP should establish comprehensive programs that address the integration of rural and urban planning approaches while promoting sustainable development across all settlement types. This includes developing integrated planning methodologies that address rural-urban linkages and promote balanced regional development, creating demonstration projects that show how rural and urban areas can develop synergistic relationships that benefit both contexts, and establishing technical assistance programs that help rural communities develop sustainable development plans aligned with broader regional and national objectives.

Sustainable Land Use and Territorial Development. The university's objective to advise local authorities on sustainable land use should be expanded to encompass comprehensive territorial development that addresses the complex interactions between agricultural, environmental, and settlement systems. This includes developing land use planning approaches that integrate agricultural productivity, environmental protection, and community development objectives, creating tools and methodologies for territorial planning that address climate change adaptation and resilience building, and establishing programs that help communities balance development needs with environmental conservation and agricultural land protection.

Comprehensive Affordable Housing Solutions. Building on current objectives to provide affordable housing for employees and students, NUBiP should develop comprehensive programs that address housing challenges while promoting sustainable community development principles. This includes developing innovative housing models that demonstrate sustainable, affordable approaches appropriate for both rural and urban contexts, creating financing mechanisms and cooperative models that make sustainable housing accessible to diverse populations, and establishing construction training programs that build local capacity for sustainable, affordable housing development.

Sustainable Infrastructure Development. The university's current objective regarding construction standards for new buildings should be expanded to encompass comprehensive sustainable infrastructure development that serves as a model for broader community application. This includes developing integrated infrastructure systems that demonstrate sustainable approaches to energy, water, waste, transportation, and communications, creating resilient infrastructure models that can function effectively during emergencies and adapt to changing climate conditions, and establishing training programs that build local capacity for sustainable infrastructure development and maintenance.

Comprehensive Community Engagement and Participation. Building on current objectives regarding cooperation with local authorities on planning and development, NUBiP should establish comprehensive community engagement programs that promote participatory approaches to sustainable development. This includes developing community engagement methodologies that ensure meaningful participation of diverse stakeholders in planning and development processes, creating platforms and forums that facilitate ongoing dialogue between university experts, community members, and local authorities, and establishing programs that build local capacity for community organizing, advocacy, and participatory planning.

Cultural Heritage Preservation and Community Identity. The university's current objective to record and preserve cultural heritage should be expanded to encompass comprehensive programs that strengthen community identity while promoting sustainable development. This includes developing programs that document and preserve rural and agricultural cultural heritage, including traditional knowledge, practices, and landscapes, creating educational and cultural programs that connect communities with their heritage while promoting sustainable practices, and establishing partnerships with cultural organizations and institutions that support heritage preservation and community identity development.

Comprehensive Sustainable Transportation Systems. Building on the current objective to allow remote work as a strategy for reducing commuting, NUBiP should develop comprehensive sustainable transportation programs that address mobility challenges while promoting environmental and social sustainability. This includes developing demonstration projects for sustainable transportation options appropriate for rural and small urban contexts, creating programs that promote alternative transportation modes including cycling, walking, and public transportation, and establishing technical assistance programs that help communities develop sustainable transportation plans and infrastructure.

Digital Connectivity and Virtual Community Building. The university should leverage digital technologies to promote sustainable community development while reducing the need for physical transportation and promoting access to services and opportunities. This includes developing comprehensive digital infrastructure that serves both campus and surrounding communities, creating online platforms and programs that connect rural and urban communities around shared interests and challenges, and establishing digital literacy training programs that ensure equitable access to digital tools and opportunities.

Indicators.

- Number of urban development projects implemented in cooperation with communities

Strategic Goal 9. Climate Action - SDG13

Sustainable Development Goal 13 represents the most critical and transformative opportunity for NUBiP of Ukraine to leverage its unique expertise in agricultural and environmental sciences to address the global climate crisis while positioning Ukraine as a leader in climate-smart development. This strategic goal builds upon the university's foundational strengths in agricultural research, environmental stewardship, and community engagement to create comprehensive solutions for climate change mitigation, adaptation, and resilience across Ukraine and internationally.

National Guideline and Policy Context

Ukraine's commitment to SDG13 is anchored in comprehensive national frameworks, most notably the Environmental Security and Climate Change Adaptation Strategy of Ukraine until 2030 (NAS 2030) and the updated Nationally Determined Contribution (NDC) submitted in 2021. The national strategy represents Ukraine's commitment to fulfill international obligations under the Paris Agreement, aiming to reduce greenhouse gas emissions by 65% below 1990 levels by 2030 (including land use, land-use change and forestry - LULUCF) and achieve climate neutrality by 2060.

