

"Reconstruction of Ukraine after the war: How to start rebuilding Ukraine now"

With the support of the United Nations Economic Commission for Europe, the UN4Kharkiv working group, which brings together 16 UN agencies and international organisations, has been set up to implement the pilot project.

Deputy Head of the Presidential Office Rostyslav Shurma noted that the proceeds from the seized Russian assets will be used to rebuild Ukraine, and our country will receive €50 billion from the EU over the next four years.

A team of Ukrainian and foreign architects approved a vision of the future landscape of Kharkiv presented by local volunteer, architect and documentary filmmaker Maxim Rosenfeld.

The concept was developed on a voluntary basis by the Norman Foster Foundation, a group of local architects and urban planners, and an advisory board of international experts.

According to the city council, 3,367 apartment buildings and 1,823 private houses have been destroyed in Kharkiv to date, and the city's infrastructure has suffered significant damage.

The UN estimates that the total amount of damage to Ukraine's housing sector since the start of the full-scale Russian invasion exceeds \$50 billion.

Does it make sense to start rebuilding Ukraine now? This question is on the minds of the majority of the Ukrainian population, who are left with destroyed houses, one-on-one housing, and no hope of returning to their homes. And what if I said that there is a chance to get your house back, to rebuild the economy, industry, and much more? I want to tell you about my project, which will help restore the damaged infrastructure.

For example, we can look at the principle of rebuilding Ukraine after the Second World War, in 1945 and early 1950s.

In 1947, a Soviet-Romanian treaty recognised the incorporation of Northern Bukovina and Southern Bessarabia into the Ukrainian SSR. It is not difficult to guess that "friendly" communist regimes were established in all these countries. The USSR extended its influence to the whole of Eastern Europe.

However, this was the end of its relative achievements. Soviet power was returning, and in some lands it was being established from scratch: the country was turning into a completely different one than it had been before the war. Huge lists of the dead were complemented by material devastation. The entire post-war decade was spent on restoring the national economy, which is why this period is also called "reconstruction".

The countries of Western Europe, also heavily damaged by the war, accepted an economic aid plan from the United States known as the Marshall Plan. The Soviet Union, as before, decided to fend for itself. The USSR essentially experienced a re-industrialisation. By the end of the fourth five-year plan (1946-1950), industrial production had already exceeded pre-war levels by 15%, 10% more than planned. A significant bias in favour of heavy industry remained.

Thaw reforms

In the economy, the thaw was manifested in the decentralisation of governance. The Law "On Further Improvement of the Organisation of Management of Industry and Construction in the Ukrainian SSR" divided the territory of Ukraine into 11 economic administrative districts. In each of them, a planning and management body for local industry and construction was created - the council of national economy (sovnarkhoz). As a result, local leaders gained control over 90% of enterprises and all of the republic's agriculture.

The changes concerned management - from the centre or locally - but did not change the essence. Yes, local leaders had a better understanding of the specifics of their area. However, the economy still remained planned. There are always two sides to a coin. For the construction of large hydroelectric power plants on the Dnipro River - Dniprozherzhynska, Kakhovska, Kremenchuk - large areas were flooded and giant lakes were formed. This forever changed the ecosystem of the regions and the Dnipro River.

The construction of chemical plants that produced pesticides and other chemicals for the fields also created an additional burden on the environment.

Ukraine was actively involved in the "arms race", a key element of the Cold War, the space race, and the programme to develop the "peaceful atom".

Dnipropetrovsk (now Dnipro) became a huge rocketry centre. In 1957, the first artificial Earth satellite was launched. This marked the beginning of the "space age". In 1961, Yuri Gagarin became the first man to fly into space. Ukraine's contribution to this event was significant, thanks in part to the Ukrainian rocket

designer and cosmonautics guru Serhii Koroliov. The following year, the first Ukrainian, Pavlo Popovych, flew around the Earth.

The initial task was also to simplify the bureaucracy. The powers of ministries were reduced, and some of them were eliminated, reducing the number of staff. However, the bureaucracy struck back. With the creation of the republican sovnarkhoz and other structures, the level of bureaucracy only increased.

At the same time, the Ukrainian SSR received a significant impetus for economic development. The country became a major construction site. Factories and plants were built, and entire new industries emerged. Of course, rockets and spacecraft did not directly affect the welfare of the population. However, the industry began to produce consumer goods more actively. A campaign of massive housing construction, the so-called Khrushchevs, was launched, which allowed a significant number of people to move from barracks and cramped communal apartments to new housing.

What is the current state of affairs and what are the plans? (The need for funding at the moment far exceeds the capacity of the available funding sources for Ukraine. Accordingly, it is necessary to prioritise what is most important for Ukraine.)

