Territorial aspect of forming united territorial communities

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Abstract. To ensure the rational use of land resources and manage them in the territory of Ukraine, it was introduced the process of decentralization of power. The article considers the main problems of newly created united territorial communities in the field of land management. In particular, during the study of domestic and foreign experience, as well as the detailed study of Skorokhodivska united territorial community of Chutiv district of Poltava region, the following problems were identified: uncertainty of the boundaries of united territorial communities territories; incomplete use of land outside settlements; lack of revenues to the local budget from the land payments; inability to plan activities due to lack of information on land resources; land pollution; refusal to meet the needs of citizens in land plots; lack of proposals to attract investors and business in united territorial communities; poor state of melioration systems maintenance and illegal use of abandoned forests. The main causes of these problems are analyzed in the article and the ways of their solution are suggested.

1. Introduction
To date, many settlements in Ukraine require updating and reorganizing of the territory, drawing up a model of prospective development, creating new jobs, organizing recreational areas, reviewing, updating and compliance with all health standards. In order to ensure the rational use of land resources and manage them in the territory of Ukraine, it was introduced the process of decentralization of power (the process of delegation of powers and budget revenues from government agencies to local governments) and the voluntary creation of united territorial communities (UTC) from villages, towns and cities. Since this process in Ukraine is gaining momentum, it is necessary to study the organization, optimization and rationalization of all processes within the new united territorial communities.

2. Territorial problems of UTC
During the study of domestic [1–6] and foreign experience [7–10], as well as the detailed study of the Skorokhodivska UTC of Chutiv district of Poltava region, the main territorial problems encountered by each newly formed united territorial community were identified (figure 1). Tables 1 - 10 list the causes of these problems and suggest ways to resolve them.

It should be considered separately the principle of voluntariness, which is the basic principle of the decentralization process, but does not fully ensure the rational management of land resources. After all, the main criterion for creating an UTC can become friendly relations of officials, not the rational...
use of territories. As a result radius of accessibility to schools, kindergartens, hospitals and other institutions may be broken. That is, it can be concluded that the principle of voluntary association is currently imperfect and must be taken into account the administrative and territorial division of districts, infrastructure, principle of integrity and other characteristics of certain territories.

A working group consisting of a certified land engineer, economist, lawyer and architect has to analyze the territories and provide guidance on community formation. This will allow for consideration when creating UTC effective use of engineering, industrial and social infrastructure and regulatory access to it.

**Figure 1.** The main territorial problems of UTC.

| The main territorial problems of UTC | Uncertainty of the boundaries of the UTC territories |
|-------------------------------------|-----------------------------------------------------|
| Land use information base must be created within each UTC. This database should be accessible electronically and be able to be constantly updated to take advantage of geoinformation systems. |

**Table 1.** Uncertainty of the boundaries of the UTC territories.

| Causes of the problem | The way to solve the problem |
|-----------------------|-----------------------------|
| 1. Lack of updated boundary data. | A land use information base must be created within each UTC. This database should be accessible electronically and be able to be constantly updated to take advantage of geoinformation systems. |
| 2. Lack of clear geographical definition of boundaries' turning points. | |
| 3. Lack of data on the exact UTC area. | |

**Table 2.** Incomplete use of land outside settlements.

| Causes of the problem | The way to solve the problem |
|-----------------------|-----------------------------|
| 1. Lack of information on the quantitative and qualitative indicators of land. | Each newly created UTC should hold inventory measures, the results of which should be entered in the information base. This will allow you to evaluate the quantitative and qualitative provision of the orderly area by land resources. |
| 2. Imperfect legislation. | |
| 3. Imperfection of community development strategies. | |
| 4. Lack of prospective land use and protection plan. | |

**Table 3.** Lack of revenues to the local budget from the land payments.

| Causes of the problem | The way to solve the problem |
|-----------------------|-----------------------------|
| 1. Lack in the fiscal services information about the bread. about taxpayers and the areas of land in use | Creation of modern land use scheme, on which will be shown: formed land plots; land that is in use but is not eligible for use; and that can be converted into communal property to conduct forest management; unallocated land plots; project economic ways. |
| 2. Lack of a clearly established legal regime of land under commercial routes that prevents registration of them. | |
| 3. Non-use of reserve lands. | |
Table 4. Inability to plan activities due to lack of information on land resources.

