

Ways and Directions of Development of United Territorial Communities in the Context of Sustainable Development

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Abstract: The creation of united territorial communities (UTC) is developed in Ukraine. Several village councils with territorial land with existing rural settlements, infrastructure, in fact and in the legal field, are uniting and subordinating to a single settlement council - one owner.

Therefore, it is necessary to determine the priority of those or other measures and the effective use of funds. At the same time, this problem should be solved in a complex way taking into account the social, economic, legal, environmental factors that directly affect the settlement, use of land areas and change their intended purpose, streamlining the boundaries of settlements and their architectural and planning structure and development.

It is necessary to review and increase the scientific level of all planning, planning, land management and urban planning documentation (general plans of settlements, zoning, land management projects) so that it fully reflects the changes in socio-economic conditions, legislative and legal framework, requirements regarding the provision and effective use of land areas, reflected and specified environmental measures.

Keywords: United territorial community; architectural and planning structure; rural settlements; zoning; technical documentation; comfort of living; city-forming and spatial factors.

1. INTRODUCTION

The creation of united territorial communities (UTC) is developed in Ukraine. Several village councils with territorial land with existing rural settlements, infrastructure, in fact and in the legal field, are uniting and subordinating to a single settlement council - one owner. To date, the question is irreversibly raised about the fund allocation for the development of these or other settlements, the road transport network construction, the new job creation on existing production facilities and new ones, the providing villagers with housing, social housing and cultural and educational institu-

tions, the determination of the recreation areas and places of sports, that is, raising of the level and quality of the people life.

Therefore, it is necessary to determine the priority of those or other measures and the effective use of funds. At the same time, this problem should be solved in a complex way taking into account the social, economic, legal, environmental factors that directly affect the settlement, use of land areas and change their intended purpose, streamlining the boundaries of settlements and their architectural and planning structure and development.

The article purpose is to study the territorial and practical basis of the task at the maximum impossibility of the human factor influence.

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In the scientific works of A.M. Tretyak (2020), D.S. Dobryak and O.I. Shkuratov (2018), the peculiarities of the development of land relations related to market transformations in the agricultural sector are highlighted quite vividly and systematically. The basis of sustainable development of the country and the relevant territory is land and other natural resources, considered as a physical object, with its topography and spatial characteristics, socio-economic and environmental interests, as noted in their works M.M. Fedorov, V.Ya. Mesel-Veselyak, P.T. Sabluk, O.V. Khodakivska and others (2009).

A significant contribution to the development of rural areas can be the creation of united territorial communities (UTC) under the condition of stable operation of the agricultural entity located on its territory, as says in her works I.V. Koshkalda (2020, 2021).

The development of land relations in agriculture should be aimed at ensuring sustainable land use and its greening, preservation, reproduction and increase of soil fertility with further adaptation of land relations to the requirements of a market economy and creating favorable conditions for rural entrepreneurship.

The importance of the outlined directions is due to the fact that the state of development of land relations largely affects such issues as efficiency of agricultural production, rural employment and social and demographic well-being in rural areas, the level of food and energy security and its ability to respond to external challenges. An important problem today is to ensure socio-political stability in the state, which also rests on land issues.

Taking into account the current conditions of development of land relations, there is a need for a more detailed study of the current state of agricultural land use and identification of factors that cause problems of ecological and economic nature.

2. METHODOLOGY

The methods of analysis and synthesis were used to identify the main factors that influence the comprehensive solution of the ways and directions of development of amalgamated territorial communities in the context of sustainable development.

The economic and statistical method was used to determine the impact of processes and factors on the result under study and to identify trends and patterns of their development.

The abstract and logical method was used to summarize the results of the study and draw conclusions.

3. RESULTS AND DISCUSSION

Speaking about the system of settlement in the whole and in particular the settlement development, their constituent, the structure in the architectural and planning sense, first of all, should be defined with the concept of "settlement" or populated place and their classification and subordination.

A populated place (point) is a conditionally defined territory land, in which there is a long people residence and livelihood. Each settlement has certain peculiarities: the existing

population, territory, complex of buildings and structures, the infrastructure system, natural resources. The overwhelming majority of populated places also have a name, status, and state subordination.