Current state of Ukraine's economy Key indicators of the pre-war economy In recent years, despite the shortcomings of the raw material-based consumer model of development, Ukraine's economy has proven to be able to withstand and adapt to significant force majeure. Since 2014, Ukraine's economy has been functioning in the context of Russia's hybrid war against Ukraine and, having shown relative resilience, has quickly moved from the crisis phase to the recovery phase. For reference: In 2016-2019, Ukraine's GDP increased by 12% (in 2014-2015, it decreased by 15.8%). In 2021 - At the beginning of 2022, the economy was overcoming the consequences of the ongoing COVID-19 pandemic and, having not yet fully recovered from the shock of the hybrid war unleashed by the Russian Federation in 2014, was further weakened by the pandemic, but thanks to the Government's anti-crisis and stimulus programmes, it demonstrated successful adaptation to functioning under the restrictions caused by quarantine measures, as well as the ability to absorb shocks from rising global energy and food prices without disrupting macro stability and positive development dynamics. Among the most effective government decisions were: business support programmes (businesses received UAH 65 billion under the Affordable Loans 5-7-9% programme and UAH 6.5 billion under quarantine programmes); measures to financially support job creation (400 thousand new jobs were created); effective

management of state property and privatisation, in particular, corporate governance reform was implemented at public sector entities, including the top 15 state-owned companies, as a result of which the state received tens of billions of hryvnias in As a result, Ukraine ended 2021 with a record GDP of \$200 billion, \$6.7 billion in foreign direct investment, and a 34.7% increase in exports of goods and services. All this helped to improve the welfare of the population - the real growth in average nominal wages of full-time employees was 10.5%, and overall real disposable income increased by 4.3%. The impact of the war on the economy As a result of the full-scale war unleashed by Russia, Ukraine's economy has undergone changes. In total (according to the Advanter Group survey as of 10.06.2022), almost half of the enterprises are shut down (18.7%) or almost shut down (28.1%), total direct losses of SMEs are estimated at USD 83 billion, business activity is declining, and exporters face limited opportunities due to the blockade of ports - current logistics routes cover less than 20% of exports. More than 10 million Ukrainians (~25% of the population) have fled their homes, including 7.5 million who have moved abroad. As a result, at least 3 million Ukrainians have already lost their jobs, and 53% of the population is at risk of losing them (according to the UN). The unemployment rate is estimated to have risen above 30%. According to expert estimates, the level of wages has decreased from 9 to 58% in various sectors of economic activity, and wage arrears have exceeded 3 billion hryvnias. Budget expenditures almost doubled due to increased spending on defence, business support, and humanitarian aid. The biggest losses will be incurred: 1) due to the destruction of production facilities - the energy sector, housing and communal services, transport, metallurgy, oil refining, and defence industry; 2) as a result of the actual suspension of investment projects due to extremely high investment risks - construction, engineering; 3) as a result of reduced demand from the population that is under occupation, in the area of active hostilities, or is forced to leave Ukraine (due to the migration of more than 7.5 million citizens outside the country alone, approximately 20% of demand is not formed), economic activity in the service sector and certain types of industrial activity (hotel and restaurant business, as well as sectors of the economy that belong to the creative industries, in particular production and distribution of films and videos, literature and publishing, art, architecture and design, advertising agencies, theatre and concert halls, museums, light industry); 4) due to the destroyed transport infrastructure, blocked ports, and restrictions on cross-border foreign currency payments (except for payments for critical imports), over 50% of exports were lost during the three months of the war, which, given the significant share of agricultural products in Ukraine's exports, also threatens global food security to a large extent; 5) due to the narrowing range of domestic goods, the shortage of energy imports, inflation

and exchange rate pressure is increasing). The biggest shock from Russia's full-scale invasion of Ukraine occurred in March 2022. The Ministry of Economy, using indirect calculation methods and modelling tools, estimated the GDP decline in March 2022 at 47-50% (compared to March 2021), which resulted in a 15.1% drop in the first quarter, according to the State Statistics Service. However, as of mid-May 2022, it can be said that Ukraine's economy continued to function despite the large-scale military operations in the country. Certain sectors of the economy, such as public administration and defence, banking, information and communications technology, food processing, retail, healthcare and education, continued to operate. Due to the deep penetration of digitalisation, there was little or no temporary pause in the operations of these sectors. In April, as the geography of hostilities changed, people gradually returned to their homes, and new logistics routes were formed, the list of sectors whose businesses began to resume their activities began to expand: agriculture, transport, and construction were added. The resumption of business activity was also facilitated by the introduction of a new wartime economic policy, the main elements of which were a programme to relocate businesses to safe territory; the formation of a state order for products; the introduction of a number of important deregulation decisions; a new tax policy aimed at reducing the fiscal burden on businesses; interest-free lending programmes for all business sectors; and the ePidtrymka cash payment programme for internally displaced persons (IDPs). To support the population, the Government introduced programmes to compensate employers for the salary costs of employed IDPs and to provide assistance to internally displaced persons; introduced compensation to families who have taken in IDPs; ensured payment of all granted subsidies, benefits and social assistance; and simplified the procedure for granting unemployment benefits and registering unemployed persons with the State Employment Service (SES) in wartime. The support programmes introduced by the Government have mitigated the shocks to the economy caused by the full-scale war. According to the survey of SMEs in Ukraine conducted by Advanter Group, while 73.8% of the surveyed enterprises completely stopped working in the period 11.03-13.03.2022, only 21.6% of them did so in the period 11.04-13.04.2022 (compared to 53.9% at the beginning of the third decade of March), and 20.6% in the period 05.05-07.05.2022. At the same time, 15% of enterprises did not change or increased the volume of work compared to 23.02.2022. As a result, according to the Ministry of Economy, the GDP decline in April-May 2022 was already less than in March, although, of course, in the context of the ongoing war, it still remains quite significant - at 41-44%. With regard to the price situation, the Government has been taking steps since the first days of the war to: 1. Took control of stabilising the food supply, implemented the concept of a central order

