
CHAPTER 3

SYSTEM OF FINANCIAL SUPPORT FOR SUSTAINABLE DEVELOPMENT OF THE NORTH-WESTERN REGION

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3.1. Multi-criteria assessment and justification of strategies for financial support of sustainable development of the region

The analysis of individual sources of attraction and areas of use of financial resources for the implementation of the SDGs, carried out in the previous paragraphs, does not allow a general assessment of the level of financial support for this process. It is therefore important to carry out a comprehensive (multi-criteria) assessment of the level of financial support for sustainable development, using the methodological approach justified in paragraph 2.3 of this paper, which involves the calculation, analysis and evaluation of a set of indicator indices.

The research is based on the latest available official statistics corresponding to the defined system of indicators (Tables 2.6-2.8) for the period 2017–2021: at the regional level, the main statistical offices of the regions of the region – the Main Department of Statistics in Volyn Oblast [11; 12; 16] and the Main Department of Statistics in Rivne Oblast [17]; at the national level – the State Statistics Service of Ukraine [31], the Ministry of Finance of Ukraine [71] and the National Bank of Ukraine [58].

At the initial stage of the assessment, for each SDG (except for Goal 14, as the relevant administrative regions of the Northwest region do not have access to the sea), tables of initial data and results of calculating individual indicator indices, as well as group financial security indices based on them, were compiled, which are presented in Annex G.

As part of the assessment of the level of financial support for sustainable development according to the Social Pillar criterion, Tables D.1-D.5 of Appendix D present the results of the calculation of individual and group indices for individual years and in general for the period 2017–2021 for individual SDGs assigned to this pillar (SDG 1, SDG 3, SDG 4, SDG 5, SDG 10, SDG 16). Table 3.1 shows the summary results of the calculation of the group indices, as well as the intergroup index of the level of financial security by social component based on them, grouped by region and Sustainable Development Goal.

As can be seen, Volyn Oblast demonstrated both medium and low levels of financial security under Goal 1: Poverty Reduction. While Rivne region achieved mostly high (2017–2019) and medium (2020–2021) levels, the Northwest region as a whole achieved an average level of financial security for this goal both in individual years and for the period 2017–2021.

Analysing the level of financial security under Goal 3 “Good health and well-being”, we see that Volyn Oblast had a low level in 2019 and 2021, and provided an average level for the rest of the years and for the period as a whole. At the same time, Rivne region provided an average level in all years. In general, the North-Western

region only allowed a low level in 2021, while for the rest of the years and for the period as a whole it maintained an average level of financial support for this goal.

For Goal 4, “Quality Education”, Volyn Oblast had a predominantly average level of financial support, with a high level only reached in 2021, but overall this group index remained at an average level throughout the period. In Rivne Oblast and the North-Western Region as a whole, the average level of financial support for this goal was maintained throughout the period.

When analysing the level of financial support for Goal 5 “Gender Equality”, Volyn Oblast achieved a high level of funding only in 2017 and 2021, but in other years and for the period as a whole, this indicator was at an average level. In contrast, the situation in Rivne Oblast was worse, as funding was low in 2017–2020 and over the entire period. However, in general, the North-Western region had an average level of funding for this goal.

Table 3.1

Assessment of the level of financial support for sustainable development under the “Social Component” for 2017–2021

Indexes for the 2030 Sustainable Development Goals	Group and intergroup financial coverage indexes					
	2017	2018	2019	2020	2021	For the period
Volyn Oblast						
Goal 1: Eradicate poverty	0,332	0,410	0,378	0,317	0,302	0,348
Goal 3: Good health and well-being	0,365	0,372	0,276	0,464	0,287	0,353
Goal 4: Quality education	0,431	0,347	0,389	0,603	0,695	0,493
Goal 5: Gender equality	0,764	0,589	0,528	0,657	0,767	0,661
Goal 10: Reduce inequality	0,618	0,193	0,200	0,033	0,422	0,293
Goal 16: Peace, justice and strong institutions	0,356	0,327	0,341	0,730	0,607	0,473
<i>Intergroup index by social component</i>	0,478	0,373	0,352	0,467	0,514	0,437
Rivne Oblast						
Goal 1: Eradicate poverty	0,738	0,752	0,772	0,492	0,520	0,655
Goal 3: Good health and well-being	0,447	0,475	0,587	0,534	0,598	0,528
Goal 4: Quality education	0,404	0,398	0,447	0,516	0,342	0,421
Goal 5: Gender equality	0,217	0,088	0,027	0,209	0,431	0,194
Goal 10: Reduce inequality	0,517	0,485	0,317	0,347	0,432	0,420
Goal 16: Peace, justice and strong institutions	0,120	0,238	0,474	0,617	0,372	0,364
<i>Intergroup index by social component</i>	0,407	0,406	0,437	0,453	0,449	0,430
North-Western region						
Goal 1: Eradicate poverty	0,530	0,594	0,589	0,420	0,408	0,508
Goal 3: Good health and well-being	0,374	0,381	0,372	0,443	0,321	0,378
Goal 4: Quality education	0,414	0,363	0,391	0,546	0,504	0,444
Goal 5: Gender equality	0,485	0,335	0,271	0,412	0,579	0,416
Goal 10: Reduce inequality	0,568	0,339	0,258	0,190	0,427	0,356
Goal 16: Peace, justice and strong institutions	0,232	0,277	0,380	0,667	0,473	0,406
<i>Intergroup index by social component</i>	0,434	0,381	0,377	0,446	0,452	0,418

Note:

Grouping criteria by level of financial support: – low; – medium; – high.

The assessment of the level of financial support for Goal 10 “Reducing Inequality”, showed that Volyn Oblast had a low level of funding in most years (2018–2020) and for the period as a whole. The situation was better in Rivne Oblast, where the average level of funding was mostly provided. Also, in the North-Western region as a whole, the average level of financial support for this goal was achieved.

Analysing the level of financial support for Goal 16 “Peace, Justice and Strong Institution”, we see that Volyn Oblast has achieved different values of this indicator over the period (including a high level in 2020), but overall, it has achieved an average level of funding over the period. In Rivne Oblast, on the other hand, the level of financial support has increased from low to medium in recent years and over the period as a whole. The situation was similar in the North-Western region as a whole, with an average level of financial support for this target.

Summing up the values of the group indices, we calculated the intergroup financial security index based on the Social Component criterion, the dynamics of which by region and in the North-Western region as a whole is shown in Figure 3.1.

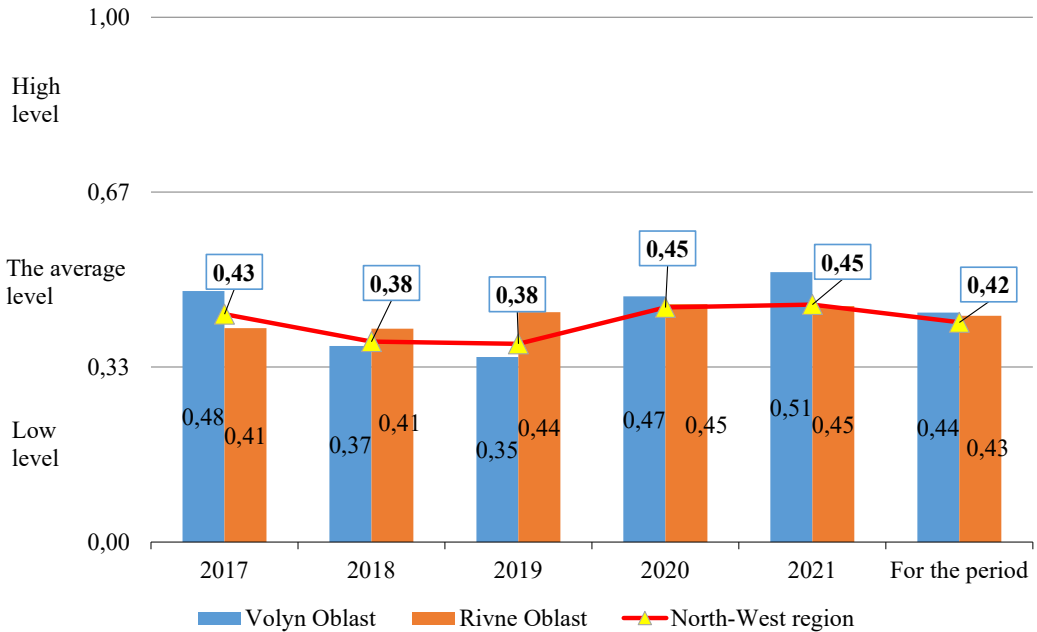


Figure 3.1. Changes in the intergroup index of the level of financial support for sustainable development of the North-West region by the Social Component criterion in 2017–2021

Source: built by the authors

As can be seen from the figure, some oblasts and the North-Western region as a whole achieved only average levels of financial security for this criterion over the period analysed. At the same time, the Volyn Oblast showed higher index values in most years and for the whole period. During the analysed period, a decrease in the

indices was observed in 2018–2019, but in the following 2020-2021 they increased to the highest values.

In order to assess the level of financial support for sustainable development according to the “Economic Component” criterion, Tables D.6-D.9 of Appendix D present the results of the calculation of individual and group indices for the period 2017–2021 according to the Sustainable Development Goals 2030 assigned to this component (Goal 2, Goal 8, Goal 9, Goal 11, Goal 17). Accordingly, Table 3.2 presents the results of the calculation of the group indices by region and by Sustainable Development Goal, on the basis of which the intergroup index of the level of financial security under the economic component was calculated.

Table 3.2

Assessment of the level of financial support for sustainable development by the Economic Component for 2017–2021

Indexes for the 2030 Sustainable Development Goals	Group and intergroup financial coverage indexes					
	2017	2018	2019	2020	2021	For the period
Volyn Oblast						
Goal 2. Overcome hunger and develop agriculture	0,738	0,499	0,337	0,131	0,587	0,458
Goal 8: Decent work and economic growth	0,469	0,470	0,362	0,322	0,458	0,416
Goal 9: Industry, innovation and infrastructure	0,402	0,409	0,451	0,518	0,440	0,444
Goal 11: Sustainable development of cities and communities	0,501	0,513	0,430	0,612	0,571	0,525
Goal 17. Partnership for sustainable development	0,429	0,464	0,663	0,372	0,442	0,474
<i>Intergroup index by economic component</i>	<i>0,508</i>	<i>0,471</i>	<i>0,449</i>	<i>0,391</i>	<i>0,500</i>	<i>0,464</i>
Rivne Oblast						
Goal 2. Overcome hunger and develop agriculture	0,506	0,276	0,210	0,319	0,365	0,335
Goal 8: Decent work and economic growth	0,564	0,515	0,746	0,662	0,810	0,659
Goal 9: Industry, innovation and infrastructure	0,097	0,475	0,258	0,433	0,317	0,316
Goal 11: Sustainable development of cities and communities	0,267	0,325	0,453	0,588	0,564	0,439
Goal 17. Partnership for sustainable development	0,330	0,419	0,471	0,412	0,533	0,433
<i>Intergroup index by economic component</i>	<i>0,353</i>	<i>0,402</i>	<i>0,428</i>	<i>0,483</i>	<i>0,518</i>	<i>0,437</i>
North-Western region						
Goal 2. Overcome hunger and develop agriculture	0,621	0,395	0,279	0,208	0,458	0,392
Goal 8: Decent work and economic growth	0,516	0,492	0,554	0,493	0,635	0,538
Goal 9: Industry, innovation and infrastructure	0,251	0,436	0,365	0,457	0,385	0,379
Goal 11: Sustainable development of cities and communities	0,390	0,427	0,443	0,606	0,545	0,482
Goal 17. Partnership for sustainable development	0,344	0,385	0,540	0,351	0,427	0,409
<i>Intergroup index by economic component</i>	<i>0,424</i>	<i>0,427</i>	<i>0,436</i>	<i>0,423</i>	<i>0,490</i>	<i>0,440</i>

Note:

Grouping criteria by level of financial support: – low; – medium; – high.

When analysing the level of financial support for Goal 2 “Overcoming hunger, developing agriculture”, it can be seen that Volyn Oblast achieved different values for this indicator over the period (and even a high level in 2017), but in general received an average level of funding for the period.

In contrast, in Rivne Oblast the level of financial security increased from low to medium in 2021 and over the whole period. The situation was similar in the North Western region as a whole, where an average level of financial security was achieved for this objective over the period.

The assessment of the level of financial support for Goal 8, “Decent Work and Economic Growth”, showed that Volyn Oblast had an average level of funding for most years (2017–2019 and 2021) and for the period as a whole. The situation was better in Rivne Oblast, where in some years (2019 and 2021) a high level of funding was even provided. While in the North-Western region as a whole, an average level of financial support for this goal was achieved in all years and over the period.

When analysing the level of financial support for Goal 9 “Industry, Innovation and Infrastructure”, Volyn Oblast maintained an average level of funding in all years. In contrast, the situation in Rivne Oblast was worse, as in most years (2017, 2019, 2021) and for the whole period, the financial support was low. However, in general, the North-Western region maintained an average level of funding for this goal.

As we can see, according to Goal 11 “Sustainable Development of Cities and Communities”, Volyn Oblast demonstrated an exceptionally average level of financial support. While the Rivne region at the initial stage (2017–2018) allowed for low levels, but later on, average levels. In general, the North-Western region achieved an average level of financial support for this goal both in individual years and on average for the period 2017–2021.