The NAS 2030 identifies ten priority sectors vulnerable to climate change impacts. Biodiversity, Water resources, Energy, Public health, Fisheries, Agriculture and soils, Forestry, Cities and Territorial Communities, Transport and infrastructure, Coastal areas, and Tourism. Agriculture emerges as particularly critical, with climate-smart agriculture (CSA) representing a transformative approach that helps reorient agricultural systems to effectively support development and ensure food security in a changing climate while contributing to mitigation through reduced greenhouse gas emissions, carbon sequestration, and clean fuel production.

Ukraine's agricultural sector contributes 13% of national greenhouse gas emissions (42.5 million tons CO₂-equivalent in 2019), with emissions shifting from livestock to crop production, particularly from agricultural soil management which increased from 45% to 70% of agricultural emissions between 2000-2017. The sector faces significant climate risks, with climatic and weather variables explaining 49-58% of wheat yield variability, and close to 60% of rain-fed crop production exposed to high drought risk.

The national approach emphasizes that Ukraine's agricultural sector can help reduce emissions by 39 million tons CO₂-equivalent through implementation of climate-smart practices, while maintaining food security and economic viability. Post-conflict reconstruction provides unprecedented opportunities to "build back better" with climate resilience integrated from the outset.

Objectives of the NUBiP of Ukraine.

Comprehensive Climate-Resilient Agriculture Research. Building upon the current objective to conduct research in climate-resilient agriculture, NUBiP should establish comprehensive research programs that address the full spectrum of climate challenges facing Ukrainian agriculture while developing globally applicable solutions. This includes developing climate-adapted crop varieties that maintain productivity under changing temperature and precipitation patterns while requiring

fewer inputs, creating integrated farming systems that optimize carbon sequestration, biodiversity conservation, and productivity outcomes simultaneously, and establishing long-term research sites that provide comprehensive data on climate impacts and adaptation effectiveness across different agroecological zones.

Advanced Carbon Management and Monitoring Systems. The university's current objective regarding CO₂ emissions monitoring should be expanded to create comprehensive carbon management research and demonstration programs that position Ukraine as a leader in agricultural carbon solutions. This includes developing precision carbon accounting systems that accurately measure and verify carbon sequestration in agricultural soils and biomass, creating innovative carbon market mechanisms that provide economic incentives for climate-smart agricultural practices, and establishing comprehensive life-cycle assessment capabilities that evaluate the full climate impact of agricultural systems from inputs to final products.

Climate-Smart Technology Development and Innovation. Building on current objectives for research centers specializing in environmental sustainability, NUBiP should develop comprehensive technology innovation programs that create scalable solutions for climate challenges. This includes developing precision agriculture technologies that optimize resource use while minimizing greenhouse gas emissions, creating biotechnology solutions that enhance crop resilience to climate stresses while improving nutritional value, and establishing innovation labs that prototype and test emerging technologies such as renewable energy systems, smart sensors, and data analytics platforms specifically designed for agricultural applications.

Comprehensive Climate Education and Literacy Programs. Building upon the current objective to develop educational courses on climate change and adaptation solutions, NUBiP should create comprehensive climate education that prepares students and communities to address climate challenges across all sectors. This includes integrating climate science and solutions across all academic disciplines, not just environmental and agricultural programs, developing specialized graduate programs in climate science, policy, and technology that prepare leaders for climate careers, and creating community education programs that build climate literacy and promote behavior change across diverse audiences.

Professional Development and Expert Training. The university should establish comprehensive professional development programs that build climate expertise across agricultural, governmental, and private sectors while positioning NUBiP as a premier climate education destination. This includes developing executive education programs for agricultural professionals, policymakers, and business leaders on climate risks and opportunities, creating certification programs in climate-smart agriculture, renewable energy, and environmental management, and establishing international training programs that position Ukraine as a regional hub for climate education and expertise.

Comprehensive Campus Carbon Neutrality. Building on the current objective for net zero emissions, NUBiP should develop comprehensive carbon neutrality programs that demonstrate scalable approaches to emissions reduction while serving as living laboratories for climate solutions. This includes achieving full carbon neutrality across all campus operations through renewable energy, energy efficiency, sustainable transportation, and carbon sequestration projects, establishing comprehensive waste reduction and circular economy programs that minimize resource use and environmental impact, and creating carbon offset programs that invest in local and regional climate solutions while building community partnerships.