The most important characteristic of the settlement is the existing population. The population is people who inhabit a certain land or place. Therefore, the second main characteristic of the settlement is the territory - a place that is a spatial base for the settlement of people. In this case, both of these characteristics are best combined by one word and constitute a single whole concept - a settlement, which means a place inhabited by people.

The territory of the settlement is a rather complex and multi-define category. First, such a territory is necessarily characterized by its location in the system of states, regions, districts, etc. Second, such a territory should be defined as a specific area of land that has its own borders and is separated from other territories. Thirdly, the internal structure of the settlement territory is quite complex and different. And in general, not every territory of the land is suitable for the location of settlements.

Among secondary, but also defining features of populated areas is a complex of buildings and structures, the system of infrastructure and natural resources. The complex of buildings and structures should primarily include residential buildings, as well as economic buildings and structures necessary for long-term living and livelihoods of people.

Further, depending on the development of such a settlement, public and industrial buildings, and other architectural objects are located in it. The infrastructure system includes the territory arrangement with communication elements with other settlements, technical and other socially necessary equipment for higher quality accommodation. Among natural resources are necessary for the existence of a populated place, water and drinking resources occupy a significant place. An important role is played by the quality of soils, their geological structure, the availability of minerals, and so on.

Without these basic defining features, a populated place cannot exist. Another thing is how developed each of them. Depending on the economic situation and the development of a specific society, these secondary features significantly expand their influence, strengthen their significance and sometimes become close to the main.

If the population is considered in the state system, and at present the vast majority of settlements are directly determined by the states themselves, they, at least, have the name, status and state administrative and territorial subordination. The status of populated points is determined by the state depending on the population, occupied area, location, population professional occupation and fulfillment of special functions in the settlement system. Most often, according to their status, state administrative and territorial subordination of inhabited places is determined.

It is possible to determine their functions based on the characteristics of populated points. The most important is the life support function - the ability to locate housing and organize people's livelihoods, including food security. Various social,

cultural, industrial and other functions are added to this function.

Each settlement can be attributed to one of the following five types of settlements according to its organization and other characteristics:

1. Points: single residential houses with households those are remote from other settlements as far. Such settlements include houses near railways, forestry holders, farmers, etc.
2. Farms: small settlements with several residential houses and households, which are rather chaotic built up and do not have public facilities. In such settlement often one large family lives which deals in most cases with agriculture.
3. Localities: settlements in which residential, industrial and other buildings are concentrated in designated locations with relatively close build-up. Most localities have a definite status, administrative bodies and public facilities.
4. Groups of localities: territorial systems of nearby located several settlements with the presence of different and everyday economic, industrial, household and other communications. Sometimes such groups of localities are united by a single governing body or a large enterprise.
5. Agglomerations: territorial systems of nearby located several large settlements, usually with addition of connections between them and also the only system of infrastructure - transport, water supply, etc. This is the most complicated entity with its internal structure.

The first two types of settlements are most often related to the agricultural activity of the population. In some countries, individual or family farming is very common in isolated areas. Localities are the main, that is, the most widespread type of settlement. They have the meaning of local service centers: they have such public buildings as shops, schools, religious buildings, buildings of communication establishments and others. Agglomerations and groups of localities occur on an economic basis most often, for example, when it is more profitable to have one school in several settlements.

At present, there are many quite different types of settlements, of which there are two poles: the city and the village. All other settlement types occupy a slightly average position relative to these two pole types. Although a clear and unambiguous division of settlements into types does not exist, but all settlement types converge with each other by qualitative characteristics in modern conditions.

Among other types of settlements, it is necessary to separate farming settlements in which one or more families live and engage mainly in agricultural production. But recently such settlements often are united with nearby rural settlements under the administrative subordination, which are also a kind of center for such small settlements.

The system of settlements in Ukraine, as well as in other civilized countries, has developed for quite some time on the basis of historical, natural, economic and other features. And the further transformation and changes in the state territorial structure did not very affect to the basic unit of settlement - localities.

The boundaries of the state, regions, districts and other management units was changing; settlements were uniting, divid-

ing, consolidating, developing or decaying - but they still retained their essence and, in most cases, historic primacy.