For Goal 17, “Partnership for Sustainable Development”, Volyn Oblast had a predominantly average level of funding, with a low level in 2019, but overall, this group index remained at an average level for the period. In Rivne Oblast and the North-Western region as a whole, the average level of financial support for this goal was steadily maintained throughout the period.

Based on the generalisation of the values of the group indices, the intergroup financial security index was further calculated according to the Economic Component criterion, the dynamics of which by region and in the North-Western region as a whole is shown in Figure 3.2.

The figure shows that some oblasts and the North-Western region as a whole achieved only an average level of financial security according to this criterion throughout the analysed period. At the same time, Volyn Oblast demonstrated higher values of this index during the first three years and for the entire period. During the analysed period, a decrease in the indices was observed in 2020, but in 2021 they increased to their highest values.

At the final stage, in order to assess the level of financial support for sustainable development according to the Environmental Component criterion, Tables D.10-D.14 of Appendix D contain the results of calculating individual

and group indices for the period 2017–2021 according to the 2030 Sustainable Development Goals related to this component (Goal 6, Goal 7, Goal 12, Goal 13, Goal 16). Accordingly, Table 3.3 below presents the results of the calculation of group indices grouped by region and the Sustainable Development Goals, as well as the intergroup indices of the level of financial security under the environmental component calculated on their basis.

For Goal 6, “Clean Water and Adequate Sanitation”, Volyn Oblast had a predominantly average level of funding, with a low level of funding only in 2017–2019, but overall, this group index remained at an average level over the period under review. In Rivne Oblast and the North-Western region as a whole, the average level of financial support for this objective was consistently achieved throughout the period.

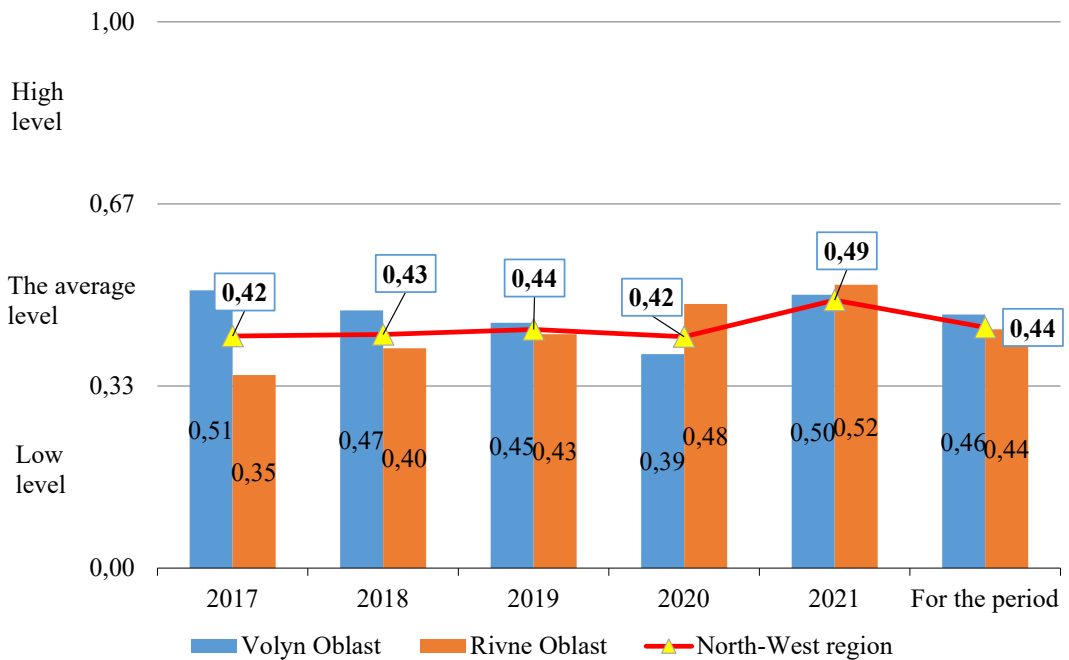


Figure 3.2. Changes in the intergroup index of the level of financial support for sustainable development of the North-Western region by the criterion “Economic component” in 2017–2021

Source: built by the authors

The assessment of the level of financial support for Goal 7 “Affordable and Clean Energy” showed that Volyn Oblast had an average level of funding for most years (starting in 2018) and for the period as a whole. The situation was somewhat better in Rivne Oblast, where in recent years an average (2019–2020) and even high (2021) level of funding was provided. In general, the North-Western region achieved an average level of financial support for this goal after 2018 and for the entire period.

Table 3.3

**Assessment of the level of financial support for sustainable development
under the Environmental Component for 2017–2021**

Indexes for the 2030 Sustainable Development Goals	Group and intergroup financial coverage indices					
	2017	2018	2019	2020	2021	For the period
Volyn Oblast						
Goal 6: Clean water and adequate sanitation	0,266	0,209	0,326	0,433	0,431	0,333
Goal 7: Affordable and clean energy	0,289	0,356	0,588	0,491	0,511	0,447
Goal 12: Responsible consumption and production	0,354	0,380	0,581	0,154	0,154	0,325
Goal 13: Mitigate the effects of climate change	0,325	0,104	0,277	0,150	0,159	0,203
Goal 15: Protect and restore terrestrial ecosystems	0,281	0,491	0,412	0,368	0,282	0,367
<i>Intergroup index by environmental component</i>	<i>0,303</i>	<i>0,308</i>	<i>0,437</i>	<i>0,319</i>	<i>0,307</i>	<i>0,335</i>
Rivne Oblast						
Goal 6: Clean water and adequate sanitation	0,600	0,600	0,623	0,599	0,559	0,596
Goal 7: Affordable and clean energy	0,079	0,178	0,355	0,591	0,723	0,385
Goal 12: Responsible consumption and production	0,542	0,568	0,540	0,515	0,515	0,536
Goal 13: Mitigate the effects of climate change	0,412	0,389	0,706	0,526	0,432	0,493
Goal 15: Protect and restore terrestrial ecosystems	0,542	0,529	0,447	0,480	0,420	0,484
<i>Intergroup index by environmental component</i>	<i>0,435</i>	<i>0,453</i>	<i>0,534</i>	<i>0,542</i>	<i>0,530</i>	<i>0,499</i>
North-West region						
Goal 6: Clean water and adequate sanitation	0,473	0,437	0,534	0,540	0,515	0,500
Goal 7: Affordable and clean energy	0,184	0,267	0,472	0,541	0,617	0,416
Goal 12: Responsible consumption and production	0,469	0,484	0,524	0,328	0,328	0,427
Goal 13: Mitigate the effects of climate change	0,352	0,259	0,531	0,364	0,320	0,365
Goal 15: Protect and restore terrestrial ecosystems	0,446	0,512	0,414	0,429	0,357	0,432
<i>Intergroup index by environmental component</i>	<i>0,385</i>	<i>0,392</i>	<i>0,495</i>	<i>0,440</i>	<i>0,427</i>	<i>0,428</i>

Note:

Grouping criteria by level of financial support: – low; – medium; – high.

When analysing the level of financial support for Goal 12 “Responsible Consumption and Production”, Volyn Oblast achieved an average level of funding only in 2017-2019, while in subsequent years and over the entire period, this indicator was low. In contrast, the situation in Rivne Oblast was better, as the financial support was at an average level throughout the entire period. In general, the North-Western region achieved an average and then a low level of funding for this goal during the first three years, but overall, it still received an average assessment of the level of financial support for this goal”.

A further assessment of the level of financial support for Goal 13, “Mitigating the effects of climate change”, showed that Volyn Oblast had a low level of funding for all years and for the period as a whole. The situation in Rivne Oblast was much better, with a mostly medium and even high level of funding in 2019. Similarly,

in the North-Western region, the overall level of financial support for this goal was mostly average.

Under Goal 15, “Protect and restore terrestrial ecosystems”, Volyn Oblast mostly achieved an average level of funding, with low levels only in 2017 and 2021, but on average this group index remained at an average level for the period. In Rivne Oblast and the North-Western region as a whole, the average level of financial support for this goal was consistently achieved throughout the analysed period.

Further, based on the results of summarising the values of the group indices, intergroup indices of financial security were calculated according to the “Environmental component” criterion, the change in which in individual regions and in the North-Western region as a whole is shown in Figure 3.3.

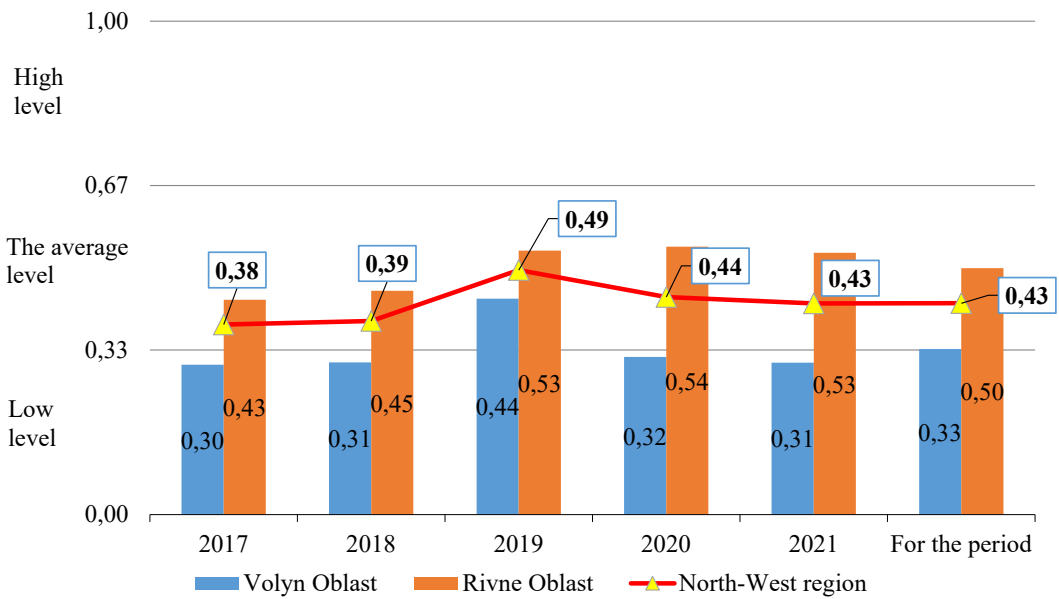


Figure 3.3. Changes in the intergroup index of the level of financial support for sustainable development of the North-Western region by the criterion “Environmental component” in 2017–2021

Source: built by the authors

It can be seen that, among the individual regions, Volyn Oblast achieved a low level of funding in most years (with the exception of 2019), while Rivne Oblast achieved a much higher, but only average, level of funding. Ultimately, this resulted in a balance of positive and negative results and an average level of financial support according to this criterion in the North-Western region throughout the period analysed. At the same time, it should be noted that after 2019 there was a decrease in this intergroup index.

The final stage of the multi-criteria assessment involved the calculation of an integral index of the level of financial support for sustainable development in each

of the oblasts and in the North-Western region as a whole (table. 3.4). As can be seen from the table, Volyn Oblast has achieved an average level of financial support for the social and economic components throughout the period, while the environmental component is mostly low, but according to the results of the integrated assessment, this oblast has still achieved an average level of financial support.

Table 3.4

Integral assessment of the level of financial support for sustainable development of the North-Western region in 2017–2021

Indexes by component	Intergroup and integral financial security indices					
	2017	2018	2019	2020	2021	For the period
Volyn Oblast						
Social component	0,48	0,37	0,35	0,47	0,51	0,44
Economic component	0,51	0,47	0,45	0,39	0,50	0,46
Environmental component	0,30	0,31	0,44	0,32	0,31	0,33
<i>Integral index</i>	<i>0,43</i>	<i>0,38</i>	<i>0,41</i>	<i>0,39</i>	<i>0,44</i>	<i>0,41</i>
Rivne Oblast						
Social component	0,41	0,41	0,44	0,45	0,45	0,43
Economic component	0,35	0,40	0,43	0,48	0,52	0,44
Environmental component	0,43	0,45	0,53	0,54	0,53	0,50
<i>Integral index</i>	<i>0,40</i>	<i>0,42</i>	<i>0,47</i>	<i>0,49</i>	<i>0,50</i>	<i>0,46</i>
North-Western region						
Social component	0,43	0,38	0,38	0,45	0,45	0,42
Economic component	0,42	0,43	0,44	0,42	0,49	0,44
Environmental component	0,38	0,39	0,49	0,44	0,43	0,43
<i>Integral index</i>	<i>0,41</i>	<i>0,40</i>	<i>0,44</i>	<i>0,44</i>	<i>0,46</i>	<i>0,43</i>

Note:

Grouping criteria by level of financial support: – low; – medium; – high.

The situation in the Rivne Oblast was more stable, as it maintained an average level of financial support for the implementation of the sustainable development goals throughout the period analysed, according to all components and the integrated assessment. Considering the North-Western region as a whole, it can be noted that the average level of financial support was also achieved throughout the period 2017–2021.

A comparative analysis of changes in the integral index of financial security (Figure 3.4) shows that Rivne Oblast demonstrated higher values of this indicator on average, while its growth was observed both in individual oblasts and in the North-Western region as a whole, from 0.41 in 2017 to a maximum level of 0.46 in 2021.

However, the values of the indices remained very far from the threshold value (0.67) of transition to a high level of financial support for sustainable development throughout the analysed period.