for food and medicine producers and providing funding through the reserve fund, and established international cooperation on humanitarian supplies. 2. It introduced price regulation for utilities and a number of essential goods for people, including basic foodstuffs (flour, 5 PROJECT pasta, bread, meat, milk, etc.) and certain groups of medicines. In addition, measures were taken to reduce the cost of fuel for cars, including the introduction of a new procedure for calculating maximum fuel prices, the abolition of the excise tax on fuel and a reduction in VAT rates from 20 to 7 per cent, and the limitation of prices for premium fuel. 3. Cancelled a significant part of duties and VAT, and expanded the list of critical imports. These measures helped to avoid a systemic shortage of goods and the development of strong inflationary processes in March. At the same time, the Government is responding to current challenges: in order to revive economic activity, the state regulation of prices was eased from 19.03.2022 (the requirement for a maximum level of trade margin (mark-up) on certain food products was removed), the procedure for declaring prices was simplified in view of the stabilisation of the situation in the consumer market; given the growing demand in the fuel market, in order to avoid imbalances 29. 04.2022, the NBU decided to amend the procedure for state regulation of prices for petroleum products by raising the maximum level of trade margins, which will help to resolve the current issue of fuel shortages in the market. These actions have created more room for price increases, but it is a necessary price to pay for the increased availability of goods on the market, which has begun to adapt to new conditions without harsh government intervention. And this stage is quite successful. In April-May, consumer inflation slowed to 3.1 percent and 2.7 percent, respectively, from 4.5 percent in March. Thus, despite all the difficulties, Ukraine has managed to maintain relative macroeconomic stability in the midst of the war and to overcome the large-scale shutdown of production and labour outflow caused by the displacement of people to safe places, and, in fact, to reverse these processes.

Goals, objectives, stages of the Recovery Plan in the area of Economic Recovery and Development The high price Ukraine pays for the right to be an independent state makes everyone change - Ukrainians and the world. By changing together, we will change the Ukrainian economy. Our goal: Economic recovery and rapid economic growth. Objectives: 1. RECOVERY: Within 12 months from the end of the war, restore a safe environment for people to live comfortably and do business in Ukraine. 2. GROWTH: To ensure that Ukraine's GDP grows from \$200 billion in 2021 to \$500 billion in 2032 and that the economy continues to generate high economic growth. 3. EUROPE: to achieve full compliance with the economic criterion for membership in the European Union and become a full member of the

EU. Maximise economic relations with the G7 countries outside the EU. Key reforms: 1. Structural adjustment of the economy through accelerated development of the processing industry (attracting investment, increasing exports, import substitution). 2. Boosting SMEs through deregulation, reducing the tax burden, expanding access to knowledge, markets, capital, and creating a comfortable business environment. 3. Reform of the labour market by introducing market principles of relations between employees and employers. 4. Implementation of the economic part of the EU-Ukraine Association Agreement. 5. Reform of state property management: privatisation and corporate governance. 6. Reform of markets, reduction of monopolies and de-oligarchisation of the economy. 7. Reform of law enforcement agencies in the field of economic crimes.