Agricultural Sector Decarbonization Leadership. The university should develop comprehensive programs that support agricultural sector decarbonization while maintaining productivity and economic viability. This includes developing and promoting regenerative agriculture practices that enhance soil carbon storage while improving soil health and productivity, creating integrated crop-livestock systems that optimize nutrient cycling and minimize greenhouse gas emissions, and establishing bioeconomy initiatives that convert agricultural waste into clean energy, biofuels, and bio-based materials.

Comprehensive Climate Risk Assessment and Planning. Building on current objectives for climate change disaster planning with authorities and communities, NUBiP should establish comprehensive climate risk assessment and adaptation planning services that support resilience building across multiple scales. This includes developing comprehensive climate risk assessment methodologies that evaluate impacts across agricultural, environmental, and community systems, creating adaptation planning services that help farmers, communities, and organizations develop and implement climate resilience strategies, and establishing early warning systems that provide timely information on climate-related risks to agricultural and community stakeholders.

Ecosystem-Based Adaptation and Natural Climate Solutions. The university's current objectives regarding ecosystem restoration should be expanded to create comprehensive programs that harness natural systems for climate adaptation and mitigation. This includes restoring and protecting wetlands, forests, and grasslands that provide natural climate regulation services while supporting biodiversity and water management, developing agroforestry and silvopasture systems that integrate trees with agricultural production to enhance resilience and carbon sequestration, and creating green infrastructure projects that use natural systems to address climate challenges such as flooding, drought, and extreme temperatures.

Global Climate Partnership and Knowledge Exchange. Building on current objectives for collaboration with international organizations and participation in climate initiatives, NUBiP should establish comprehensive global climate leadership programs that position the university and Ukraine as leaders in international climate cooperation. This includes participating in international climate research networks and initiatives that advance global knowledge on climate solutions, developing partnerships with international institutions working on similar climate challenges in agricultural and post-conflict contexts, and contributing to global climate policy development through evidence-based research and stakeholder engagement.

Climate Policy Research and Advocacy. The university should develop comprehensive climate policy research and advocacy programs that support effective climate action at local, national, and international levels. This includes conducting research on optimal climate policy frameworks for agricultural and rural contexts, providing technical expertise to government agencies on climate mitigation and adaptation policies, and developing recommendations for climate policy that support sustainable development while building economic competitiveness and social equity.

Indicators.

- Reduction of CO₂ emissions on university research fields
- Reduction of campus CO₂ emissions

Strategic Goal 10. Conservation of terrestrial ecosystems - SDG15

Sustainable Development Goal 15 represents the most critical alignment between NUBiP of Ukraine's core mission and global sustainability priorities, positioning the university as a natural leader in terrestrial ecosystem conservation, biodiversity protection, and sustainable land management. This strategic goal leverages the university's unique expertise in agricultural and environmental sciences to address Ukraine's most pressing ecosystem challenges while contributing to global conservation efforts.

National Guideline and Policy Context

Ukraine's commitment to SDG15 is implemented through comprehensive national frameworks addressing biodiversity conservation, forest management, and sustainable land management, though progress has been severely challenged by the ongoing conflict. The national approach prioritizes four key tasks from the 2030 Agenda: ecosystem protection (15.1 and 15.4), forest ecosystem management (15.2), and rehabilitation of degraded soils (15.3). Ukraine has achieved modest progress on only two tasks: conserving and restoring terrestrial and freshwater ecosystems (15.1) and ensuring conservation of mountain ecosystems (15.4).

The national context reveals both achievements and significant challenges. Between 2015-2021, Ukraine increased nature conservation areas by 314.47 thousand hectares (0.52% of the country's area) and created Emerald Network territories covering 8,098.2 thousand hectares (13.4% of the state area). However, the full-scale conflict beginning February 24, 2022, has dramatically impacted conservation efforts, with more than 900 protected areas (about 48% of all protected area territory) affected by war, including 5 biosphere reserves, 11 nature reserves, and 18 national parks.

Ukraine faces fundamental structural challenges in ecosystem conservation, including the absence of a specialized state body responsible for Nature Reserve Fund objects since 2013, incomplete implementation of European environmental directives, and insufficient biodiversity monitoring and biotope mapping. The country is among the most plowed in the world, with arable land covering 56.8% of the territory by 2020, accelerating desertification processes and ecosystem degradation.

Forest management presents particular challenges, with Ukraine's forestry characterized by systemic problems leading to forest degradation, concentration of excessive powers in the State Forest Resources Agency, contradictory felling regulations, and destruction of unaccounted forests estimated at hundreds of thousands of hectares. The lack of proper forest inventory, absence of biodiversity monitoring, and inadequate protection of primary forests create significant obstacles to sustainable forest management.