A more detailed comparative assessment of the values of the intergroup indices of the level of financial support for sustainable development in the North Western region in terms of social, economic and environmental components (Figure 3.5) shows that in most years and for the period as a whole, the lowest level of funding was

associated with the achievement of the socially oriented Sustainable Development Goals (0.42 for the period), while a slightly higher level of funding was associated with the environmentally oriented goals (0.43) and the highest level was associated with the achievement of the economically oriented goals (0.44). In other words, for all components, only an average level of financial support for the implementation of the Sustainable Development Goals was achieved throughout the period, which is far from the threshold for moving to a relatively high level (0.67).

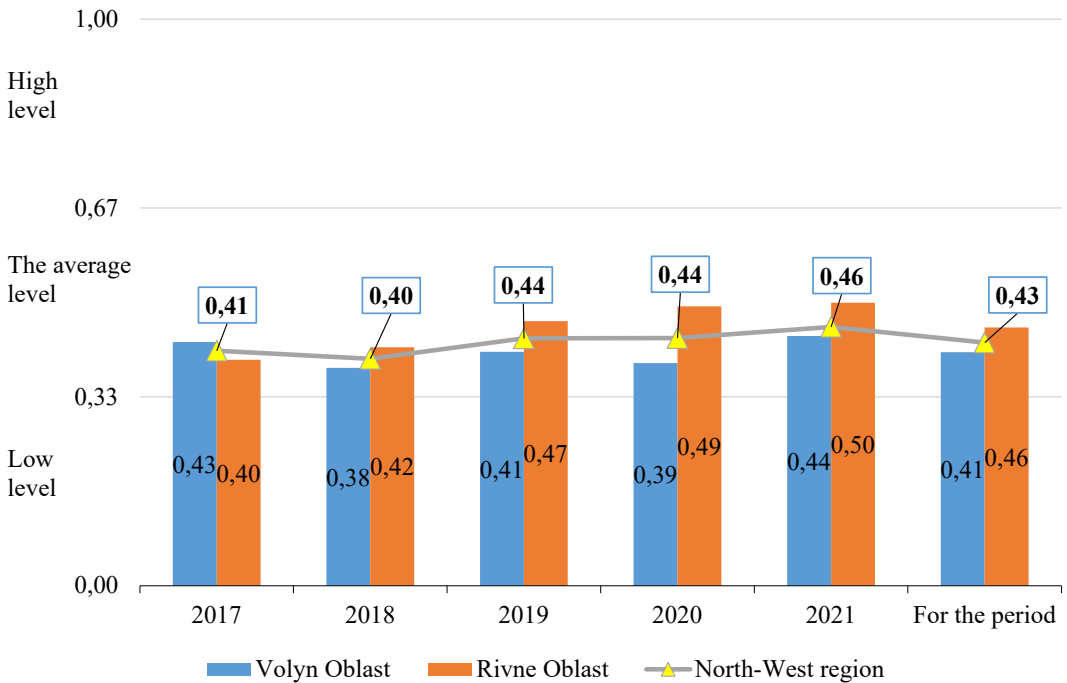


Figure 3.4. Changes in the integral index of the level of financial support for sustainable development of the North-Western region by regions in 2017–2021

Source: built by the authors

Further analysis and evaluation (Figure 3.6) showed that each oblast and the North-Western region as a whole, according to the results of the integrated assessment, although providing an average level of funding (0.34-0.50), were closer to the low (0.33) than to the high (0.67) level of financial support for the implementation of the Sustainable Development Goals in terms of social, economic and environmental components. Further analysis and evaluation (Figure 3.6) showed that each oblast and the North-Western region as a whole, according to the results of the integrated assessment, although providing an average level of funding (0.34-0.50), were closer to the low (0.33) than to the high (0.67) level of financial support for the implementation of the Sustainable Development Goals in terms of social, economic and environmental components.

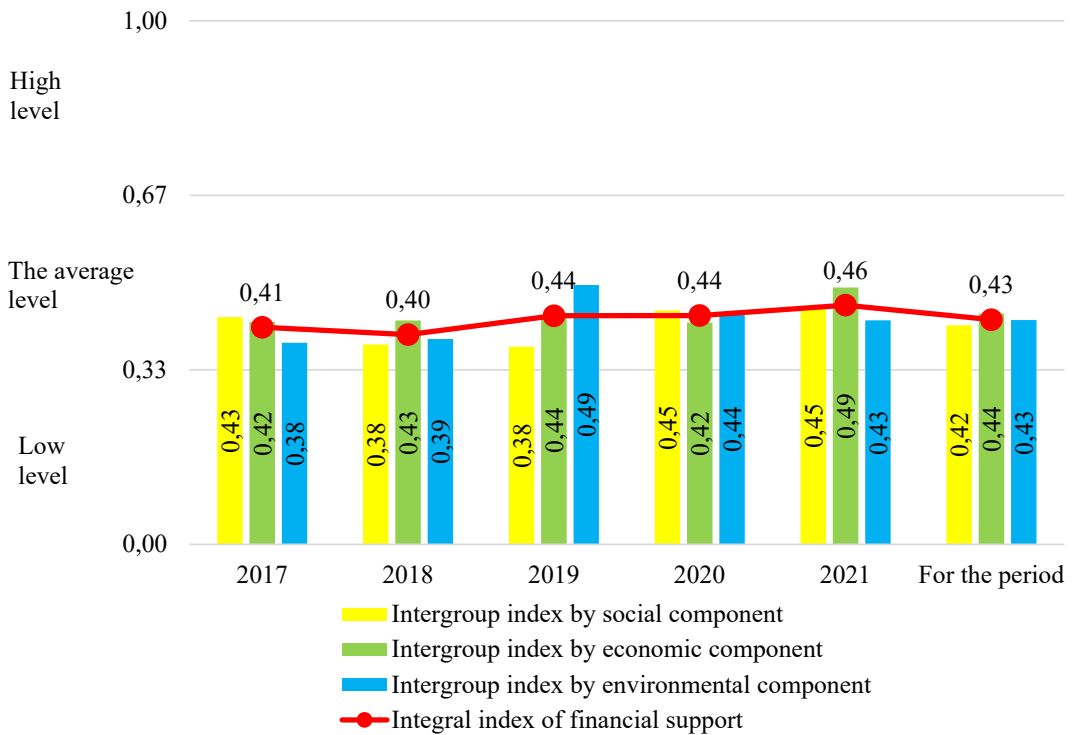


Figure 3.5. Changes in the level of financial support for sustainable development of the North-Western region in terms of social, economic and environmental components in 2017–2021

Source: built by the authors

It is also important to conduct a comparative analysis to identify the advantages and disadvantages of financing the implementation of individual Sustainable Development Goals in the North-Western region (Table 3.5). As we can see, the social component has achieved an average level of funding over the entire period, but in some years there were certain problems associated with low funding for the implementation of individual goals – Goal 3 “Good health and well-being”, Goal 5 “Gender equality”, Goal 10 “Reduce inequality”, Goal 16 “Peace, justice and strong institutions”. As for the financing of the economic component, the average level was also generally achieved, but there were some problematic issues related to the low financing of the implementation of the following Goals: Goal 2 “End hunger, develop agriculture”, Goal 9 “Industry, innovation and infrastructure”.

Funding for the environmental component was also generally at an average level, but some Goals had low levels of funding in some years of the analysed period, in particular Goal 7 “Affordable and Clean Energy”, Goal 12 “Responsible Consumption and Production”, Goal 13 “Climate Change Mitigation”.

The table also shows that, based on the results of the multi-criteria assessment, the North-Western region has achieved an average level of funding for the implementation of all the Sustainable Development Goals by 2030. It should be noted,

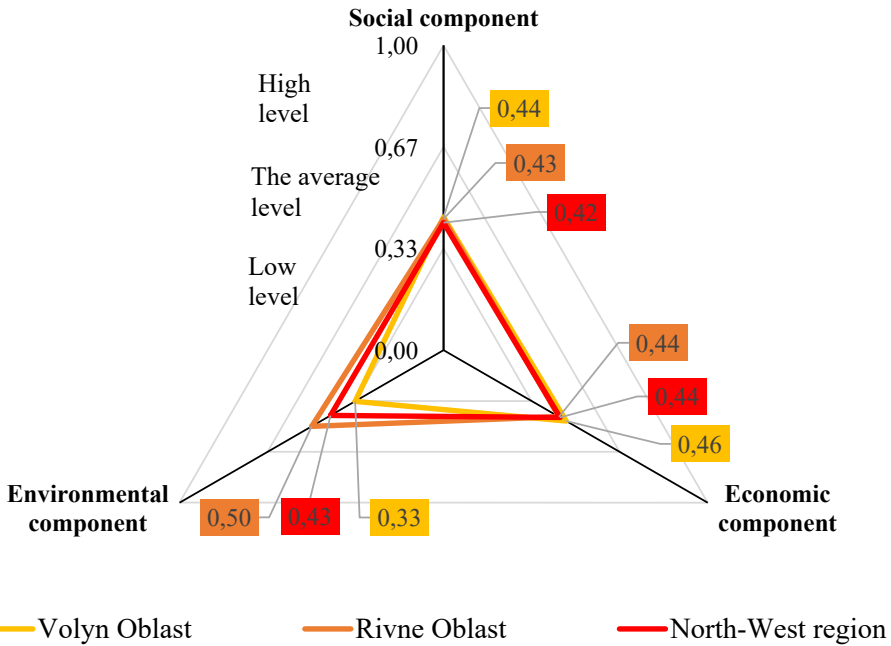


Figure 3.6. Comparison of the levels of financial support for sustainable development in the oblasts of the North-Western region of Ukraine in terms of social, economic and environmental components for the period 2017–2021

Source: built by the authors

however, that in the social component, funding for Goal 10 “Reduce inequality” and Goal 3 “Promote good health and well-being” is approaching a critically low level, in the economic component – Goal 8 “Decent work and economic growth” and Goal 2 “End hunger and promote agriculture”, and in the environmental component – Goal 13 “Mitigate climate change”.

Thus, the results of the multi-criteria assessment made it possible to identify the advantages and disadvantages of the existing system of financing the implementation of the Sustainable Development Goals in individual oblasts and in the North-Western region of Ukraine as a whole, which developed during the period 2017–2021. Obviously, the results obtained can serve as a basis for the development of further strategies, policies, and programme documents to improve the state of financing the implementation of the Sustainable Development Goals by 2030.

At the same time, it can be unequivocally stated that the outbreak of a full-scale war and its negative consequences from 2022 until its end led to a deterioration in the state of financing for the implementation of the Sustainable Development Goals in Ukraine, in particular in the North-Western region, although it is considered to be relatively less affected by military aggression. Given the objective lack of extensive statistical data for 2022, in order to assess the negative impact of a full-scale war on the state of financing for the implementation of the Sustainable Development Goals,

it is proposed to adjust the estimated levels of financial support obtained from the results of the multicriteria assessment by the percentage of decline in Ukraine’s gross domestic product in 2022, which was 29.1%. After all, this indicator is the main indicator of economic changes in the country, and approaches to this calculation using different methods contain different indicators that can be used to study the state of financial support for the implementation of the Sustainable Development Goals.

Table 3.5

Comparative analysis of the levels of financial support for sustainable development in the North-Western region by Sustainable Development Goals and components in 2017–2021

Components and targets for sustainable agriculture by 2030	Intergroup and group indices of the level of financial support					
	2017	2018	2019	2020	2021	For the period
<i>Social component, including.:</i>	0,43	0,38	0,38	0,45	0,45	0,42
Goal 1: Eradicate poverty	0,53	0,59	0,59	0,42	0,41	0,51
Goal 3: Good health and well-being	0,37	0,38	0,37	0,44	0,32	0,38
Goal 4: Quality education	0,41	0,36	0,39	0,55	0,50	0,44
Goal 5: Gender equality	0,48	0,33	0,27	0,41	0,58	0,42
Goal 10: Reduce inequality	0,57	0,34	0,26	0,19	0,43	0,36
Goal 16: Peace, justice and strong institutions	0,23	0,28	0,38	0,67	0,47	0,41
<i>Economic component, including.:</i>	0,42	0,43	0,44	0,42	0,49	0,44
Goal 2. Overcome hunger and develop agriculture	0,62	0,40	0,28	0,21	0,46	0,39
Goal 8: Decent work and economic growth	0,52	0,49	0,55	0,49	0,63	0,54
Goal 9: Industry, innovation and infrastructure	0,25	0,44	0,37	0,46	0,38	0,38
Goal 11: Sustainable development of cities and communities	0,39	0,43	0,44	0,61	0,55	0,48
Goal 17. Partnership for sustainable development	0,34	0,38	0,54	0,35	0,43	0,41
<i>Environmental component, including.:</i>	0,38	0,39	0,49	0,44	0,43	0,43
Goal 6: Clean water and adequate sanitation	0,47	0,44	0,53	0,54	0,51	0,50
Goal 7: Affordable and clean energy	0,18	0,27	0,47	0,54	0,62	0,42
Goal 12: Responsible consumption and production	0,47	0,48	0,52	0,33	0,33	0,43
Goal 13: Mitigate the effects of climate change	0,35	0,26	0,53	0,36	0,32	0,37
Goal 15: Protect and restore terrestrial ecosystems	0,45	0,51	0,41	0,43	0,36	0,43
<i>Integral index of the level of financial security</i>	0,41	0,40	0,44	0,44	0,46	0,43













Note:

Criteria for grouping by social component:

Grouping criteria by economic component:

Criteria for grouping by environmental component:

Grouping criteria by integral level of financial support:

	– low;		– medium;		– high.
	– low;		– medium;		– high.
	– low;		– medium;		– high.
	– low;		– medium;		– high.