The Basic Law of Ukraine establishes localities as basic units in the system of its administrative-territorial division. At the same time, the Constitution defines only three types of settlements - cities, towns and villages - such units that have all administrative powers within their territories. Accordingly, such localities have a state status, including a name. All other possible types of settlements do not have such status, are not included in the system of administrative-territorial structure of the state, and even do not have an official name.

Most of the existing localities in Ukraine relate to one or another official type of localities - a city, town or village. Also, these three official settlement types, due to their significant role in the system of state-building, have the status of localities. Others, which are mostly single settlements, most of the temporary settlements and collective gardening or summer cottage associations, including those in which people are permanently residing, are not considered to be units in the Ukraine administrative-territorial organization system.

The category of "village councils" in statistical reporting is not accidental. It characterizes groups of several rural settlements, which have unified control bodies, and correspond to other features of the corresponding type of settlements - "groups of localities". One rural council has about 3 rural settlements on average. This indicates the prevalence of such associations in Ukraine, although they do not have constitutional law as an administrative-territorial unit. But there were repeatedly initiatives to change the administrative-territorial system of Ukraine: in 1998, 2000, 2003 and especially in 2005 and in recent years.

All localities of Ukraine on the basis of their main functional purpose and, accordingly, the form of life and production, are divided into urban and rural areas, according to the accepted statistical reporting.

In Ukraine, there are about 30 thousand settlements, of which more than 28 thousand rural settlements, which is 95.5% of the total number of settlements (Table 1).

There are many different definitions of types of settlements in Ukraine. The main feature is the population employment: if not take into account the employed in the social sphere, in the city the vast majority of the working population is employed in the system of industrial and other productions, in the village - mainly in different agricultural branches, agricultural and industrial population employments are fairly balanced in the village. On the other hand, the classification of a settlement to one or another type is directly related to the population. In different years, this qualification was not the same and changed. Today, to cities may include settlements with a population of more than 10 thousand people, to towns - from 3 to 10 thousand people, others - to villages. Although such restrictions do not characterize the already existing distribution: usually, cities and towns do not "lower in status" in the presence of fewer people.

Based on these two main parameters for assigning settlements to one or another type in Ukraine, as well as from other interconnected additional parameters such as the importance of the settlement in the resettlement system, the

Table 1. Класифікація населених пунктів за чисельністю Населення.

Groups of Settlements	Population, Thousand People	
	Cities and Towns	Villages
The most significant (larger)	more 1000	-
Significant (large)	from 500 to 1000	more 5
Large	from 250 to 500	from 1 to 3 from 0,5 to 1
Medium	from 100 to 250 from 50 to 100	from 0,2 to 0,5
Small	from 20 to 50 from 10 to 20 to 10	from 0,05 to 0,2 to 0,05

Source: formed by the Heoportал administratyvno-terytorial'noho ustroyu Ukrayiny (Geoportal of the administrative-territorial structure of Ukraine).

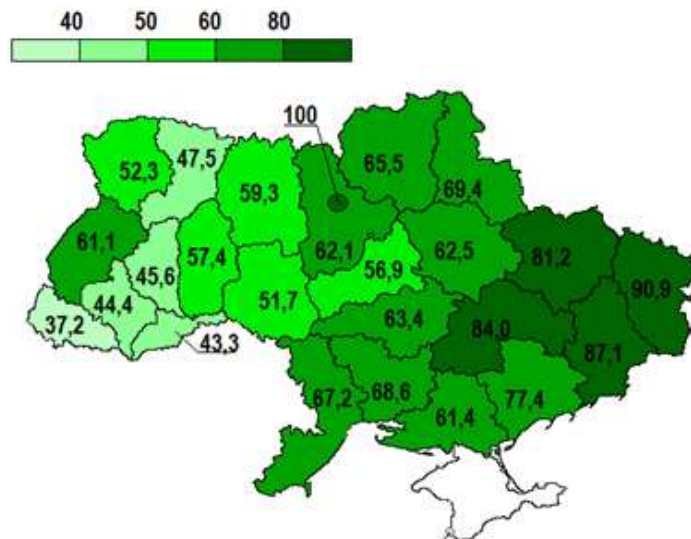


Fig. (1). Urban population, as a percentage of the total population of the region.