Objectives of the NUBiP of Ukraine

Comprehensive Ecosystem Research and Monitoring Systems. Building upon the current objective to develop field research on ecosystems, phytosanitary status, and biodiversity, NUBiP should establish comprehensive research programs that position the university as Ukraine's premier ecosystem research institution. This includes developing long-term ecological monitoring networks that track ecosystem health, species populations, and environmental changes across diverse Ukrainian landscapes, establishing comprehensive biodiversity assessment programs that document species composition, population dynamics, and conservation status across agricultural and natural

ecosystems, and creating innovative research approaches that integrate traditional ecological knowledge with cutting-edge technologies such as remote sensing, DNA barcoding, and artificial intelligence for ecosystem monitoring and management.

Advanced Restoration Ecology and Ecosystem Engineering. The university's current objective regarding restoration of degraded areas should be expanded to encompass comprehensive ecosystem restoration research and implementation programs that demonstrate scalable approaches to landscape restoration. This includes developing innovative restoration methodologies that address different types of ecosystem degradation including soil erosion, contamination, desertification, and biodiversity loss, creating living laboratories for restoration techniques that can be adapted and applied across different ecological contexts, and establishing comprehensive programs for post-conflict ecosystem restoration that address the unique challenges of restoring ecosystems damaged by military activities.

Sustainable Land Use and Agroecological Research. Building on current objectives for creating educational and research sites for studying sustainable land use, NUBiP should develop comprehensive research programs that address the integration of agricultural productivity with ecosystem conservation. This includes developing agroecological systems that maintain agricultural productivity while enhancing biodiversity and ecosystem services, creating demonstration landscapes that showcase sustainable land use practices across different scales from farm plots to watersheds, and establishing comprehensive research on soil health, carbon sequestration, and nutrient cycling in agricultural and natural systems.

Comprehensive Conservation Education and Outreach. Building upon the current objective to involve students in volunteer programs on nature protection, greening, and reclamation, NUBiP should develop comprehensive conservation education programs that prepare students and communities to address ecosystem challenges. This includes integrating ecosystem conservation principles across all academic disciplines, creating specialized graduate programs in conservation biology, restoration ecology, and sustainable land management, and developing community education programs that build conservation awareness and promote behavior change across diverse audiences including farmers, local authorities, and civil society organizations.

Professional Development and Expert Training. The university should establish comprehensive professional development programs that build ecosystem conservation expertise across governmental, private, and non-governmental sectors while positioning NUBiP as the premier conservation education destination in the region. This includes developing certification programs in ecosystem restoration, biodiversity assessment, and sustainable land management, creating executive education programs for land managers, policymakers, and conservation professionals, and establishing international training programs that position Ukraine as a regional hub for ecosystem conservation expertise.

Comprehensive Landscape Restoration Programs. Building on the current objective for restoration of degraded soils, NUBiP should develop comprehensive landscape restoration programs that address ecosystem degradation at multiple scales while demonstrating integrated approaches to restoration. This includes establishing large-scale restoration projects that demonstrate ecosystem restoration techniques across different landscape types including forests, steppes, wetlands, and agricultural areas, creating partnerships with government agencies, NGOs, and communities to implement restoration projects that address priority conservation needs, and

developing innovative financing mechanisms for restoration projects including payments for ecosystem services, carbon credits, and international conservation funding.

Sustainable Forest Management and Conservation. The university's current objectives regarding forestry activities should be expanded to address Ukraine's critical forest conservation challenges while promoting sustainable forest management practices. This includes developing sustainable forestry practices that balance economic needs with biodiversity conservation and ecosystem health, creating programs that address illegal logging, forest degradation, and conversion of forests to other land uses, and establishing partnerships with forest management agencies and communities to implement sustainable forest management approaches that enhance both conservation and livelihood outcomes.

Agricultural Landscape Conservation. Building on existing agricultural expertise, NUBiP should develop comprehensive programs that address conservation challenges within agricultural landscapes while maintaining agricultural productivity. This includes creating agricultural practices that enhance biodiversity and ecosystem services within farming systems, developing programs that support farmers in adopting conservation-friendly practices through technical assistance, training, and economic incentives, and establishing demonstration farms that showcase integrated approaches to agricultural production and conservation.

Protected Areas Management and Development. The university should develop comprehensive programs that support protected areas management while building capacity for effective conservation across Ukraine's protected areas system. This includes providing technical assistance and training for protected areas managers on best practices for biodiversity conservation, visitor management, and community engagement, developing management plans and conservation strategies for existing and proposed protected areas, and creating partnerships between protected areas and surrounding communities that promote conservation while supporting sustainable livelihoods.