The results of a comparative analysis of the calculated and adjusted values of the indices (Figure 3.7) show that as a result of the war, the level of financial support for most of the Goals, all components and the integrated score decreased from medium to low.

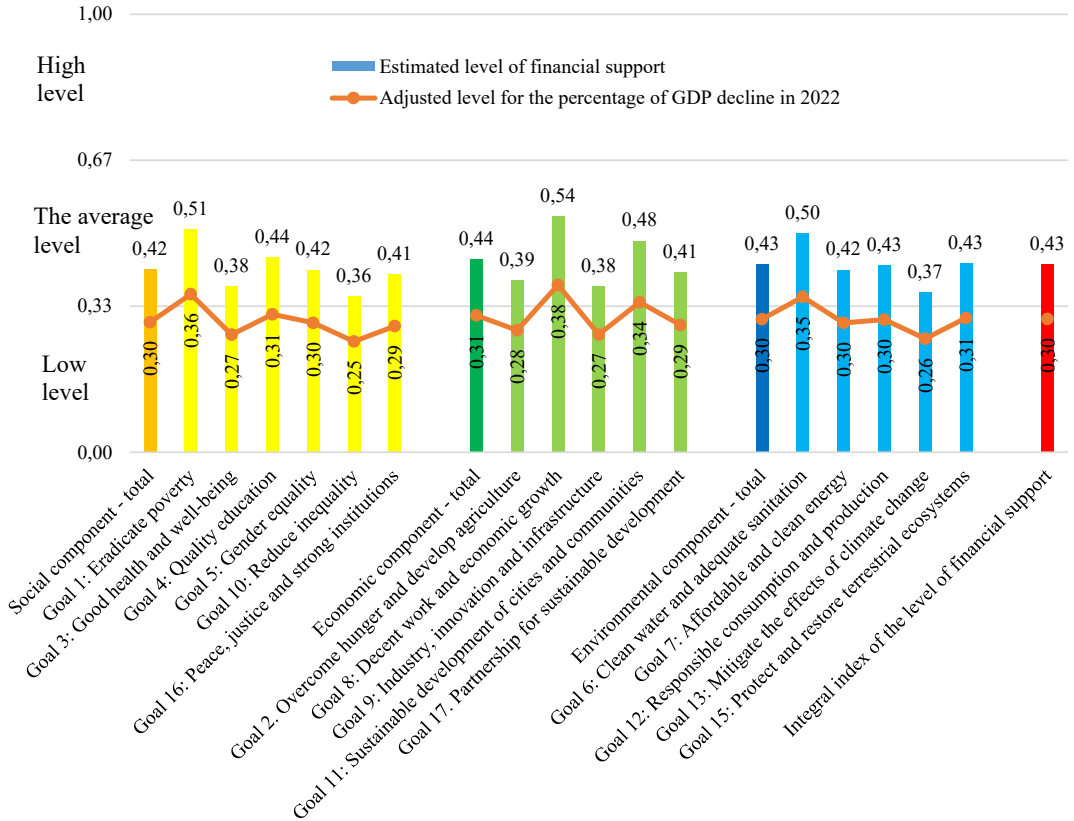


Figure 3.7. Comparative analysis of the estimated and adjusted levels of financial support for sustainable development in the North-Western region by components and Sustainable Development Goals for the period 2017–2021

Source: built by the authors

Therefore, in developing further strategies for the country, individual oblasts or regions, it is advisable to immediately take into account the negative cumulative impact of the war on the country's macroeconomic situation, which in particular worsens the state of financing for the implementation of individual Sustainable Development Goals, their aggregate social, economic and environmental components, and the overall integrated assessment of the level of financial security.

At the next stage, based on the strategy selection matrix developed in section 2.3 and based on the results of the integrated assessment, the profile of strategies for financial support for sustainable development for the North-Western region was determined in terms of components and SDGs (table 3.6).

**Basic provisions of the strategy of financial support
for sustainable development for the North-Western region**

Components and SDGs by 2030	Adjusted level of financial support	North-Western region
Social component – total	0,30	Focusing on financing priority measures, attracting additional investments for the implementation of the SDGs under the social component
Goal 1: Eradicate poverty	0,36	Increase local budget expenditures on social protection and social security
Goal 3: Good health and well-being	0,27	Increased capital investment in Healthcare and social assistance and Arts, sports, entertainment and recreation
Goal 4: Quality education	0,31	Increase capital investments in Education
Goal 5: Gender equality	0,30	Stimulating an accelerated increase in women's wages than men's
Goal 10: Reduce inequality	0,25	Active measures to de-shadow the economy, ensure transparency, and increase the income of households from the poorest 10% of the population
Goal 16: Peace, justice and strong institutions	0,29	Increase capital investment in public administration and defence; compulsory social insurance
Economic component – total	0,31	Focusing on financing priority measures, attracting additional investments for the implementation of the SDGs under the economic component
Goal 2. Overcome hunger and develop agriculture	0,28	Increase capital investment in agriculture, forestry and fisheries
Goal 8: Decent work and economic growth	0,38	Stimulating business entities to create new and expand existing value chains
Goal 9: Industry, innovation and infrastructure	0,27	Increase capital investments in the areas of industry and professional, scientific and technical activities
Goal 11: Sustainable development of cities and communities	0,34	Increase in consolidated local budget expenditures on housing and communal services and construction
Goal 17. Partnership for sustainable development	0,29	Attracting additional direct investment from non-residents in the region (equity and debt instruments)
Environmental component – total	0,30	Focusing on financing priority measures, attracting additional investments for the implementation of the SDGs under the environmental component
Goal 6: Clean water and adequate sanitation	0,35	Increase in current costs for wastewater treatment
Goal 7: Affordable and clean energy	0,30	Increase capital investments in the supply of electricity, gas, steam and air conditioning
Goal 12: Responsible consumption and production	0,30	Increased capital investment in waste management
Goal 13: Mitigate the effects of climate change	0,26	Increase capital investment in air protection and climate change
Goal 15: Protect and restore terrestrial ecosystems	0,31	Increase capital investment in the protection and rehabilitation of soil, groundwater and surface water

Notes. Created by the authors.

Thus, we can see that in all components, due to the low level of financial support received, it is proposed to implement strategies to focus on financing priority measures, attracting additional investments to implement the SDGs in the relevant components.

In addition, group strategies for financial support for individual SDGs are substantiated. Most of them are anti-crisis in nature, as the North-Western region has not secured high levels of financial support for sustainable development for some of the SDGs.

Thus, the results of the multi-criteria assessment and justification of strategies for financial support for sustainable development indicate that during the war, it is necessary to mainly implement anti-crisis measures by focusing on financing priority measures, as well as attracting additional investments to implement the SDGs in all components and most of the SDGs.

3.2. Conceptual provisions of the regional policy of financial support for sustainable development of the region

Based on the results of the previous studies, we conclude that a prerequisite for the implementation of the SDGs in the North-Western Region is the improvement of the existing financial support system, which will allow attracting additional financial resources for the implementation of priority tasks related to the SDGs, which are mainly correlated with the objectives of the Development Strategy of Volyn and Rivne Regions (Appendix D).

The policy of financial support for sustainable development in the North-Western region should also take into account the recommendations of the UNDP Programme in Ukraine. In particular, a number of steps have been identified that the Government of Ukraine can take to further improve the SDG financing process:

- 1) “division of responsibilities:
 - at the national level – determining the strategy, funding, directions, etc;
 - at the local level – identifying and participating in the implementation of specific programmes, activities, projects;
- 2) increasing the institutional capacity of civil servants, primarily through their participation in intergovernmental cooperation programmes, attracting funding from donors, creditors, and specialised organisations;
- 3) formulate KPIs for budget programmes to include SDG indicators. This would help the Ukrainian Cabinet of Ministers in general, and the Ministry of Finance and line ministries in particular, to monitor the effectiveness of the financing of their policy measures” [82].

The sustainable development of our country's regions requires adequate financial support. “Given that in the current difficult economic period there are virtually no additional financial resources in the state that could be redistributed through the state budget or from the private sector, the main sources of financial support for sustainable development include external investment, the main form of which is foreign direct investment” [157].

Taking into account the specifics of the North-Western macro-region of Ukraine, the following are promising areas for foreign investment to create proper financial support for sustainable development:

- “development of production facilities for procurement, extraction, storage and integrated processing of local mineral resources (peat, amber, stone, sand, clay) and forest resources (development of woodworking, furniture and pulp and paper industries);

- development of existing and creation of new modern production facilities in the region's agro-industrial complex based on the integrated use of agricultural land, development of livestock complexes with a focus on cattle and pig breeding” [24];

- “expanding and creating new areas of advanced processing of industrial crops for biofuel, feed, oil, etc.;

- development of tourism infrastructure and the entertainment and recreation industry, particularly in rural areas, as well as the development of the hotel and restaurant business;

- development of light industry through the expansion of primary production of natural leather and natural fibres, especially through the resumption of flax production and processing;

- development of the chemical industry based on the use of available local natural raw materials and facilities” [100].

Thus, an important source of financing for the development of the economic complex of the North-Western region of Ukraine is the attraction of foreign investment. At the same time, the level of foreign investment depends on the economic situation in the country and the security of the country's functioning in general, as investors try to minimise the risks of losing their investments. Accordingly, in the first years after the start of the ATO and the annexation of Crimea, there was an outflow of foreign capital from the economies of the Volyn and Rivne Oblasts, while since 2017 there has been a positive increase in foreign direct investment, and its balance in 2019 will also increase significantly.

Therefore, it is important to create favourable conditions for increasing the volume of foreign direct investment in the economy of the North-Western region through the use of equity instruments, which can create a multiplier effect that will ensure a qualitatively higher level of socio-economic development of this macro-region.

A further increase in foreign investment is linked to the need to create favourable conditions for the development of integrated processing industries based on the existing natural resources, tourism and industrial potential, based on the principles of energy efficiency and environmental safety, which will help the North-Western Region to reach the path of sustainable development as soon as possible.

In the context of economic instability, it is important for regions that are depressed due to agricultural specialisation, underdeveloped industry, including processing industries, and low incomes to find additional sources of financial support. Such

macro regions of Ukraine include the North-Western region, which includes Volyn and Rivne Oblast. An important source of mobilising additional financial resources for the development of the economic complex of this region could be an increase in foreign investment. After all, local business entities do not have sufficient internal resources to expand existing and create new production facilities based on the use of the region's powerful natural resource potential.

Given the above, we believe that the regional policy of financial support for sustainable development in the North-Western region, in addition to the traditional tasks of financing the implementation of the SDGs, should focus on a number of priority areas, and each of them should be accompanied by the main tasks and measures (Figure 3.8).

The war in Ukraine has caused significant damage to the regional economy, including the North-Western Region. The recovery and sustainable development of the region requires effective financial support.

The regional policy of financial support for the sustainable development of the North-Western region of Ukraine during the war should be based on certain priority areas and include the allocation of main tasks and key measures:

Priority area 1: Generating additional revenues from the integrated use of natural resources and conditions of the Polissya area.

Main tasks:

1. Expanding the areas of integrated use of forest, land, water, recreational, mineral and tourist resources of the Polissya region.
2. Attracting external investors for integrated harvesting, processing, and restoration of the region's natural resources on a partnership basis.

Key events:

1. Development and implementation of a regional programme for the integrated use of natural resources in the Polissya region. The programme should include:

- identifying priority areas for the integrated use of the region's natural resources;
- developing a regulatory framework for the programme;
- introducing mechanisms to stimulate business development in the environmental sector;
- creating conditions for international cooperation in the field of integrated use of the region's natural resources.

2. Introduce new mechanisms for licensing and quota-based natural resource use. New mechanisms should be aimed at increasing the efficiency of natural resource use and protecting the environment.

3. Creating conditions for the development of small and medium-sized businesses in the environmental sector. This can be achieved by providing financial, advisory and other types of support to small and medium-sized businesses.

4. Attracting international financial assistance and grants for the implementation of projects for the integrated use of natural resources in the Polissia region. International financial assistance and grants can be used to finance research, development, design work, and training in the field of integrated use of natural resources.