Launch negotiations on Ukraine's membership in the EU and continue Ukraine's integration into the EU economic space. Measure 1: Special consultations with the European Commission (separate session of the EU-Ukraine Association Committee in the trade section) to determine the scope of the future negotiation process by area: Public procurement. Free movement of goods. Right of establishment and freedom to provide services. Company law. Intellectual property rights. Competition policy. Measure 2: Ad hoc consultations with the European Commission and EU Member States (or the Czech Presidency of the Council of the EU) on the future negotiation process in the following areas: Freedom of movement of labour. Economic and monetary policy. Social policy and employment (in relation to employment). Entrepreneurship and industrial policy Measure 3: Implementation of the economic part of the EU-Ukraine Association Agreement: Organise a Special Meeting of the EU-Ukraine High Level Dialogue on Horizontal Issues and Selected Sectors of Industry (Industrial Dialogue) to agree on the areas of EU support for the restart of enterprises that have changed their location under the relocation programme and remained in the government-controlled territory. Start of negotiations on the ACAA. Work with the EC to obtain a positive opinion on the implementation of Phases I and II of the Roadmap for Public Procurement (recommendation of the EU-Ukraine Association Committee in the Trade Configuration).

Medium-term tasks and measures for the stage "Restoration, restart of the economy and institutions", 2023-2025. Task 1. Reduce the regulatory and administrative burden on business and introduce new support tools for small and medium-sized businesses. Objective 2: Rebuild destroyed and damaged facilities, build new production facilities, in particular for processing local raw materials, increasing the value chain in Ukraine. Objective 3: Promote full productive employment and the realisation of the individual's abilities in labour. Objective 4.

To expand access to markets for high value-added products, in particular, to ensure full access to the G7 and EU markets. Task 5. Conduct pre-accession negotiations, deepen economic integration with the EU and sign the membership agreement in December 2024. Task 6. To review the level of market concentration in key sectors of the economy, taking into account the actual control structure.

Medium-term expected results Stage "Restoration, restart of the economy and institutions", 2023-2025. Increase in production of goods (primarily manufacturing) and services, building new innovative enterprises. Development of the raw material base. Expanding logistics capacity. Development of exports. Modernisation of production facilities. Increasing the knowledge intensity of production. Employment growth. Increase in foreign investment. Expanding access to "cheap and long" money for SMEs. Legalisation of labour relations. Implementation of European legislation in the field of economy. Fulfilment of all economic prerequisites for the opening of the four freedoms for Ukraine: free movement of goods, services, capital, free movement of labour and signing of the EU-Ukraine Association Agreement (December 2024).

Strategic tasks and measures for the Structural Modernisation and Full Integration into the EU stage, 2026-2032. Task 1. Significantly increase exports of processed products with a higher share of added value. Objective 2. Ensure the economy's transition to new innovative development trends Task 3. Ensure the functioning of a flexible and business-oriented regulatory system Objective 4. Ensure that Ukraine's economy adapts to the criteria required for integration with the EU and gains full EU membership.

Strategic Expected Results Structural Modernisation and Full Integration into the EU Stage, 2026-2032. Leap from a transitional economy to a developing economy. Full membership of Ukraine in the EU and completion of Ukraine's European economic integration. Becoming one of the world's top 10 exporters of metal, agricultural products and IT services. Reducing the resource intensity of the economy. Development of innovations. Import substitution in the field of equipment and military equipment. Maximum digitalisation of interaction between the state and business entities. Completion of Ukraine's "green" transition. Creating a developed ecosystem of small and medium-sized businesses. Achieving full employment of the population. Improving the welfare of the population. Reducing the shadow economy to an economically safe level.

A common vision of development and recovery: Ukraine is striving to overcome the crisis, including those caused by the war. Systematic planning of the country's reconstruction and further development provides a unique opportunity to rethink,

redesign and modernise buildings and life support systems, and ensure a comprehensive transformation of territorial communities and regions. The key development goals for the next decade are to accelerate the economic growth of regions and territorial communities through the effective use of internal potential, create new jobs, improve employment, and access to public services and facilities, which creates conditions for migrants to return home. The state will pay special attention to supporting potential growth centres that can spread their positive impact on the development of neighbouring territories and influence the development of the region as a whole, as well as supporting the development of territories with special development problems, which should help reduce inter- and intra-regional asymmetries in the development of territorial communities and improve the quality of life of people regardless of their place of residence. All citizens who lost their homes due to the military aggression of the Russian Federation should be provided with housing. One of the key tasks is to restore and create high-quality new housing and living infrastructure with protective, sustainable and inclusive solutions. The recovery of Ukrainian cities and villages after the war is a complex process that should ensure modernisation and further development for decades to come. New challenges related to the war - ensuring a balanced resettlement of IDPs, relocation of enterprises and businesses to all regions of the country, and creation of a socially oriented business environment as a prerequisite for the development of the economic space of communities - should be combined with the implementation of the best, most modern global approaches and practices in urban planning and architecture and the UN Sustainable Development Goals. Human-centredness, rational spatial planning, ensuring a balance of settlement and jobs, sustainable urban mobility, inclusiveness, energy efficiency, environmental friendliness and many other modern trends in the development of human settlements should become the guiding principles of our great recovery. The transition to a circular economy model of community life support systems, comprehensive improvement of resource efficiency (including energy on both the consumption and supply sides), together with an increase in the share of local renewable energy sources and the construction of NZEB (near-zero energy buildings) are among the key elements of the European Green Deal and are a logical continuation of Ukraine's integration into the European Union. The systematic implementation of this course will become the basis for achieving Ukraine's energy independence from imported fossil fuels, as well as for the green transformation of the infrastructure of settlements. All of these factors will allow displaced Ukrainians to return to their homes and communities and transform them to higher standards of living. This approach should also ensure the long-term well-being of future generations of Ukrainians across Ukraine.