Source: formed by the Heoportал administratyvno-terytorial'noho ustroyu Ukrayiny (Geoportal of the administrative-territorial structure of Ukraine).

development of the infrastructure system, etc., we can attempt to determine the essence of different types Ukraine settlements.

A city is a type of locality, which is characterized by the number of inhabitants in more than 10 thousand people and, accordingly, a large area, with the predominance of labor employment in the industrial complex, which has a well-developed infrastructure and is a significant industrial, socio-cultural, economic and socio-political center in the Ukraine resettlement system.

The town is a type of locality, which is characterized by the number of inhabitants from 3 to 10 thousand people and the corresponding territory, with mixed population labor employment both in industrial and agricultural complexes, with a sufficiently developed infrastructure, and may has an importance as the administrative, socio-cultural and economic center in the Ukraine resettlement system.

The village is a type of locality, which is characterized by a small population - up to 3 thousand people and, accordingly, a small area, with the domination of labor employment in the agricultural sector. For a village, a socio-cultural and other center is mainly a city, a town or basic rural settlements in the village council. According to the State Building Regulations of Ukraine, «village (rural settlement) is the single compact place of residence of people those occupied mainly in agriculture and other territorial dispersed industries, provided with objects of social and industrial purpose». It can be stated that all definitions of localities are incomplete, but mutually complementary in view of the fact that each settlement is the only one of its kind.

All localities are classified into two categories: urban and rural. (Fig. 1).

Signs of the locality should be considered (Fig. 2):

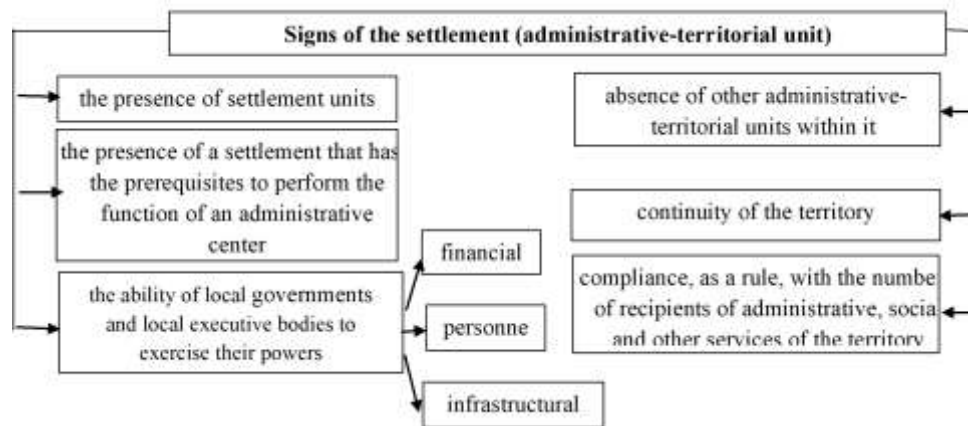


Fig. (2). Signs of the settlement.

Source: formed by the concept of the state target program for the development of land relations in Ukraine for the period up to 2020: Resolution of the Cabinet of Ministers of Ukraine of June 17, 2009.

1. The place of permanent or long-term residence of a certain people group performing functions of economic, cultural and other activity centers, the scale and intensity of which depend on specific conditions (locality size, social composition of their inhabitants, conditions of external communication, etc.).
2. For localities, there is a certain concentration of labor means used by the population to produce material goods.
3. The localities are adapted and have certain equipment for the permanent people residence, ensure diverse population needs: residential, cultural and household, etc. Their level depends on socio-economic conditions, the locality size, population, location, etc.
4. The feature of localities is a certain legal provision (charter, name, address, settlement category, adherence to the rules of planning and development).

The category of urban localities includes cities and towns of urban type, to rural localities include villages, hamlets, and others. All villages, depending on the predominant nature of the employment of inhabitants can be divided into groups:

- With the predominant employment in the agro-industrial sectors (centers of agro-industrial production);
- With complex combinations of economic needs (industry, building, agro-industrial production, etc.);
- Settlements of industrial purpose (hunting, fish farming, etc.);
- Service population places (place of railway transport workers residence, forest service, health and tourism establishments, separate objects, etc.).