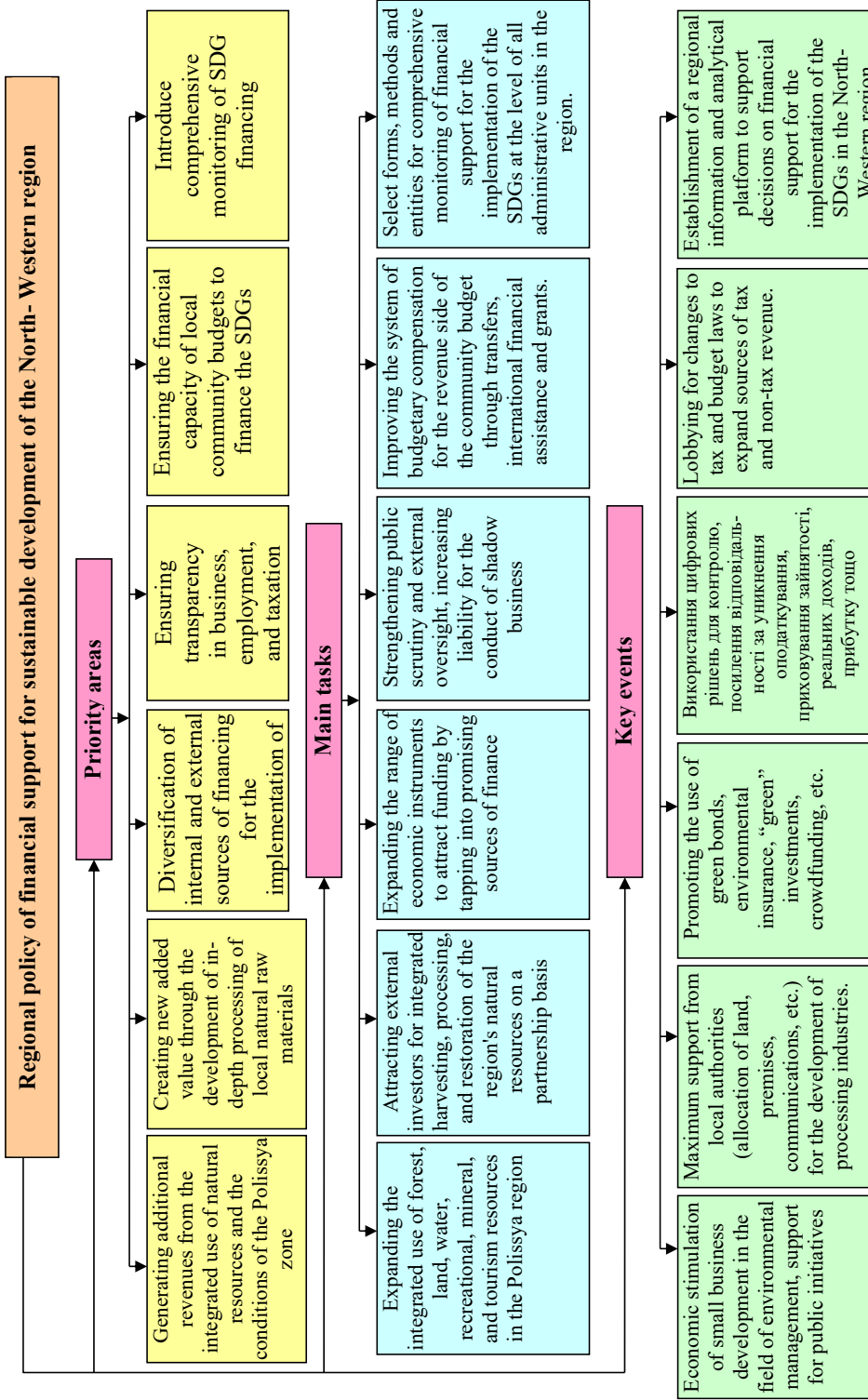


Figure 3.8. Main provisions of the regional policy of financial support for sustainable development in the North-Western region

Source: developed by the authors

Priority area 2: Creating new added value through the development of advanced processing of local natural raw materials.

Main tasks:

1. Development of processing industries that will create new jobs and increase the added value of products made from local raw materials.
2. Attracting investment in the development of the processing industry.

Key events:

1. Develop and implement a regional programme for the development of the processing industry. The programme should include:
 - identifying priority areas for the development of the region's processing industry;
 - developing a regulatory framework for the implementation of the programme;
 - introducing mechanisms to stimulate the development of the processing industry;
 - creating conditions for international cooperation in the development of the processing industry.
2. Creating conditions for the development of small and medium-sized businesses in the processing of local raw materials. This can be achieved by providing financial, advisory and other types of support to small and medium-sized businesses.
3. Introduce tax incentives for the development of the processing industry. Tax incentives can be used to reduce the tax burden on processing companies and to provide tax benefits to investors in the processing industry.
4. Attracting international financial assistance and grants for the implementation of processing industry development projects. International financial assistance and grants can be used to finance research, development, design work, and training in the processing of local raw materials.

Priority Area 3: Diversifying internal and external sources of financing for the SDGs.

Main tasks:

1. Expanding the range of economic instruments to attract funding by tapping into promising sources of finance.
2. Attracting international financial assistance and grants for the implementation of the SDGs.

Key events:

1. Develop and implement a regional investment attraction programme. The programme should include:
 - identifying priority areas for attracting investment;
 - developing a regulatory framework for the implementation of the programme;
 - introducing mechanisms to stimulate investment attraction;
 - creating conditions for international cooperation in attracting investment.
2. Introduction of green bonds, environmental insurance, green investments, crowdfunding, etc. These instruments will allow attracting financial resources for the implementation of projects aimed at protecting the environment, using eco-friendly technologies, etc..

3. Attracting international financial assistance and grants for the implementation of the SDGs.

Priority area 4: Ensuring transparency in business, employment, and taxation.

Main tasks:

1. Strengthening public scrutiny and external oversight, increasing liability for the conduct of “shadow business”.

Key events:

1. Implementation of digital solutions for control, including the use of electronic registers, electronic documents, electronic payments, etc. This will automate control processes and make them more efficient.

2. Increase liability for tax avoidance, concealment of employment, real income, profits, etc. This can be achieved by increasing sanctions for violations of tax legislation.

Priority area 5: Ensuring the financial capacity of local community budgets to finance the SDGs.

Main tasks:

1. Improving the system of budgetary equalisation of the revenue side of community budgets through transfers, international financial assistance, and grants.

Key events:

1. Develop and implement a regional budget equalisation programme.

The programme should include:

- defining the criteria for budget equalisation;
- developing mechanisms for budget equalisation;
- create a system for monitoring the effectiveness of budget equalisation.

2. Attracting international financial assistance and grants to ensure the financial viability of local community budgets. International financial assistance and grants can be used to finance investment projects that will create new jobs and increase the income of local communities.

Priority area 6: Implementing integrated monitoring of SDG financing.

Main tasks:

1. Selection of forms, methods, and entities for comprehensive monitoring of financial support for the implementation of the SDGs at the level of all administrative units in the region.

Key events:

1. Develop a regional system for comprehensive monitoring of SDG financing.

The system should include:

- defining monitoring goals and objectives;
- development of monitoring methods;
- identification of monitoring subjects;
- establishing a system of reporting on monitoring results.

2. Involvement of the public in monitoring. Public participation in monitoring will ensure transparency and effectiveness of financial support for SDG implementation.

Implementation of these measures will create a proper basis for improving the system of financial support for sustainable development of the North-Western region of Ukraine.

In addition to the main measures described above, additional measures should be taken to ensure effective financial support for the sustainable development of the Northwest region of Ukraine during the war.

These measures include:

1. To develop and implement a programme to support small and medium-sized enterprises in the field of sustainable development. The programme should provide financial, advisory and other support to small and medium-sized enterprises implementing sustainable development projects.

2. Introduce mechanisms to encourage investment in sustainable development. These mechanisms may include tax breaks, cost reimbursements, and other benefits for investors.

3. Creating conditions for international cooperation in the field of sustainable development. This can be achieved through the conclusion of international cooperation agreements and the involvement of international organisations in the implementation of sustainable development projects.

The implementation of these additional measures will not only attract additional financial resources for the implementation of the SDGs, but also increase the efficiency of their use.

In order to implement the priority directions of the regional policy of financial support for the sustainable development of the North-Western Region, it is advisable to apply the following main economic incentives:

1. Tax incentives in the form of tax reductions or exemptions. They can be introduced for individual companies or organisations that implement sustainable development projects. Tax incentives can be used to encourage the following actions:

- investing in sustainable development;
- development of small and medium-sized businesses in the field of sustainable development;
- attracting international assistance to implement projects in the field of sustainable development.

2. Financial support in the form of additional funding to companies or organisations carrying out sustainable development projects. Financial support may take the form of grants, loans, subsidies, etc. and may be aimed at encouraging the following actions:

- development of infrastructure in the field of sustainable development;
- conducting educational and training programmes in the field of sustainable development;
- involvement of the population in the implementation of sustainable development projects.

3. Trade preferences in the form of preferential terms of trade for goods or services produced as part of sustainable development projects. Trade preferences can be introduced to encourage actions such as:

- development of exports of goods or services produced within the framework of sustainable development projects;
- attracting investments in the production of goods or services produced within the framework of sustainable development projects.

4. Investment incentives in the form of tax reductions or exemptions on income generated by sustainable development investments, which may be aimed at stimulating actions such as:

- attracting investment in the production of goods or services produced using environmentally friendly technologies;
- attracting investments in the development of infrastructure that promotes sustainable development;
- attracting investments in the development of small and medium-sized businesses in the field of sustainable development.

5. Green loans, which should be provided for the implementation of sustainable development projects. They can be provided on preferential terms, such as a reduced interest rate or a longer repayment period, and can be aimed at stimulating actions such as:

- investing in energy production from renewable sources;
- adoption of energy efficient technologies;
- implementation of environmental protection measures.

6. Standards and certifications that make it possible to assess the compliance of products, services or processes with certain requirements, including sustainability requirements, and that can be used to promote actions such as:

- producing goods or services that meet sustainable development requirements;
- implementation of environmental protection measures;
- involving consumers in sustainable consumption.

The choice of specific economic incentives for the implementation of the priority areas of the regional policy of financial support for sustainable development of the North-Western Region should be made taking into account the following factors:

- goals and objectives of priority areas, since economic incentives should be aimed at achieving specific goals and objectives of priority areas;
- the object of the incentives, since economic incentives should be aimed at stimulating specific actions or decisions;
- economic efficiency, because economic incentives should be cost-effective, i.e. they should contribute to the achievement of the set goals at minimal cost.

For the successful use of the considered economic incentives for the implementation of the priority areas of the regional policy of financial support for the sustainable development of the North-Western Region, it is important to develop and approve the relevant regulatory framework that will regulate the procedure for granting economic incentives, create mechanisms for implementing economic incentives, and conduct ongoing information and awareness raising in this area.

The implementation of the identified economic incentives will increase the efficiency of the implementation of the priority areas of the Regional Policy of Financial Support for Sustainable Development of the North-Western Region.

We believe that the implementation of the SDGs in the depressed areas of the Polissia zone in the North-Western region should be one of the priority tasks.

To achieve this, it is necessary to improve the system of financial support for the implementation of the SDGs, which will help to find additional financial resources that can become an effective economic tool for achieving this goal.

In order to find additional financial resources to finance the implementation of the SDGs in the depressed areas of the Polissya zone within the North-Western Region, the following measures can be proposed:

1. Small and medium business development in the sustainable development field.

Small and medium-sized enterprises can be an important source of financial resources for the implementation of the Sustainable Development Goals. To this end, it is necessary to develop and implement a program to support small and medium business in the area of sustainable development. This programme should provide financial (in the form of grants, loans, subsidies, etc.), advisory (in the field of business planning, marketing, management, etc.) and other support (such as access to education and training programmes in the field of sustainable development) to small and medium-sized enterprises that implement projects in the field of sustainable development.

2. Attracting investment in sustainable development.

Investment can be an important source of financial resources for the implementation of the Sustainable Development Goals. To this end, it is necessary to develop and implement mechanisms to encourage investment in sustainable development. These mechanisms may include tax incentives (in particular, tax exemption for profits generated by sustainable development projects), reimbursement of costs incurred in implementing sustainable development projects, and other benefits for investors (access to public procurement, land, etc.).

3. Creating conditions for the development of international cooperation in the field of sustainable development.

International cooperation can be an important source of financial resources for the implementation of the Sustainable Development Goals. To this end, it is necessary to conclude international cooperation agreements, as well as to involve international organizations in the implementation of sustainable development projects, and to actively participate in international programs and projects funded by external sources.

In order to assess the effectiveness of the implementation of the proposed measures to find additional financial resources to finance the implementation of the Sustainable Development Goals in the districts of Polissya region, it is necessary to:

- develop a system of performance indicators that will meet the goals and objectives of these measures;
- organize data collection and analysis, as it is necessary to collect and analyze data on the implementation of measures in order to assess their effectiveness;
- ensure the preparation of analytical reports, as it is necessary to prepare reports on the effectiveness of actions based on the collected and analyzed data.

Accordingly, based on the assessment of the effectiveness of the measures, it will be possible to determine whether the goals and objectives have been achieved and to make the necessary adjustments to their implementation.

We believe that the implementation of the planned measures to improve the system of financial support for the sustainable development of this region will achieve the following results:

- increase regional income through integrated use of natural resources and development of processing industries;
- creation of new jobs in the field of environmental management and processing;
- attract investment for the development of the region;
- increasing the transparency and efficiency of financial support for the implementation of the SDGs.

The results obtained will contribute to the sustainable development of the North-Western region of Ukraine during the war, as well as attract additional financial resources for the implementation of the SDGs in the depressed areas of the Polissya region.

In order to effectively implement measures to improve the financial sector in the region, it is also important to focus on a number of important tasks for the implementation of the SDGs in the North-Western region:

1. Ensure appropriate economic incentives for the implementation of the SDGs. This requires improving tax, budget and customs legislation to find additional economic incentives for businesses, territorial communities, public authorities and citizens in the region.

2. Align the actions envisaged by the SDGs with other programs and projects implemented in the region. This will help avoid duplication of efforts and increase the efficiency of the use of financial resources.

3. Conduct awareness-raising among the population and the business community about the importance of implementing the SDGs. This will make it possible to involve the general public in the process of implementing the SDGs.

The implementation of these recommendations will create organizational and economic conditions for increasing the level of financial support for the sustainable development of the North-Western region of Ukraine during the war and in the post-war period.

3.3. Directions for improving the system of financial support for sustainable development of the region

We believe that for the successful implementation of the identified key provisions of the regional policy of financial support for sustainable development of the North-Western region, it is important to make changes in the system of financial support itself.