Key principles of recovery and development: Rebuild better than before - the restoration and development of settlements will be based on the best international practices with the use of modern solutions and "green" technologies, which will allow for a significant transformational leap for communities and regions of Ukraine. **Openness and transparency** - the state will continue to provide free access for all citizens of Ukraine and international partners to the plans and actions of public authorities at all stages of Ukraine's recovery and development.

European integration - the implementation of each task of the recovery plan will facilitate Ukraine's rapid approximation to fundamental European values and standards, and its eventual membership in the European Union. **Sustainable development** - Ukraine's recovery and development will be ensured in line with the UN's global sustainable development goals. **Energy independence** - decarbonisation of buildings and life support systems through a significant increase in their energy efficiency and an increase in the use of renewable energy sources in communities will allow Ukraine to completely abandon imports of fossil fuels (in particular, natural gas of Russian origin). **Inclusiveness** - creating a favourable environment for equal access to opportunities for all citizens, strengthening the involvement of all segments of the population in solving development problems, and fair distribution of material and social benefits. **Civil protection** is the creation of a space aimed at ensuring the safety of the maximum number of people and the sustainable functioning of business entities in emergency situations, including martial law.

Key issues to be addressed under the Recovery Plan. The state of the agricultural sector before the war.

The agriculture sector is one of the drivers of Ukraine's national economy: the industry was growing steadily before the outbreak of the full-scale war, with annual growth of 5-6%, with agricultural production accounting for 10% of GDP and -16% of GDP together with agricultural processing. Agriculture was one of the world's leading producers of certain types of food, providing trade volumes equivalent to 6% of global calories. Ukraine was a leader in international trade in sunflower oil (first in the world), rapeseed and barley (third and fourth, respectively), and other products. Trade in agricultural products and foodstuffs brought Ukraine about USD 22 billion annually. This amounted to 41% of total exports. The development of industrial agricultural production in Ukraine made it possible to offset the impact of the disparity in the level of state support and the cost of lending with the countries of North America and the EU and to compete successfully on international markets.

The impact of the war on the defined scope of analysis The blockade of seaports led to a significant reduction in exports from 6-7 million tonnes per month to 1.5 million tonnes. This has led to a drop in domestic sales prices for agricultural products below the cost of production, which threatens to bankrupt agricultural enterprises. If seaports remain blocked until the start of the new harvest, Ukraine's grain storage capacity will be up to 15 million tonnes, and the lack of funds from agricultural sales will threaten to disrupt the 2022 harvest and sowing campaigns. According to FAO's preliminary estimates, direct losses of assets in the industry could amount to USD 6.5 billion. USD. Currently, about 5% of agricultural land has been damaged. The loss of available sown areas is more than 25%, irrigated land - more than 70%, berry fields - about 25%, and orchards - 20%. There was an increase in the cost of production due to higher prices for fertilisers, fuel and seeds. Large tracts of land are dangerous for production activities due to damage and mining. Infrastructure facilities in the agricultural, storage, transport, energy, and processing industries have suffered significant damage.

The goal to be achieved to solve the problem at each stage:

Stage 1: January 2023 - December 2025. Restore the economic potential of the agricultural sector.

Stage 2: January 2026 - December 2032. Rapid growth of economic indicators of the agricultural sector.

Risks to achieving the target. **Stage 1:** insufficient funding, limited credit resources; unfavourable investment climate, imperfect legislation to protect investors' interests, persistent corruption; lack of adequate government support; lack of investment opportunities for market operators; insufficient implementation of protective measures at the previous stage; slow opening of promising markets.

Measurable indicator of achievement: The post-war period is a strong start. Restoration of the industry to pre-war levels. Total amount of financial resources required to achieve the target: UAH 742 billion (\$24.7 billion).

Risks to achieving the target. **Stage 2:** insufficient funding, limited credit resources; unfavourable investment climate, imperfect legislation to protect investors' interests, and persistent corruption; lack of adequate government support; lack of investment opportunities for market operators; insufficient implementation of recovery measures at the previous stage; slow opening of promising markets. **Measurable indicator of achievement:** 50% of grain export potential will be processed. Increase by 20-85% of marketable livestock

production. Total financial resources required to achieve the target: UAH 724 billion (\$24.1 billion).