| Causes of the problem                                                                 | The way to solve the problem                                                                                                                                 |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Lack of information on the lease of land within UTC.                                | Development of a scheme of modern land use, which should provide comprehensive information on land resources and objects located in the territory of UTC.          |
| 2. Lack of information on land and any other objects of state property.                |                                                                                                                                                              |
| 3. Lack of information on clear delineation of the territories of the water fund lands |                                                                                                                                                              |
| and water protection zones, nature reserve fund and other lands of nature conservation|                                                                                                                                                              |
| purpose.                                                                              |                                                                                                                                                              |
| 4. Lack of information on reserve lands and their location on the ground.              |                                                                                                                                                              |

Table 5. Land pollution.

| Causes of the problem                                                                 | The way to solve the problem                                                                                                                                 |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Lack of organization of garbage collection and removal system in settlements.     | A land protection scheme should be established, which will show cattle-bakers, landfills, industrial waste disposal sites, radioactively contaminated land, etc.          |
| 2. Absence of solid waste landfills.                                                 |                                                                                                                                                              |
| 3. Lack of information on the location of the cattle-breeding grounds and the         |                                                                                                                                                              |
| established sanitary protection zones around them.                                  |                                                                                                                                                              |
| 4. Lack of information on locations of radioactively contaminated land and disposal of |                                                                                                                                                              |
| industrial waste.                                                                    |                                                                                                                                                              |
| 5. Lack of balance between land, exposed to human impacts, and natural lands.         |                                                                                                                                                              |

Table 6. Refusal to meet the needs of citizens in land plots.

| Causes of the problem                                                                 | The way to solve the problem                                                                                                                                 |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Lack of information and cartographic materials on reserve lands locations.         | There should be a scheme of lands that will fully reflect the reserve lands in the territory of the UTC, which can be allocated to the private property of citizens according to their applications. |
| 2. Lack of reserve lands.                                                             |                                                                                                                                                              |
| 3. Citizens' ignorance of the right to free land privatization.                       |                                                                                                                                                              |

Table 7. Lack of proposals to attract investors and business in UTC.

| Causes of the problem                                                                 | The way to solve the problem                                                                                                                                 |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Uncertainty of land reserves.                                                      | On the basis of the strategy of UTC development a scheme of land plots should be created for conducting business activities, which will reflect lands of communal, state and private forms of ownership. |
| 2. Uncertainty of the prospects for the UTC development.                              |                                                                                                                                                              |
| 3. Opacity of relations in the field of land management.                              |                                                                                                                                                              |
| 4. Lack of information about the location of communications and their capacity.       |                                                                                                                                                              |

Table 8. Lack of reservation of promising for development territories.

| Causes of the problem                                                                 | The way to solve the problem                                                                                                                                 |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Lack of appropriate regulatory documentation.                                       | The prospective use plan of UTC territory should reflect the land necessary for agriculture and accommodation of public, residential, municipal and warehouse, industrial territories, landscape and recreational zones. |
| 2. Uncertainty of the prospects for the UTC development.                               |                                                                                                                                                              |
| 3. Uncertainty of land that can be used for development and construction of public    |                                                                                                                                                              |
| facilities.                                                                           |                                                                                                                                                              |
Table 9. Poor state of melioration systems maintenance.

| Causes of the problem | The way to solve the problem |
|-----------------------|------------------------------|
| 1. Lack of monitoring of the melioration systems state. | The land melioration scheme should reflect the internal, state and international melioration canals and engineering structures, as well as the boundaries of the operational strips. |
| 2. Lack of established bands servicing channels. | |

Table 10. Illegal use of abandoned forests.

| Causes of the problem | The way to solve the problem |
|-----------------------|------------------------------|
| 1. Lack of information on quantitative and qualitative indicators of land covered with forest. | The UTC information database should contain a diagram showing the lands of communal and state forestry enterprises and reserve lands covered with forest. |
| 2. Lack of perspective vision of such lands use. | |
| 3. Insufficient financing of land management works on streamline land under forests. | |

3. Analysis of the Skorokhodivska UTC territory

In the course of the study the territory of Skorokhodivska UTC of Chutiv district of Poltava region was surveyed and analyzed. The study was conducted in the context of existing land categories, population, public service institutions and existing restrictions on land use.