At the same time, the improved system should be based on the elements of the management approach, i.e., have certain resources at the input, which, after the interaction of decision-making subjects and objects, will allow to obtain the desired target result at the output.

Based on these provisions, a promising scheme for the functioning of the system of financial support for sustainable development of the North-Western region has been developed (Figure 3.9). It should be noted that this system will operate

under the constant influence of a number of external factors that will contribute to sustainable financing or, on the contrary, create additional risks for financing. Certain facilitating factors include the relative military security of the region, the preserved infrastructure, the proximity to the EU border, the presence of unique natural ecosystems, etc. On the other hand, additional risks are created by the presence of a military threat from the Belarusian border, a relatively lower level of economic development in the North-Western region, financial insufficiency of communities, agrarian orientation of the state economic complex, difficult demographic and migration situation, etc.

The key to the development of the North-Western region lies in its resources (human, natural and climatic, spatial and geographical, financial, logistical, informational, historical and cultural), which should be used to the maximum for the achievement of the SDGs. At the same time, the attraction of these resources should be carried out to realize the main goal of financial support, which is to generate additional financial resources for the adequate financing of SDG implementation activities in the North-Western region.

The internal environment of the financial support system includes a combination of several elements, including traditional and future sources of financing, economic instruments for attracting financial resources, and related forms and methods of financing. In addition, appropriate administrative and managerial support for financing (including decision-making bodies), functional support for financing (including key financing processes), organizational and economic support for financing (i.e., a set of rules and regulations for financing), and information and analytical support (a set of key indicators of financing efficiency) are envisaged to strengthen activities aimed at achieving the SDGs. The interaction of these elements will make it possible to intensify economic activity at the local level (acting as the subject of financing), in order to achieve all the SDGs defined for the region.

Successful interaction of all these subsystems will allow to achieve certain financial results (expected indicators of achievement of SDGs, ensuring self-sufficiency of business, self-sufficiency of local budgets, increasing the level of welfare of the population, ensuring financial independence of the country and the region, ensuring quantitative and qualitative recovery of financial losses due to the war, etc.).

Accordingly, the results obtained should be compared with the target indicators and a decision made as to whether the defined SDGs have been fully achieved, whether certain refinements are needed, or whether new target indicators should be set.

The key to the functioning of the developed system is the transition to the predominant use of promising sources of financing, such as: environmental insurance, international grants, “green” and “blue” bonds, green project financing, donor funds for reconstruction, guarantees, “green” investments, crowdfunding, etc.

It is also important to use a combination of different forms and methods of financing (self-financing, budget financing, lending, investment, insurance, tax, guarantee, rent, leasing, factoring, etc.) in the process of functioning of this system, forming their specific sets for the implementation of individual important projects aimed at achieving a set of several SDGs.

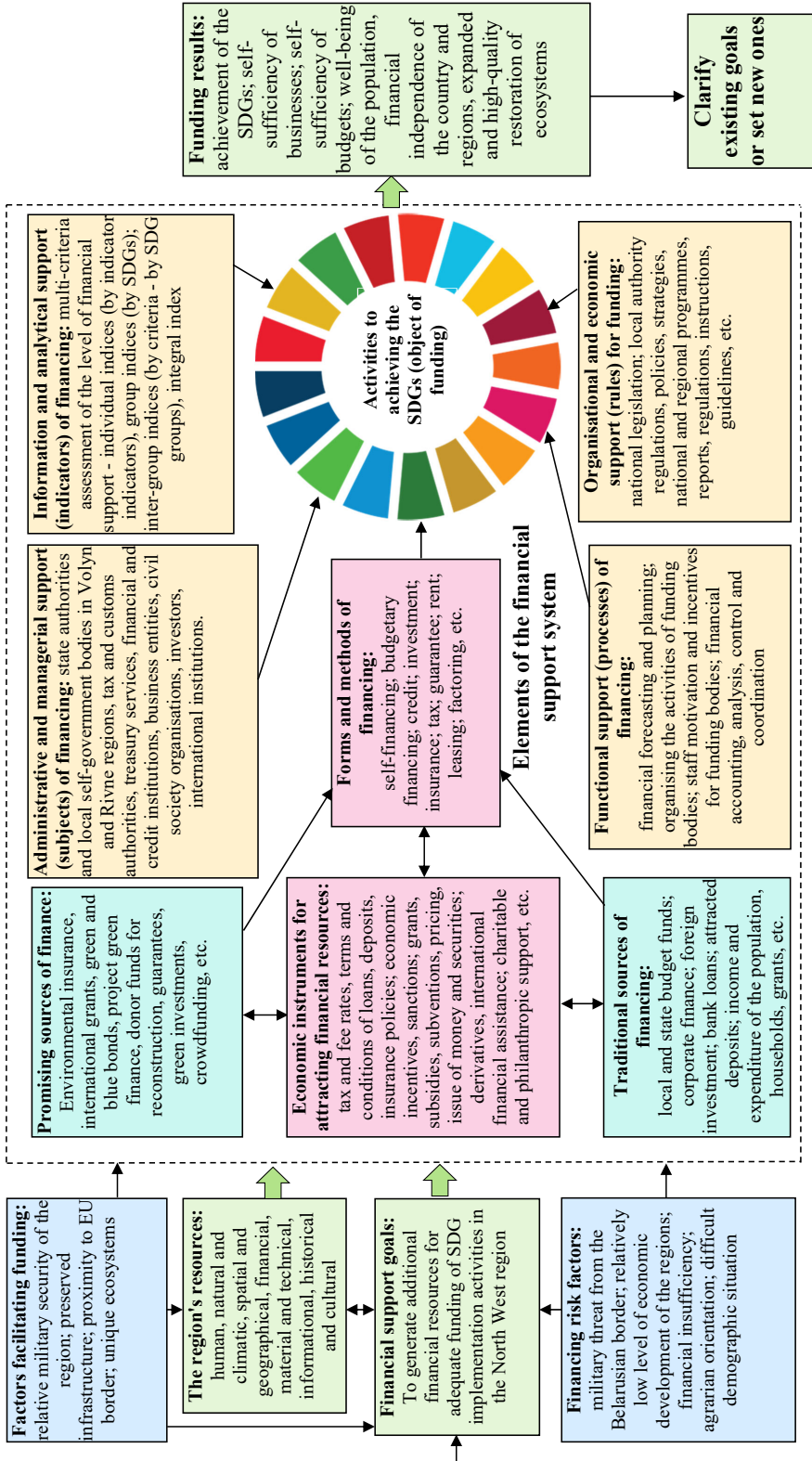


Figure 3.9. Prospective scheme of functioning of the system of financial support for sustainable development of the North-Western region

Source: developed by the authors

A certain driver for the active functioning of the improved system of financial support for sustainable development in the North-Western region should be the widespread use of financial incentives for sustainable development.

The issues of financial incentives for sustainable regional development, both in Ukraine and abroad, remain highly relevant. They are especially relevant in the context of the war in the North-Western region, as the state's financial capabilities are decreasing and regional and global risks may increase. These problems have been studied by many scholars [74–76; 83–85], but more attention needs to be paid to research on the choice of the most effective incentives to maintain the chosen path of sustainable development despite the negative consequences of the war.

War conditions may pose a number of challenges to financial incentives for sustainable development in the regions of western Ukraine. Some of these challenges are:

1. Economic instability. A prolonged war can lead to a decline in investment and economic activity in the region. This can make it difficult to finance sustainable development projects and secure the necessary resources.

2. Reduced budget allocations. Finally, the war may result in a reallocation of budgetary resources to military needs and a reduction in funding for sustainable development programs. This may limit the availability of financial resources for the implementation of development projects in the regions.

3. Reduced investment attractiveness. War and conflict can affect the investment attractiveness of regions. Instability, military threats and uncertainty can reduce investor interest in the region, making it difficult to attract financing for sustainable development.

4. Difficulties in attracting external aid. The continuation of the war may complicate the process of attracting external financial assistance for the sustainable development of the regions. International organizations and donors may be limited in providing financial assistance due to security risks and difficult conditions.

5. Increased funding needs. A protracted war can lead to increased funding needs for rehabilitation of affected areas, social support and humanitarian issues. This can lead to a reduction in funding for sustainable development projects.

For a more in-depth study of these issues, it is recommended to refer to recent research, analytical reports and publications related to financial incentives for sustainable development in the context of war and conflict in Ukraine.

The war makes it much more difficult to provide financial incentives for sustainable regional development, but there are still some measures that can contribute to the efficient use of financial resources and increase the effectiveness of regional development in Western Ukraine. Some of these measures are:

1. Facilitating business. Providing favorable conditions for business can stimulate its development and attract investment to the regions. This may include lowering tax rates, simplifying business registration procedures, and providing financial and advisory support to businesses.

2. Infrastructure development. Investing in the development of transportation, energy, and information infrastructure can make regions more attractive to businesses

and investors. This can include building roads, expanding energy networks, and introducing modern communications and Internet technologies.

3. Support small and medium enterprises. Small and medium-sized enterprises can be the engine of economic development in regions. Providing financial, advisory and training support to these businesses can help them grow and stimulate regional development.

4. Human capital development. Investment in education, training and professional development of employees will increase the competitiveness of the regions. The development of educational programs and training centers, scholarships and support for highly qualified personnel will strengthen the human potential of the regions.

5. Attract new investment. The development and implementation of an effective investment attraction strategy can stimulate regional development. Attractive investment conditions, the existence of special economic zones, tax incentives and other measures can attract investors to the regions.

In particular, the following economic incentives can be considered to stimulate the sustainable development of the Volyn and Rivne Oblasts:

1. Providing favorable conditions for investors can attract new investment to the region. This includes lowering tax rates, providing preferential tax treatment for businesses that develop in sustainable areas, and providing support to investors in the form of subsidies, grants, or reduced-interest loans.

2. Investing in the development of transportation, energy, social, and information infrastructure can improve the business environment and make regions more attractive to investors. This includes building roads, expanding energy networks, improving access to education, health care and other social services, and introducing modern communications and Internet technologies.

3. Investment in education, training and skills development can increase the competence of workers and ensure the availability of a skilled workforce. The development of educational programs, training centers, and support for internships and apprenticeships can contribute to the development of human capital in the oblasts.

4. Support for small and medium-sized enterprises can stimulate the development of economic activity in regions. This can include providing financial assistance, loans, grants or subsidies to entrepreneurs, facilitating the establishment of business incubators and entrepreneurial centers, and providing access to business advice and support.

5. Development of tourism, as Volyn and Rivne Oblasts have rich cultural and natural potential. Investments in the development of tourist infrastructure, popularization of tourist attractions and events, creation of tourist routes and packages can attract tourists and contribute to the development of the tourism sector.

All this can contribute to the sustainable development of Volyn and Rivne Oblasts, but it is important to analyze the specific characteristics and needs of these regions and to involve stakeholders in the development and implementation of effective incentive strategies.

Thus, the successful implementation of the presented measures will contribute to the effective financial stimulation of the sustainable development of the North-Western region of Ukraine in the context of the war, but it should be borne in mind that each region, administrative district, community or settlement has its own characteristics.

Therefore, in the future it is important to move from general concepts, strategies and policies to the specification of tasks within the framework of development of detailed programs, taking into account regional specifics, external security risks (primarily those bordering with Belarus), based on the study of specific problems and opportunities of the respective territory to implement measures for financial stimulation of its sustainable development.

In order to implement the priority area identified in the regional policy related to the need to create new added value through the development of in-depth processing of local natural raw materials, it is proposed to implement a model to generate additional financial resources for the implementation of the SDGs in the North-Western region by stimulating the creation of new added value in the real sector of the economy (Figure 3.10).

his model envisages the use of a number of direct and indirect economic incentives to actively stimulate the increase in the value of certain elements of the added value of the real sector of the region's economy, so that the explicit and implicit results obtained exceed the total amount of the incentive costs incurred. Therefore, the main task in the formation of this model is to ensure that the direct or indirect effects of economic incentives are achieved in order to generate additional financial resources for the implementation of the SDGs in the North-Western region.

The main elements of value added, which according to the Tax Code of Ukraine [61] are subject to VAT and are subject to incentives, include: wages, social contributions, as well as local taxes and fees, financial expenses, net profit, as well as income tax and value added tax.

Direct incentives for the growth of the “labor compensation” element include measures to de-shadow employment and wages in the region, which will ultimately generate additional economic benefits in the form of an increase in the number of employees and an increase in the average salary, which will increase the real income and purchasing power of the local population. Instead, by expanding the program of temporary compensation of the unified social tax for employers, it will be possible to increase the amount of such a component of value added as “social spending” with a certain time lag”.

This will allow for an increase in unified social tax payments after the grace period ends, a further increase in social insurance contributions, and ultimately an increase in social benefits from social insurance funds.

Direct incentives for the growth of such a value-added component as “local taxes and fees” may include a reduction in rates or temporary exemptions from local taxes, which, after a certain time lag, will increase tax revenues to local budgets at the end of the grace period, allowing further redistribution of these funds to increase municipal spending on utilities, social protection, environment and safety.