Tasks to achieve the goals. Stage 1: Inventory of lost production facilities, both raw materials and processing; Attraction of investments in priority areas; Support of the population's purchasing power by reducing the VAT rate on food products (after the cancellation of martial law); Restoration and establishment of new orchards and berry gardens; Construction of modern greenhouse complexes; Inventory of technological readiness for processing raw materials, launch of new industrial production facilities for the production of equipment; Localisation and production of agricultural machinery. Lending and insurance as key elements of state support. Development of cooperation, including the introduction of the EU and US model of taxation of agricultural cooperatives - "patronage" dividends. "De-shadowing" of agricultural production: registration of all producers as market operators, ensuring traceability of products from field to table. Implementation of a programme to return qualified personnel to Ukraine and build up modern sectoral expertise. Developing a new methodology for NPI that correlates with actual yields, including the current level of soil moisture.

Tasks to achieve the goals. Stage 2: Launch of processing facilities, including deep processing of grain and oilseeds. Construction of seed plants. Redirect grain and oilseeds to the livestock industry. Development of organic production. Opening new markets for fruit, livestock and processed products. Localisation and production of agricultural machinery, including tractors. Directing the bulk of state support funds to finance lending and insurance programmes. Opening new markets for fruit, livestock and processed products. Implementation of the best international practices for controlling and distributing GMOs. Joining the electronic circulation system of phytosanitary certificates of the Food and Agriculture Organisation of the United Nations (ePhyto) to enable the issuance of international phytosanitary certificates in electronic format. Development of software for the full functioning of the system in the format of an electronic grain owner's office, similar in functionality to the client-bank system. Development of bioenergy in line with the EU REPowerEU plan. Full implementation of the commitments in the field of agriculture, sanitary and phytosanitary measures under the EU-Ukraine Association Agreement, and conducting audits. Development of the "Smart Green Deal": gradual alignment of requirements for Ukrainian agricultural producers with the EU Green Deal, taking into account Ukrainian national specifics.

The research project was initiated by ISAR Ednannia and implemented by the Kyiv International Institute of Sociology within the framework of the

project "Sectoral Support Initiative for Ukrainian Civil Society", implemented by ISAR Ednannia in consortium with the Ukrainian Center for Independent Political Research (UCIPR) and the Centre for Democracy and Rule of Law (CEDEM) thanks to the generous support of the American people through the United States Agency for International Development (USAID).

Initiatives and projects in the field of post-war reconstruction for the period 2022-2024.

Despite the ongoing hostilities in Ukraine, the country's recovery process has already begun. The country does not yet have a single national recovery plan developed by the authorities that would have legal force and be used by other recovery actors as a strategic document. In the absence of a national recovery plan, communities become the "engine" of recovery, as recovery plans are rarely developed at the oblast level. However, communities face many challenges: uncoordinated legislation on the creation of recovery plans, the lack of a national recovery "framework", budgetary problems, and a lack of qualified specialists (especially in small communities). Recovery in Ukraine started with communities. According to the quantitative survey, 41% of community leaders reported that projects and initiatives to overcome the devastating impact of the war in their communities are currently being implemented or planned for 2023-2024. No recovery projects are being implemented or planned in 55% of communities, and 4% of respondents found it difficult to answer. The projects are mainly focused on rebuilding and repairing educational institutions (34%), restoring critical community infrastructure (32%), and roads and bridges (31%). This physical reconstruction in communities is most often carried out at the expense of local budgets or grants from international organisations/projects. Several leading civil society coordinating organisations are implementing large-scale programmes to support Ukrainian CSOs to participate in reconstruction. These are primarily ISAR UNITED, the Eastern Europe Foundation, and the International Renaissance Foundation.

Reconstruction of Ukraine: participation of civil society and other partners.

Several coalitions are assessing the extent of damage and needs in Ukraine as a result of the war: central authorities (the President's Office, ministries) in cooperation with civil society representatives of the KSE Institute; leading international organisations (the World Bank, the European Commission, the UN). A large number of initiatives are focused on the creation of GIS systems and services necessary for recovery: new systems are being created by the government

as part of the electronic reconstruction system, as well as by CSOs and local authorities.

The creation of digital products/information systems is the "heart" of the reconstruction process. This will allow not only to effectively manage the reconstruction, but also to make it transparent to the public and international partners. The main digital product of the government, which is created by the government, CSOs and international partners and should be the basis for reconstruction, is DREAM (Digital Restoration Ecosystem for Accountable Management). **Civil society's activity in creating training programmes for reconstruction actors, especially at the community level, is useful.** In Ukraine, as a result of decentralisation, the newly created communities have faced new powers and responsibilities, which they have acquired without sufficient financial resources, experience, infrastructure and personnel. The problem is the practice of transferring powers from the central to the local level without transferring the corresponding financial resources to the ground. The war and the need for reconstruction have made this situation even more acute. As a result, training of local authorities in such complex areas as engineering protection of territories, updating urban planning documentation, development of housing and communal services, etc. should be much more extensive than it is now. Support for entrepreneurs and businesses is most often provided by the Ukrainian government and major international partners (e.g. USAID, and such as the European Union or Germany).