Species Conservation and Recovery Programs. NUBiP should establish comprehensive programs focused on conserving threatened and endangered species while addressing the drivers of species decline. This includes developing species recovery programs for priority threatened species that address habitat restoration, population management, and threat reduction, creating ex-situ conservation facilities including seed banks, plant collections, and wildlife rehabilitation centers, and establishing monitoring programs that track species populations and assess the effectiveness of conservation interventions.

Ecosystem Services Assessment and Management. The university should develop comprehensive programs that assess, value, and manage ecosystem services to demonstrate the economic and social benefits of ecosystem conservation. This includes developing methodologies for ecosystem services assessment that quantify the benefits provided by different ecosystems including clean water, carbon sequestration, pollination, and flood control, creating payment for ecosystem services programs that provide economic incentives for conservation and sustainable land management, and establishing partnerships with government agencies and private sector organizations to integrate ecosystem services considerations into land use planning and decision-making.

Indicators.

- The area of land was restored with the participation of the university

Strategic Goal 11. Peace, Justice and Strong Institutions - SGD16

Sustainable Development Goal 16 represents a foundational commitment for NUBiP of Ukraine to leverage its educational mission, research capabilities, and community engagement to strengthen democratic governance, promote justice, and build accountable institutions across Ukrainian society. This strategic goal positions the university as a vital contributor to Ukraine's democratic consolidation, rule of law development, and institutional resilience, particularly in the context of ongoing conflict, European integration aspirations, and post-war reconstruction planning.

National Guideline and Policy Context

Ukraine's approach to SDG16 is anchored in comprehensive national frameworks addressing democratic governance, anti-corruption efforts, judicial reform, and institutional strengthening, all of which have gained heightened importance during the ongoing conflict. The national strategy encompasses nine key targets: reducing violence prevalence, increasing detection of human trafficking victims, increasing confidence in courts and ensuring equal access to justice, strengthening systems to prevent money laundering and terrorism financing, reducing illicit weapons trafficking, reducing corruption scale, increasing efficiency of government bodies and local self-government, recovering conflict-affected areas in eastern Ukraine, and strengthening social stability while promoting peacebuilding and community security.

The rule of law roadmap, developed as part of Ukraine's EU accession process, identifies five critical areas for anti-corruption policy implementation: anti-corruption policy development, corruption prevention, prosecution of corruption, audits of specialized anti-corruption bodies, and anti-corruption mainstreaming. This comprehensive framework encompasses systematic reforms to strengthen legal institutions, improve judicial effectiveness, enhance anti-corruption policy, improve human rights protection, and strengthen security and law enforcement.

Ukraine's commitment to participatory democracy has evolved significantly, particularly in the context of martial law, European integration, and hybrid threats. The national approach emphasizes the need to increase transparency, inclusiveness, and legitimacy of governance processes through citizen involvement in policy development, discussion, and adoption. Digital tools such as the Diya platform, public hearings, and citizens' assemblies represent emerging mechanisms for democratic participation, though challenges remain including low civic engagement, insufficient institutional support, uneven regional access to participation, and disinformation influences.

Recent legislative developments, including controversial amendments affecting anti-corruption bodies' independence, highlight ongoing tensions between institutional strengthening and political pressures during wartime. The continued challenge of balancing democratic governance with security needs during conflict creates particular urgency around institutional resilience and accountability mechanisms.

Objectives of the NUBiP of Ukraine

Comprehensive Ethics and Integrity Systems. Building upon the current objective to implement the Code of Ethical Conduct and Academic Integrity, NUBiP should establish comprehensive ethics and integrity systems that serve as models for institutional excellence while building broader societal capacity for ethical governance. This includes developing comprehensive ethics training programs for faculty, staff, and students that address not only academic integrity but also professional ethics, social responsibility, and civic duty, establishing transparent grievance and accountability mechanisms that ensure fair resolution of ethics violations while protecting whistleblowers and promoting institutional learning, and creating ethics review boards and oversight mechanisms that provide independent assessment of institutional policies and practices while promoting continuous improvement in governance standards.

Anti-Corruption Education and Practice. The university's current objective regarding courses on ethics and anti-corruption practices should be expanded to create comprehensive anti-corruption education and demonstration programs that build societal capacity for corruption prevention and accountability. This includes developing specialized academic programs in governance, transparency, and anti-corruption that prepare students for careers in public service, civil society, and oversight organizations, establishing research centers focused on corruption prevention, governance innovation, and institutional accountability that contribute to evidence-based policy development, and creating demonstration projects within the university that showcase transparent, accountable governance practices applicable to other institutions and organizations.