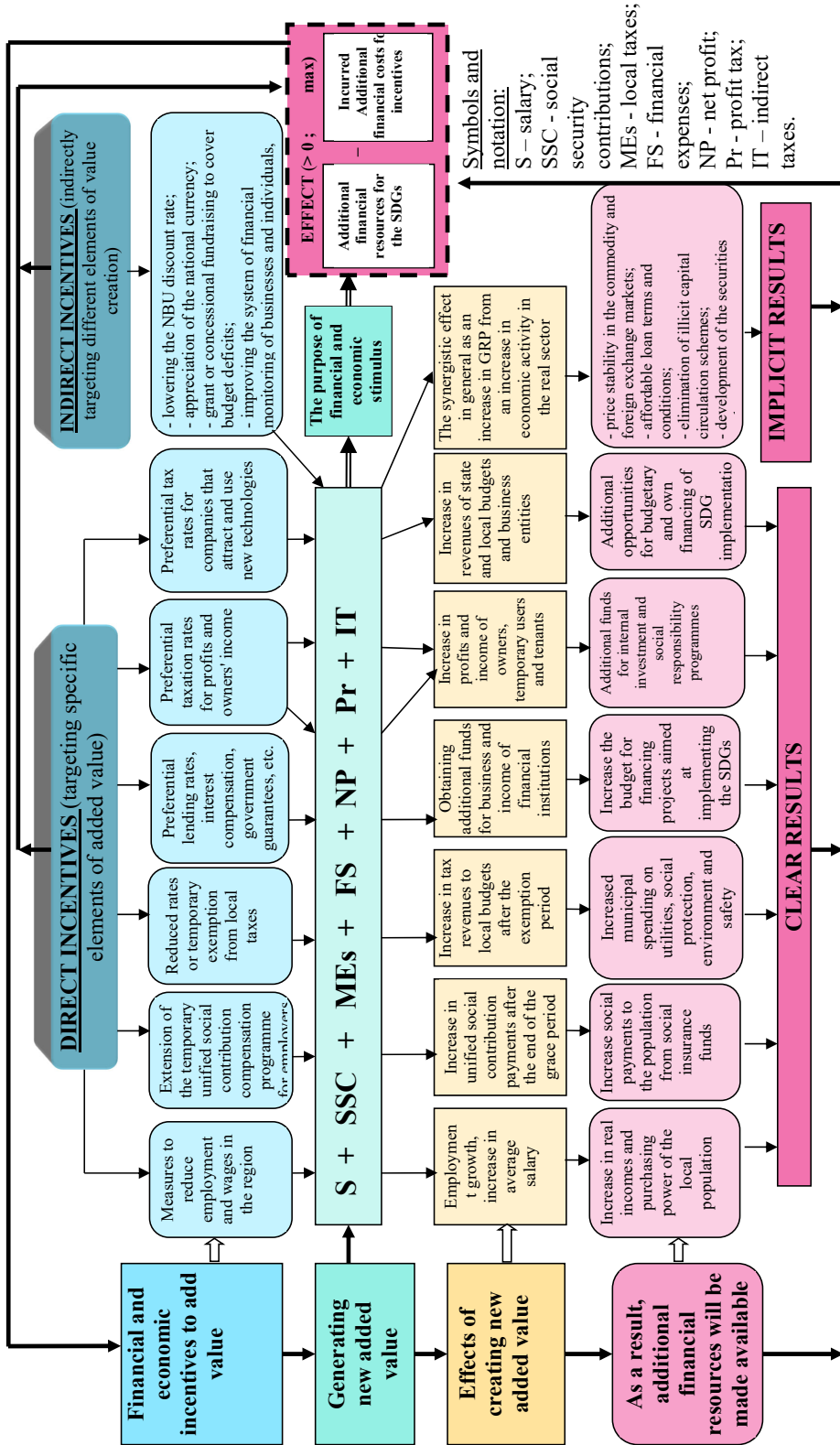


Figure 3.10. Model for generating additional financial resources for the implementation of the SDGs in the North-Western region by stimulating the creation of new added value in the real economy

Source: developed by the authors

Other effective incentives related to the added value component of “financial costs” include the establishment of preferential lending rates, interest compensation, and government guarantees, which, by generating additional funds for businesses and revenues for financial institutions, will significantly increase the budget for financing projects aimed at implementing the SDGs.

The main economic incentives for the growth of one of the most important elements of added value for business owners, “net profit”, include the establishment of preferential tax rates on profits and owners' income, which will contribute to the growth of profits and income of owners or temporary users, tenants and will allow to obtain additional funds for internal investments and implementation of social responsibility programs.

It should be noted that the stimulating effect on other tax elements of value added, in particular “income tax” and “value added tax” by establishing preferential tax rates for entities that attract and use new technologies, will increase revenues of state and local budgets, business entities, and create additional opportunities for expanding budgetary and own financing of the implementation of the SDGs in the North-Western region.

A number of indirect incentives to increase value added, which indirectly affect the various elements of value added, include: lowering the NBU discount rate, appreciation of the national currency, grants or concessional financing to cover budget deficits, improvement of the system of financial monitoring of enterprises and households, etc.

As a result of direct and indirect incentives aimed at the growth of each of the above-mentioned elements of added value, in addition to the effects discussed above, an additional synergy effect is expected to be achieved, which will manifest itself in: price stability on the commodity and foreign exchange markets; creation of affordable conditions for attracting loans; elimination of illegal capital turnover schemes; development of the securities market; development of the insurance market, etc.

In the future, as part of the implementation of such a priority area of the regional policy of financial support for sustainable development as the introduction of comprehensive monitoring of financing for the implementation of the SDGs, it is proposed to create a new information and analytical structure – the Regional Platform for Supporting Decisions on Financial Support for the Implementation of the SDGs in the North-Western region. The main functions of the groups of participants of this Regional Platform are presented in Figure 3.11.

At the initial stage, it is proposed to attract grant funds to organize its ongoing activities, as well as contributions from participants among business entities of all forms of ownership.

The Regional Platform for Supporting Decisions on Financial Support for the Implementation of the SDGs in the North-Western region (hereinafter referred to as the Platform) should become a permanent body that will help create appropriate organizational and economic conditions for effective financial support for the implementation of the SDGs in the region. It is proposed to include in the Platform state institutions, local governments, civil society institutions, business entities, representatives of international financial, governmental and municipal institutions and business.

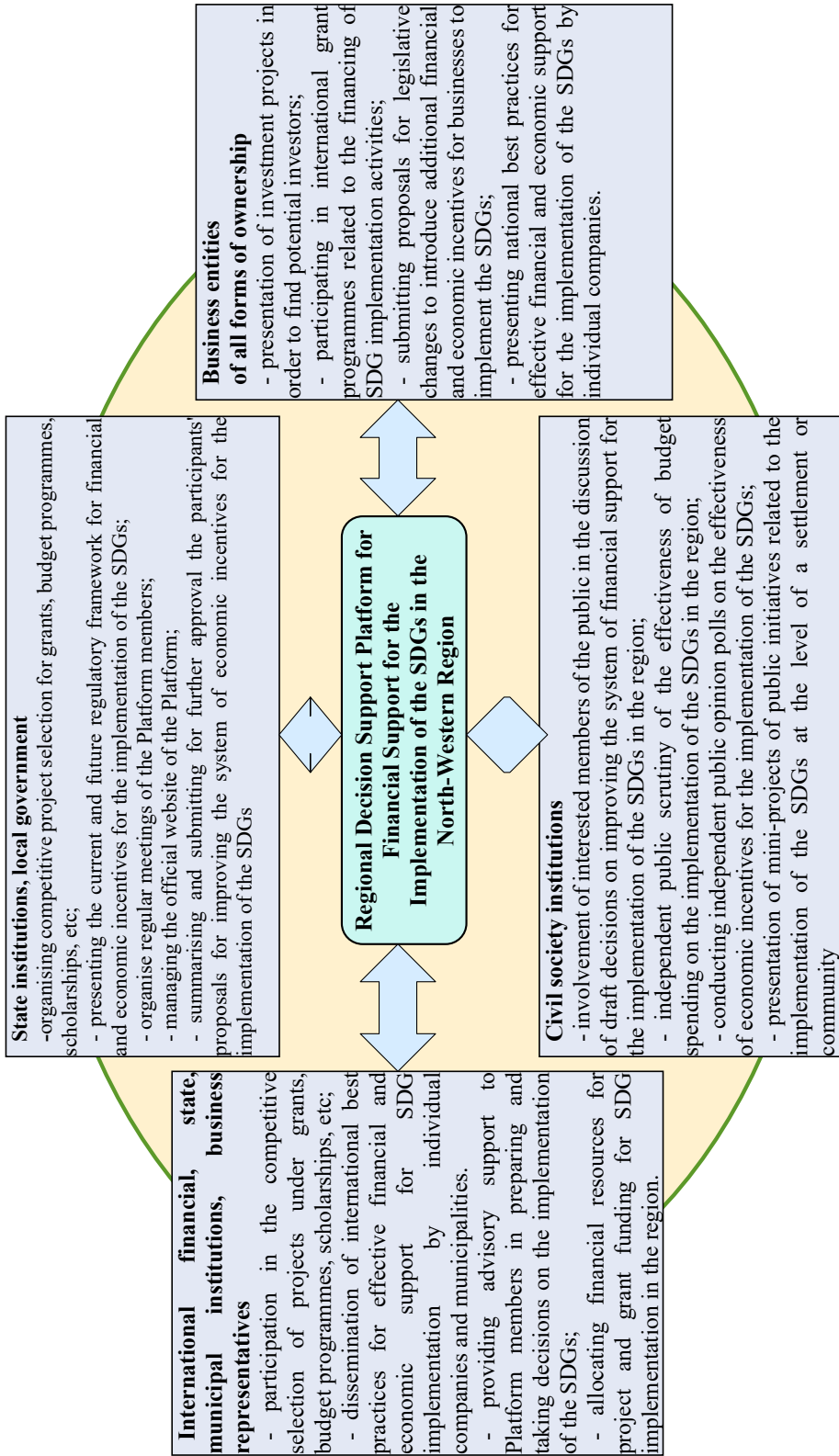


Figure 3.11. Main functions of the groups of participants of the Regional Decision Support Platform for Financial Support for the SDGs in the North-Western region

Source: built by the authors

The general functions of the participants of this Platform include:

1. Participate in the development and implementation of an action plan for financial support for the implementation of the SDGs in the region. The action plan will identify specific measures to be taken to ensure financial support for the implementation of the SDGs in the region, as well as those responsible for their implementation and sources of funding.

2. Collaborate with state authorities, local governments, businesses, NGOs and other stakeholders to ensure effective financial support for the implementation of the SDGs in the region. Platform members will be able to exchange information, experiences and best practices, as well as collaborate on the implementation of specific activities.

3. Monitoring the implementation of the action plan on financial support for the implementation of the SDGs in the region. Platform members may monitor the implementation of the action plan and make recommendations for its improvement. The specific functions of the Platform members will be determined by their roles and responsibilities. Thus, representatives of public authorities will be responsible for the development and implementation of state policy in the area of financial support for the implementation of the SDGs, representatives of local self-government – for the development and implementation of local policy in this area, business entities – for the generation and redistribution of financial resources for the implementation of the SDGs, representatives of civil society institutions – for public control over the implementation of the SDGs.

Thus, the Regional Platform for Supporting Decisions on Financing for the SDGs in the Northwest Region is an important tool for ensuring effective financing for the SDGs in the region. The Platform members can join their efforts to develop and implement effective measures that will ensure adequate financing for the implementation of the SDGs in the region.

Special functions will vary depending on the membership of a particular participant of the Platform to a particular group.

In particular, we specify the *special functions of state institutions and local governments*:

1. Organizing competitive project selection for grants, budget programs, scholarships, etc. This function is one of the main functions of state institutions and local governments, as competitive project selection is an important tool for attracting financial resources for the implementation of the SDGs. This allows for the selection of the best projects, which meet the goals of the SDGs and have a high potential for effectiveness.

At the level of regions, cities, counties and municipalities, state institutions and local governments can organize competitive project selection based on the use of various sources of funding:

- state grants proposed to be awarded on a competitive basis for the implementation of projects in the field of SDGs implementation;
- budget programs that are proposed to be used to finance projects, including those related to the implementation of the SDGs;

– scholarships proposed to be granted for training and professional development of persons who will participate in the implementation of the SDGs.

2. Presentation of the current and prospective regulatory framework for financial and economic incentives for the implementation of the SDGs. This function is also important for ensuring the transparency and efficiency of the financial support system for the implementation of the SDGs. State institutions and local governments should regularly inform the Platform members about the current and prospective regulatory framework in the area of financial and economic incentives for SDG implementation. This will help the Platform members to better understand the conditions and procedure for obtaining financial support for the implementation of the SDGs.

3. Organize regular meetings of Platform members. This will allow for the exchange of information, experiences and best practices in the field of financial support for the implementation of the SDGs. They will also facilitate the development of partnerships among Platform members, and ensure the effective implementation of action plans for financing the implementation of the SDGs.

4. Administration of the official website of the Platform. The official website of the Platform will contain up-to-date information on its composition, functions, action plans and other relevant information. Administration of the official web-site of the Platform shall contribute to ensuring broad public awareness of the activities of the Platform and its role in ensuring effective financial support for the implementation of the SDGs.

5. Summarize the proposals of the Platform participants on improving the system of economic incentives for the implementation of the SDGs, and submit them for further approval. State institutions and local governments will be able to summarize the Platform participants' proposals for improving the system of economic incentives for the implementation of the SDGs. These proposals may relate to such issues as: expanding the sources of financing for the implementation of the SDGs, improving the process of competitive selection of projects, and introducing new instruments of economic incentives for the implementation of the SDGs.

The general proposals of the Platform participants should be considered and taken into account by the relevant state and local authorities.