The agricultural sector is the focus of business support projects. As for the scale of funding for business support programmes, it does not seem too large, given the complexity of the task and the number of people (and therefore businesses) in Ukraine: from \$1 million to \$15.5 million in projects where the total budget is known. Government programmes, of course, are somewhat larger, such as eRobota, which has issued grants worth \$82 million, or UAH 3 billion, in its almost one-year history. However, the scale of government programmes seems insufficient. At the level of civil society, small-scale projects that support creative entrepreneurs, IDPs, and women entrepreneurs are most often implemented. The state is active and powerful in rebuilding and repairing housing, medical, educational, and social infrastructure, but the processes it coordinates or initiates are rather slow. For example, the Fund for the Elimination of the Consequences of Armed Aggression was not yet operational as of April 2023, and the first allocation of funds took place only on 17 May 2023. In addition to the state, international organisations, such as the European Investment Bank, the EBRD, the World Bank, and actors such as the European Union, are important partners. At the same time,

civil society was involved in the reconstruction and repair of housing and infrastructure much earlier and is active in several areas. **There are four main areas of activity of CSOs and volunteer initiatives in this area:** 1) physical repairs and reconstruction of damaged and destroyed homes; 2) planning new spaces in war-affected settlements; 3) training mayors, architects, and specialists, and creating manuals for reconstruction participants; 4) professional engineering support for construction projects. Most of these are volunteer projects that have a certain core of specialists around whom those willing to participate in the initiatives unite in one form or another: physical work at the sites, provision of building materials, creation of educational content, and work with humanitarian aid. Ukrainian CSOs and international partners such as the European Union and UNDP play an important role in rebuilding schools. **Mine clearance** is one of the most important areas of reconstruction, and without success in this area, it is impossible to move forward. The state, recognising the need to coordinate partners providing financial and technical assistance, has established the Humanitarian Demining Centre, which is responsible for these tasks, among others.

Establishing mechanisms to monitor spending and fight corruption during the reconstruction process is an area where international organisations and civil society initiatives are active. Access to data is a prerequisite for effective control over public spending. The role of civil society organisations, think tanks and researchers in advocating for the return of access to open data that became inaccessible due to the war is key. It is civil society that draws attention to this problem, pointing out that without this data, it will be difficult to fight corruption and officials will feel impunity in the process of rebuilding the country.

Psychological support for the population and adaptation of veterans were in the focus of CSOs even before the outbreak of full-scale war, and in 2022-23, work in this area became even more intensive. It is worth noting that, as in other areas, Ukrainian CSOs create successful coalitions of organisations and cooperate productively with the authorities. Along with government officials, athletes, and cultural figures, CSOs are actively involved in advocating for Ukraine at the international level: representatives of Ukrainian civil society make presentations in the European Parliament, advocate for assistance to Ukraine in the US Congress, etc.

"The state now provides for different possibilities of filling its budget, and the state will be involved in these processes in any case. But local governments will not wait for one fund, because local governments are elected positions, elected by people on the ground who look them in the eye. Almost all local governments have started their recovery processes. They have their own autonomy and they will

implement it, and that's right. Let them look for opportunities." The independent search for funds for recovery by local authorities raises the problem of social justice in the distribution of resources, as much depends on the activity, fundraising experience, connections, and even the knowledge of English of local authorities. More active local authorities can attract significant resources, even if their needs are smaller compared to other affected communities.

Establishment of GIS systems/GIS registries necessary for recovery. At the level of the government and international organisations.

At the end of October 2022, the government and UNDP reached an agreement to create a new geographic information system to improve information and reconstruction in Ukraine. According to a UNDP press release, the decision to create such a system was made by the government in the summer of 2022: "The GIS project is envisaged by a resolution of the Government of Ukraine adopted on 24 June 2022. Immediately after the adoption of this document, UNDP began collecting data from affected communities across Ukraine to create the pilot model that was presented this week. UNDP, in collaboration with the United Nations Observatory on Satellite Applications (UNOSAT), Kyiv School of Economics (KSE) and the City University of New York (CUNY), has launched a pilot using remote sensing methods and tools to map damage and destruction of buildings in 55 settlements in Kyiv Oblast and six other oblasts. The first phase will cover Kyiv, Chernihiv, Kharkiv, Sumy and Zhytomyr regions. The second stage will assess the damage in Kherson, Luhansk, Donetsk, Zaporizhzhia, Mykolaiv, Odesa and Dnipro regions (in accessible areas). In addition, the cities of Chernihiv, Kharkiv, Okhtyrka, Kramatorsk, Kherson, Kremenchuk, Sievierodonetsk, Lysychansk, Melitopol, Avdiivka and Bakhmut will also be assessed at the first stage."