Comprehensive Legal Literacy and Access to Justice. Building on the current objective to create a center for legal education for students and communities, NUBiP should develop comprehensive legal literacy programs that strengthen rule of law understanding and promote access to justice across diverse populations. This includes establishing community legal clinics that provide legal services and education to rural and underserved populations while offering practical training opportunities for students, developing legal literacy curricula that address fundamental rights, legal processes, and civic responsibilities appropriate for different educational levels and community contexts, and creating legal advocacy and support programs that help vulnerable populations access justice while building capacity for community-based legal support systems.

Civic Engagement and Democratic Participation. The university's current objective to promote student participation in self-governance and decision-making should be expanded to encompass comprehensive civic engagement and democratic participation programs that strengthen democratic culture and practice. This includes developing comprehensive civic education programs that prepare students and community members for active democratic participation including voting, advocacy, community organizing, and public service, establishing participatory governance structures within the university that provide meaningful opportunities for student, staff, and community input into institutional decision-making, and creating community engagement programs that connect university expertise with local governance challenges while building capacity for participatory democracy and collaborative problem-solving.

Comprehensive Governance Research and Policy Analysis. Building on the current objective regarding research on business social responsibility, NUBiP should establish comprehensive governance research programs that contribute to evidence-based policy development while building institutional capacity for governance innovation. This includes developing research programs

focused on governance effectiveness, transparency, accountability, and citizen participation that inform policy development at local, regional, and national levels, creating policy analysis and recommendation services that provide technical expertise to government agencies, civil society organizations, and international development partners, and establishing comparative governance research that examines best practices from other contexts while adapting innovations to Ukrainian conditions and challenges.

Conflict Prevention and Peace Building Research. Given Ukraine's conflict context, the university should develop specialized research programs that address conflict prevention, peace building, and post-conflict recovery while contributing to sustainable peace and security. This includes conducting research on conflict dynamics, peace building strategies, and post-conflict recovery approaches that inform policy and practice development, developing early warning systems and conflict analysis capabilities that support conflict prevention and response efforts, and establishing peace education and reconciliation programs that build capacity for constructive conflict resolution and social healing.

Comprehensive Stakeholder Engagement Systems. Building on current objectives for identifying and engaging local stakeholders, NUBiP should develop comprehensive stakeholder engagement systems that promote participatory governance while building multi-sectoral partnerships for sustainable development. This includes establishing formal stakeholder advisory structures that provide ongoing input into university strategic planning and program development while ensuring diverse representation including local residents, authorities, civil society, and marginalized groups, developing participatory planning and decision-making processes that ensure meaningful stakeholder input into university policies and programs while building broader capacity for collaborative governance, and creating platforms for multi-stakeholder dialogue and collaboration that address complex development challenges requiring coordination across sectors and institutions.

Government Advisory and Capacity Building. The university's current objective to provide expert advice to government should be expanded to encompass comprehensive government advisory and capacity building services that strengthen institutional effectiveness and accountability. This includes developing comprehensive training programs for government officials, civil servants, and elected representatives on governance, transparency, accountability, and citizen engagement, establishing technical assistance programs that help government agencies improve service delivery, policy development, and public participation processes, and creating research partnerships with government agencies that support evidence-based policy making while building institutional research and analysis capacity.

Indicators.

- Number of publications on good governance issues

Strategic Goal 12. Partnerships for the Goals - SDG17

Sustainable Development Goal 17 represents the foundational framework that enables all other sustainable development goals, positioning NUBiP of Ukraine as a vital hub for partnership development, knowledge exchange, and collaborative action across multiple sectors and scales. This strategic goal leverages the university's unique position as an educational institution, research

center, and community connector to foster transformative partnerships that advance sustainable development locally, nationally, and internationally.

National Guideline and Policy Context

Ukraine's commitment to SDG17 is anchored in comprehensive national frameworks emphasizing intersectoral cooperation and Ukraine's integration into global sustainable development processes. The national approach recognizes that achieving the SDGs requires collaborative partnerships between all countries and stakeholders, with Ukraine joining the global sustainable development process through participatory and inclusive adaptation of SDGs to the Ukrainian context. Over 800 experts from diverse sectors participated in Ukraine's national SDGs identification process, establishing a precedent for multi-stakeholder engagement and partnership development.

The national strategy emphasizes the critical importance of international partnerships in achieving SDG financing and implementation. Ukraine's development of an Open SDGs Platform demonstrates the country's commitment to transparency and international cooperation, allowing Ukraine to join countries providing up-to-date information on SDG progress while strengthening international partnerships for achieving and financing the Global Goals. The platform represents a practical manifestation of SDG17 principles, facilitating collaboration and knowledge sharing with the international community.