We will further specify *the special functions of business entities of all forms of ownership*:

1. Presentation of investment projects in order to find potential investors. Business entities of all forms of ownership will be given the opportunity to present investment projects to find potential investors, in particular in the following priority areas, which are also identified in the Development Strategies of Volyn and Rivne Regions: infrastructure development, environmental rehabilitation, digital transformation, and human capital development. This will allow business entities to find potential investors interested in the implementation of the SDGs.

2. Participation in international grant programs related to financing the implementation of the SDGs. Finally, business entities of all forms of ownership can participate in international grant programs related to the financing of SDGs

implementation, which can provide grant support for projects in the following areas: development of small and medium-sized enterprises, innovation development, export growth, and social sphere. This will allow them to receive additional funding for the implementation of projects that meet the goals of the SDGs.

3. Submission of proposals for amendments to legislation for the introduction of additional financial and economic incentives for business to implement the SDGs. Business entities of all forms of ownership may submit proposals for the introduction of additional financial and economic incentives for business to implement the SDGs. These incentives may relate to issues such as the reduction of the tax burden, the introduction of low-interest loans, and subsidies for the purchase of equipment and technology. In this way, business entities will be able to influence the formation of an effective system of financial and economic incentives for business to implement the SDGs.

4. Presenting the best domestic practices of effective financial and economic support for the implementation of the SDGs by individual business entities. In this way, businesses will be able to share their own progressive experiences and take into account the experiences of leading businesses in effective financial and economic support for the implementation of the SDGs in the relevant area. These practices may include attracting investment, obtaining grants, taking advantage of tax benefits, and implementing financial mechanisms to support employees.

At the next stage, will compete special functions of civil society institutions:

1. Involvement of interested public representatives in discussions of draft decisions on improving the system of financial support for the implementation of the SDGs in the region. Civil society organizations will be able to participate in discussions of draft decisions on improving the system of financial support for the implementation of the SDGs in the region, as well as express their views and suggestions on how to improve the system of financial support for the implementation of the SDGs.

2. Implementation of independent public control over the effectiveness of budget spending for the implementation of the SDGs in the region. Civil society institutions can exercise independent civic control over the effectiveness of budget spending for the implementation of the SDGs in the region. This will help to identify possible violations and shortcomings in the use of budget funds and take measures to eliminate them.

3. Conducting independent public opinion polls on the effectiveness of economic incentives for the implementation of the SDGs, which is important to get feedback from the public on the effectiveness of economic incentives for the implementation of the SDGs. Finally, civil society institutions will be able to conduct independent public opinion polls on the effectiveness of economic incentives for SDG implementation. This will allow us to assess whether these incentives are achieving their objectives, and whether there is a need to improve them.

4. The presentation of mini-projects of civic initiatives related to the implementation of the SDGs at the level of a settlement or community is very important to involve the public in the implementation of the SDGs at the local level. Civil society institutions will be able to submit mini-projects of civic initiatives

related to the implementation of the SDGs at the level of a locality or community, which will allow the implementation of the SDGs taking into account the needs of the residents of the territorial community.

At the final stage, we specify the *special functions of international financial, state and municipal institutions and business representatives*:

1. Involvement of international representatives in the competitive selection of projects within grants, budget programs, scholarships, etc. It is proposed to widely involve international representatives in the competitive selection of projects within grants, budget programs, scholarships, etc., which will ensure the transparency and impartiality of the competitive selection, as well as increase its effectiveness.

2. Disseminate best international practices for effective financial and economic support for the implementation of the SDGs by individual businesses and communities. Finally, international institutions and business representatives will be able to disseminate best international practices of effective financial and economic support for the implementation of the SDGs by individual businesses and communities, which will allow Platform participants to learn about new approaches and tools for financial support for the implementation of the SDGs.

3. Provide advisory support to Platform participants in the preparation and decision-making on the implementation of the SDGs. Representatives of these international organizations will be able to provide advisory support to the participants of the Platform on preparation and decision-making on the implementation of the SDGs, allowing them to obtain expert evaluation of their projects and decisions, as well as to avoid mistakes in the process of SDG implementation.

4. Allocation of financial resources for project and grant funding for the implementation of the SDGs in the region. It is important that international partners also provide financial support during the war to provide project and grant funding for the implementation of the SDGs in all administrative units of the North-Western region, which will enable the Platform members to receive the necessary funding to implement their projects in line with the SDGs.

It is proposed to assign a special role in the Platform's activities to the leading higher education institutions of the Northwest region (primarily specialized technical, natural science and humanities universities), as it is also proposed to actively involve their scientists and applicants in various project and grant competitions, exchange of experience, adoption of best foreign practices, etc. This will also help to improve the level of practical skills of applicants, improve the material and technical base of the universities involved, and maximize the employment of graduates in their chosen specialty, etc.

Therefore, the proposed Regional Decision Support Platform for Financial Support for the SDGs in the North-Western region will be a platform to bring stakeholders together to achieve a common goal – creating adequate financial support for the achievement of the SDGs in the region.

In the process of joint activities, it is also important that all participants are equal and their interests are taken into account to the greatest extent possible. This can

be achieved by establishing partnerships between all participants in the process of searching for, attracting, utilizing and redistributing financial resources for the implementation of the SDGs in the region. It should be noted, however, that the interests of individual participants often overlap, which poses the threat of increasing conflicts, unfair competition, lobbying for personal interests, corruption, etc.

To avoid this situation, it is proposed to create an institution at the level of a given region to balance the interests of financial and economic partnerships to implement regional strategies, projects, programs, and activities to achieve the SDGs, which would function according to the scheme shown in Figure 3.12.

This requires the search for application-based solutions to find the so-called “balance of interests” between different participants. Therefore, in this case, it is advisable to use an institutional approach that will allow for the formation of an appropriate regulatory framework for the implementation of financial and economic partnerships.

The mechanism of balancing the interests of all these subjects of financial and economic partnership should function on the basis of a number of important principles:

- complementarity and mutual benefit – successful achievement of the SDGs is possible only if the interests of all parties are taken into account and complemented, and each party should receive certain benefits from cooperation with other parties;
- openness and transparency – all parties should have access to information on the activities of other parties, as well as on decision-making processes for the implementation of the SDGs in the region, which will help to develop mutual trust;
- justice and equality – all parties should have equal opportunities to realize their interests.

These principles should become the basis for further implementation of mechanisms for balancing interests through the development of joint strategies and programs for the development of the region, the creation of joint projects and initiatives, interaction and cooperation at the level of government, business, the public and international institutions.

Specific mechanisms for balancing interests can be developed taking into account the specific conditions and needs of the region. For example, the following mechanisms can be introduced to increase the own revenues of local governments and utility companies: moderate and reasonable increase in utility fees, development of small and medium enterprises, attraction of green investments, etc.

To increase the profit and income of private business entities, such mechanisms can be introduced as: creating a favorable business climate, promoting the expansion of sales markets, etc.

To expand the sources and means of financing the implementation of the SDGs, the following mechanisms can be put in place: increasing tax revenues by introducing new taxes or increasing the rates of existing taxes, and attracting loans and grants from international financial institutions, as well as from national and local governments.

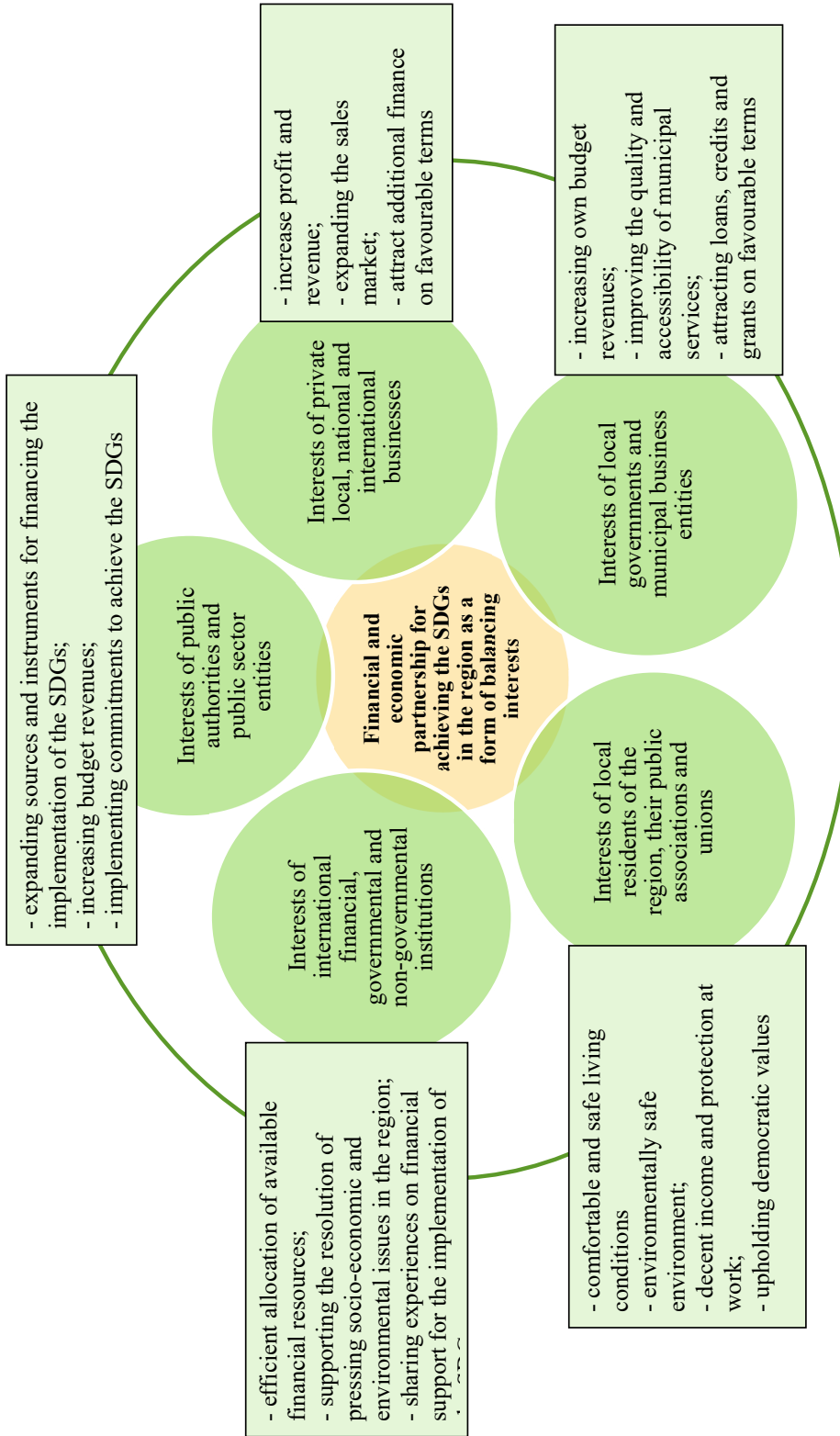


Figure 3.12. Scheme for balancing the interests of financial and economic partnership actors to implement regional strategies, projects, programs and measures to achieve the SDGs

Source: built by the authors

To ensure comfortable and safe living conditions for the local population, a number of mechanisms can be put in place, the implementation of which will correlate with the achievement of the SDGs in the region: further development of infrastructure (building roads, bridges, schools, hospitals, etc.), ensuring environmental safety (strengthening environmental protection, reducing pollution, etc.), ensuring decent income and labor protection (creating high-tech and well-paid jobs, providing additional social guarantees, etc.).

In order to ensure the effective allocation of available financial resources, international financial, governmental and non-governmental institutions can introduce mechanisms such as: developing transparent and effective schemes for the distribution of grants and loans (primarily for the most important needs of the region's SDGs), and expanding cooperation with local authorities and the public. The interests of the inhabitants of cities, towns, villages and communities should be a priority in all decisions.

Thus, the use of these mechanisms to balance the interests of financial and economic partnership actors will help ensure the successful achievement of the SDGs and improve the living conditions of the population of the North-Western region. The full-scale war has had a negative impact on the state of financing for the implementation of the Sustainable Development Goals in the North-Western region. In order to assess this impact, the estimated level of financial support was adjusted by the percentage of decline in Ukraine's GDP in 2022 (29.1%). According to the results of the analysis, the level of financial support for most of the goals and for all components, according to the integrated assessment, has decreased from medium to low. The Group's strategies for financial support of certain sustainable development goals are substantiated. Almost all of them are anti-crisis in nature, since the North-Western region has not provided high levels of financial support for sustainable development for certain goals.

The Regional Policy of financial support for the sustainable development of the North-Western region of Ukraine during the war should be based on the following priority areas: generating additional income from the integrated use of natural resources and conditions of the Polissya zone; creating new added value through the development of in-depth processing of local natural raw materials; diversifying internal and external sources of financing for the implementation of the SDGs; ensuring transparency in doing business, employment, taxation; ensuring financial capacity.

The implementation of measures aimed at improving the system of financial support for sustainable development will lead to the following results: increasing regional revenues from the integrated use of natural resources and the development of processing industries, creating new jobs in the field of natural resources management and processing, attracting investments in the development of the region, increasing the transparency and efficiency of financial support for the SDGs.

The system of financial support for the sustainable development of the North-Western region should include such elements as traditional and promising sources of financing, economic instruments for attracting financial resources, administrative

and managerial support for financing, functional support for financing, organizational and economic support for financing, and information and analytical support.

A model for generating additional financial resources for the implementation of sustainable development goals in the North-Western region by stimulating the creation of new added value in the real sector of the economy has been developed. This approach makes it possible to increase the efficiency of using financial resources to achieve sustainable development goals in the region.