Drawing up the scheme of existing land use in Skorokhodivska united territorial community (figure 2) provided the opportunity to identify several negative points. Namely, the issue of transport accessibility to settlements and the further development of transport and social infrastructure were raised.

Figure 2. The existing division of the Chutiv district into UTC.
In order to get to the villages Skibivka, Voevodsk, Trudolyubivka or Iskrivka, the route has run through the Filenkivsky village council. In view of this, it is rational to include the Filenkivsky village council as a part of Skorokhodivska UTC, which will allow at the expense of the community to restore transport accessibility to the above-mentioned settlements.

Another important aspect is the analysis of the Skorokhodivska UTC location within the administrative-territorial division of the Chutiv district. In this case, you can see three so-called centers of gravity: Skorokhodove, Nova Kochubeyivka and Chutovo. Based on the location of these centers, the following division is proposed (figure 3).

![Figure 3. The proposed division of the Chutiv district into UTC.](image)

The analysis of the Chutiv district territory showed that it would be rational to create 3 united territorial communities: Skorokhodivska, Chutivska and Novokocubeyevska, that will avoid spontaneous, selective and reckless communities creating that we see now.

4. Conclusion

Thus, the study looked at the main problems of newly created united territorial communities in the field of land management, as well as identified a serious gap in the legislation on the principle of voluntary unification.

Therefore, in order not to violate the principle of rational use of land resources, it is necessary to create a database of land use in the territory of each UTC, and make adjustments to the legislation. First, for each district in any region, a working group should be assembled to analyze the territory and provide guidance on community formation, and to create a scheme for perspective division of territories into UTC. Such a working group should consist of a certified land engineer, economist, lawyer and architect. It will allow providing an effective rational system that will work and create
conditions for a decent life of citizens taking into account the efficient use and regulatory availability of engineering, industrial and social infrastructure.

References
[1] Poltavets V 2013 Forms of Voluntary Association of Local Self-Government Bodies as a Basis of Inter-Municipal Cooperation Publ. Adm.Efficiency: Coll.of Sc. Papers 37 295-299
[2] Toppervin N 2012 Effective Local Self-Government as a Key to Successful Decentralization of Public Power: The Swiss Experience DESPRO: Anal.Bull. 2
[3] Vlasyuk O S 2015 Reform priorities and directions for perspective development of intergovernmental budgetary relations in the context of budgetary decentralization in Ukraine (Kiev: NISD)
[4] Vorona P V, Goshovskaya V A, Lopushinsky I P, Sharavara T O and others 2016 Local Authorities in the Countries of the Post-Soviet Space: Monograph ed P V Vorona 67-70
[5] Shariy G I 2016 Institutional principles of agricultural land circulation and market in Ukraine Proc.of the IX Int. Sc. and Pract. Conf. "Problems and Prospects for the Development of Academic and University Science" 163 – 167
[6] Lytvynenko T 2017 Principles of the road beautification elements placing Per.Polyt. Transp. Eng. 45(2) 94 – 100
[7] Gupta G 2017 The Paradox of Sustainable Development: A Critical Overview of the Term and the Institutionalization Process Per. Polyt. Soc. and Manag. Sc. 25(1) 1-7
[8] Kawakami M, Shen Z-J, Pai J-T, Gao X-S and Zhang M 2013 Spatial Planning and Sustainable Development - Approaches for Achieving Sustainable Urban Form in Asian Cities J. of Reg. Sc. 54(5) 927-930
[9] Kiss G 2014 Why Should the Public Participate in Environmental Decision-Making? Theoretical Arguments for Public Participation Per. Polyt. Soc. and Manag. Sc. 22(1) 13-20
[10] Ruszkai C and Kovacs T 2013 The Community Initiative LEADER I and the implementation and results of the Hungarian Pilot LEADER programme in rural development Bull. of Geography eds Szymanska D and Biegańska J Socio-economic Series 19 87–97