European integration remains a key strategic priority for Ukraine, with the Association Agreement serving as the main strategic document for systematic socio-economic reforms and partnership development with the EU. The Deep and Comprehensive Free Trade Area between Ukraine and the EU creates frameworks for collaboration across multiple sectors while supporting gradual integration into EU common markets. These partnerships have become even more critical during the ongoing conflict, with international support through partnerships playing a vital role in maintaining educational and research continuity.

The conflict context has actually strengthened Ukraine's international partnerships, with the EU allocating EUR 100M for partnership projects in education, training, and youth sectors during 2023-2024, establishing the Horizon Europe Office in Kyiv, and creating the European Institute of Innovation and Technology Community Hub in Kyiv. These developments demonstrate how crisis can catalyze partnership development while building resilience through international cooperation.

Objectives of the NUBiP of Ukraine

Comprehensive Global Academic Network Development. Building upon the current objectives to develop partnerships with other universities and join international programs like Erasmus and Horizon, NUBiP should establish comprehensive global academic networks that position the university as a hub for international collaboration in agricultural and environmental sciences. This includes developing strategic partnerships with leading universities worldwide through joint degree programs, faculty exchanges, and collaborative research initiatives that address global sustainability challenges, establishing regional networks that connect NUBiP with universities across Eastern Europe, the Black Sea region, and beyond to share knowledge and resources on common agricultural and environmental challenges, and creating thematic networks focused on specific sustainability issues such as climate-smart agriculture, rural development, and environmental conservation that bring together diverse expertise from multiple institutions and sectors.

Advanced Research Consortium and Project Development. The university's current objective to participate in international research consortia should be expanded to encompass comprehensive research partnership development that positions NUBiP as a leader in collaborative research on critical sustainability issues. This includes establishing and leading multi-institutional research consortia that address complex sustainability challenges requiring interdisciplinary and international collaboration, developing comprehensive proposal development and project management capacity that enables the university to successfully compete for and manage large-scale international research funding, and creating innovation partnerships that connect university research with practical applications through collaboration with industry, government agencies, and international development organizations.

Comprehensive Stakeholder Ecosystem Development. Building on current objectives to identify and engage local stakeholders, NUBiP should develop comprehensive multi-stakeholder ecosystems that facilitate collaboration across sectors and scales while addressing complex sustainability challenges. This includes establishing formal multi-stakeholder platforms that bring together university experts, government agencies, civil society organizations, private sector partners, and community representatives to address regional and national sustainability challenges, developing participatory governance mechanisms that ensure meaningful stakeholder input into university strategic planning and program development while building broader capacity for collaborative governance and decision-making, and creating knowledge-sharing platforms that facilitate communication and collaboration among diverse stakeholders while promoting evidence-based policy and practice development.

Government and Policy Partnership Enhancement. The university's current objective to provide expert advice to government should be expanded to encompass comprehensive government partnership development that strengthens institutional capacity for evidence-based policy making and implementation. This includes establishing formal advisory relationships with government agencies at local, regional, and national levels that provide ongoing technical expertise and policy recommendations, developing comprehensive capacity building programs that help government officials and civil servants develop expertise in sustainable development policy and implementation, and creating policy research and analysis services that support evidence-based policy development while building long-term institutional relationships with key government partners.

Comprehensive Business and Industry Collaboration. Building on current objectives to develop partnerships with businesses and agricultural enterprises, NUBiP should establish comprehensive private sector partnerships that advance sustainable development while creating mutual value for university and business partners. This includes developing strategic partnerships with agricultural enterprises, environmental technology companies, and sustainable development businesses that provide opportunities for applied research, student internships, and technology transfer, establishing business incubation and support services that help entrepreneurs and small businesses develop and scale sustainable technologies and practices, and creating public-private partnership mechanisms that leverage private sector resources and expertise to advance university sustainability goals while providing businesses with access to research expertise and talent development.

Innovation and Technology Transfer Partnerships. The university should develop comprehensive innovation partnerships that facilitate the translation of research into practical applications while building economic development through technology commercialization. This includes establishing technology transfer offices and partnerships that help faculty and students

commercialize research findings and innovations while building entrepreneurship capacity, developing industry-university research partnerships that address specific technological challenges while providing funding and practical application opportunities for university research, and creating innovation ecosystems that connect university research with startup development, venture capital, and business scaling support.