"In December 2022, the Ukrainian Society of Researchers published the project (service) "Regional Development: Functional Types of Territories. An interactive GIS guide". The authors explain the relevance of the project as follows: "After the beginning of the large-scale military invasion of Ukraine by the Russian Federation, the Law was amended to establish the specifics of the restoration of regions and territories affected by the armed aggression against Ukraine. Article 11-2, paragraph 2 of the Law states that "for the purpose of planning the restoration and stimulating the development of regions and territories, as well as for the purpose of introducing special mechanisms and instruments by executive authorities and local self-government bodies, functional types of territories are determined". The Ukrainian Society of Researchers is launching a study of

functional types of territories, the results of which will be displayed in the Interactive GIS Directory. The study will identify functional types of territory, both those specified in the Law and additional functional types of territories of territorial communities, which will help expand the tools for planning the restoration and stimulating the development of regions and territories of Ukraine."

The RebuildUA project defines its goal in this way: "On 24 February 2022, the Russian military started hostilities on the territory of Ukraine, causing numerous destructions, losses, and destroying lives at every turn. Almost all regions of the country continue to suffer damage and destruction of infrastructure of varying severity. These damages need to be recorded and digitised in order to attract funding and start the reconstruction process. The RebuildUA project aims to analyse and visualise the destroyed infrastructure of Ukraine, disseminate this information, share the results with communities, government agencies and specialised reconstruction funds, and collect evidence of the crimes of the aggressor countries."

The project ("Map of Destruction and Restoration") is also being implemented by the NGO Anti-Corruption Headquarters. Here is how the authors describe its purpose and functionality: "The Map of Destruction and Restoration accumulates information on all civilian infrastructure objects damaged or destroyed as a result of the Russian invasion of Ukraine, as well as information on restoration works. An object on the map has information about its location (coordinates), address, estimated recovery period, date of destruction, recovery estimates, photos before the destruction, the destruction itself, the recovery process and its completion, links to the source of information about the event, and the company that restored the object."

The NGO Housing Ukraine, which is working on the Council of Europe project "Facilitating Access to Housing Solutions for Internally Displaced Persons and Persons Affected by Armed Conflict at the Community Level", is also developing a digital mapping register to record damage and monitor the progress of recovery. As reported: "The NGO has initiated the development of a digital platform for mapping destroyed and damaged housing and its restoration at the community level. According to the project, access to the service is provided to international donors. Thanks to the site's functionality, they would be able to help rebuild homes and monitor the recovery process." The platform was launched on 11 November 2022, is currently operating in the Ivanivska community of Chernihiv Oblast and has plans to scale to Kryvyi Rih and Kramatorsk. Currently, the platform's functionality is as follows: it is possible to select a settlement and a specific house

affected by the hostilities, assess the extent of damage, and see the project of rebuilt housing before the reconstruction is completed.

The NGO All-Ukrainian Agrarian Council, with the support of the USAID Agriculture and Rural Development (AGRO) Programme, has created an interactive map of the destruction of the agricultural sector. The project aims to document crimes against agricultural enterprises: "The interactive map of the destruction of the agricultural sector is an evidential database that confirms the crimes committed by the Russian Federation against the agricultural sector of Ukraine. Our goal is to help agricultural producers collect sufficient evidence of war crimes against their agricultural enterprises, to defend justice and to facilitate compensation for the damage caused." The Kharkiv Humanitarian Coordination Centre has developed an interactive map to optimise the delivery of humanitarian aid to the de-occupied settlements of Kharkiv region. Kateryna Lavrynenko, a volunteer at the centre, said: "Later, our centre came up with an idea to create a new product - a map with 605 settlements in Kharkiv Oblast marked on it. You can click on a mark and see the number of residents, the level of hygiene and food supply. We created it for the charity sector so that they could see where there is an abundance of what and where there is a shortage." The map provides the following information: the level of coverage of settlements with food aid, the level of coverage of settlements with hygiene, the level of coverage of settlements with medical care, etc.

Most experts agree that we need to focus on the recovery of all regions. At the same time, we should focus not on the territories, but on where people who have moved from the dangerous areas live. There may be certain risks, as at this stage it is not known when and how many people will be able to return to the affected and occupied territories. At the same time, a significant number of IDPs are staying in other places, putting a strain on local infrastructure. At the same time, it is necessary to invest in the restoration of the frontline regions, to create conditions for the return of those who have left, otherwise there is nothing to restore.