Comprehensive International Development Partnership. Building on current objectives to cooperate with organizations like FAO, NUBiP should establish comprehensive international development partnerships that position the university as a leader in development cooperation while contributing to global sustainability goals. This includes developing formal partnerships with major international development organizations including UN agencies, World Bank, regional development banks, and bilateral development agencies to implement development projects and programs, establishing South-South and triangular cooperation partnerships that share Ukrainian expertise and innovations with developing countries while learning from international experiences and best practices, and creating capacity building and technical assistance programs that provide Ukrainian expertise to international development efforts while building university capacity for international cooperation.

Conflict Recovery and Post-Conflict Development Partnerships. Given Ukraine's current context, the university should develop specialized partnerships focused on conflict recovery and post-conflict development that contribute to national reconstruction while building international cooperation capacity. This includes establishing partnerships with international organizations and universities working on post-conflict recovery and reconstruction to share experiences and develop collaborative approaches, developing research and technical assistance programs that address the specific challenges of post-conflict agricultural and rural development, and creating international solidarity networks that provide ongoing support for Ukrainian development while contributing to global knowledge on resilience and recovery.

Indicators.

- Number of memoranda with foreign universities
- Number of cooperation agreements with foreign universities, organizations and companies
- Number of student mobilities
- Number of staff mobilities

Section 3. Integration of sustainable practices into the operational activities of NUBiP of Ukraine

3.1. Sustainability Committee

The Sustainability Committee shall serve as the central coordinating body for all sustainable development initiatives at NUBiP of Ukraine, providing strategic oversight, operational coordination, and accountability mechanisms for the implementation of the university's Sustainable Development Strategy until 2030. The Committee operates under the direct authority of the Rector and serves as the primary institutional mechanism for ensuring systematic integration of SDG principles across all university operations, academic programs, research activities, and community engagement initiatives.

Executive Leadership

Vice-Rector for Scientific and Pedagogical Work and Development, responsible for overall strategic direction and institutional integration

Strategic Planning and Oversight

- Annual review and updating of the Sustainable Development Strategy
- Development of detailed implementation roadmaps for each of the 12 Strategic Goals
- Coordination with national SDG implementation frameworks
- Integration of emerging sustainability challenges and opportunities
- Approval of major sustainability initiatives and resource allocation

Monitoring and Evaluation

- Quarterly progress assessment against established indicators for all 12 Strategic Goals
- Annual sustainability reporting to university leadership, government agencies, and international partners
- Development and maintenance of comprehensive SDG monitoring dashboard
- Coordination of external sustainability audits and assessments
- Evaluation of sustainability program effectiveness and impact

Policy Development and Integration

- Review and approval of all university policies for SDG alignment
- Development of sustainability guidelines for university operations
- Integration of sustainability criteria into hiring, promotion, and performance evaluation processes
- Establishment of sustainability requirements for research projects and academic programs
- Creation of incentive structures for sustainability innovation and implementation

Stakeholder Engagement and Communication

- Coordination of multi-stakeholder engagement processes
- Development and implementation of sustainability communication strategies
- Facilitation of community partnerships and collaboration
- Organization of annual sustainability conferences and knowledge-sharing events
- Maintenance of relationships with international sustainability networks

3.2. Sustainable Purchasing Policy

- Definition of sustainable procurement principles. priority of environmentally friendly, energy-efficient, certified products.
- Implement criteria for evaluating suppliers based on environmental, social and economic indicators.
- Use the product life cycle when purchasing decisions (e.g., durability, reusability).
- Education for university employees on the benefits of sustainable procurement.

3.3. Sustainable Investment Policy

- Integrating ESG (Environmental, Social and Corporate) criteria into investment decision-making.
- Using positive screening to support companies and projects with high sustainability indicators.
- Developing mechanisms to assess the impact of investments on the environment and society

3.4. Equality, Diversity and Inclusion (EDI) Policy

- Implementing policies to ensure equal opportunities for all students and employees.
- Supporting diversity through educational programs and activities

3.5. Anti-bribery and corruption policy

- Key provisions and references to existing policies



Sustainable development strategy **NUBiP of Ukraine** **2030**

Sustainable Development Strategy provides NUBiP of Ukraine with a robust framework for advancing its mission in education, research, and global engagement. By prioritizing internationalization, quality education, inclusivity, and innovation, NUBiP is poised to cultivate a resilient and environmentally responsible academic community. With steadfast commitment and collaborative action, NUBiP will contribute significantly to achieving sustainable development goals and ensuring a prosperous future for all.

Design by

Maksym Klymenko
Yelyzaveta Didur

© **NUBiP of Ukraine**
nubip.edu.ua