An important place in the issue of improving population living standards in rural areas, providing jobs, efficient use of lands and their protection belongs to territorial planning. It lays the foundations for the future transformation of the territory. On the basis of its rational planning organization optimal conditions for the functioning of industrial and agricultural production, resettlement, preservation and improvement of the natural environment, network of services through the integrated harmonization of social, economic and planning

decisions, etc. will be provide. In addition, the territorial forecasting of the land use and the allocation of production capacities with urban planning are combined here.

Thus, at the present stage, the main objective is to optimize the functional and planning organization of the territory of the united territorial communities. It would provide the most rational conditions for placing all types of production, communications and resettlement. It would taken into account the most efficient use of natural and economic resources, residential and public buildings, and the use of existing engineering and transport communications at a minimal cost.

Achievement of such a goal is possible subject to the decision of issues of production development, preservation and development of human settlements, infrastructure, and efficient land use. The most important of these are the following:

1. Determination of rural localities development prospects, their population and demographic composition, formation of settlement system planning structure. They should be linked to new building, the organization of agriculture and the cultural and consumer services of the population
2. Placement of zones of long-term and short-term rest, treatment and tourism on the basis of possibilities of using recreational conditions.
3. The development of proposals for the organization of the road transport network, facilities serving the entire system of settlements of the combined territorial communities.
4. Determination of perspectives of power supply, water supply and drainage, reclamation measures, development of transport and engineering communications, both within the united territorial communities and the administrative district as a whole
5. Development of measures of protection the environment and improving sanitary and hygienic conditions for the protection of air and water basins, concerning preservation and improvement of natural landscapes.
6. Justification of territorial-economic and architectural-planning zoning using the implementation priority of design

and planning works (general plans of localities, recreation and tourism zones, industrial complexes, etc.).

According to various estimates of literary sources, the overall economic efficiency as a result of the implementation of the above measures is, on average, 8-15% of the volume of capital investments in new building. Also, the production personnel number is reduced by 4-5%; the required territories size decreases by 10-12%. Economic efficiency is achieved through complex interconnected decisions on production capacities and system of settlements, as well as cooperation of non-productive construction with a group of service facilities.

The social and cultural activities organization scheme covered all localities of UTC and provided a high level of work, life, health, education, culture and recreation. It acquires the quality of the most important spatial standard (basis) for optimizing its territorial structure. In this sense, the production location is already considered as the main condition for solving social and urban problems. They are associated with territorial signs in the satisfaction levels of material and spiritual needs of the population and its social structure.

Proceeding from the above, the issue of optimizing the network of settlements while simultaneously solving various problems (location of production objects, their capacities, use of the existing material and technical bases: industrial, housing and communal, social and household) is now becoming extremely relevant. The solution of this problem is subject to the main goal - the structural and spatial location of the whole territory and purposeful regulation of economic and urban development activities. All this must be solved taking into account socio-economic interests of population of this territory.

The territorial organization should be based on its comprehensive assessment on the basis of technical and economic analysis and the subsequent choice of the optimal option. Therefore, first of all, it is necessary to determine the indicators that reflect the most significant (main) components of the city-planning complex and provide the opportunity to model the rational spatial organization of the perspective development of the united territorial communities. First of all, we can say about the assessment of territorial resources, due to it is possible to identify their suitability for different types of activity and use. It may include natural and anthropogenic elements of the geographic framework and the synthesis of their results. Assessment is offered in the 3-point system.

When applying the point assessment, scale is established in view of the possibility of developing localities for each factor (type of resources) and evaluated by the corresponding points. The locality should be estimated by maximum score (3 points), if for this type of resources can without significant additional costs to get for the development of this territory to the highest gradation of settlement population, and by minimum score, if locality can get to the lowest.

For the proper functioning and assessment prospect for the development of the area, it is proposed to determine the following key factors to determine their significance:

1) 30% * - the presence of production forces and the extent of their future development (population of localities: 1 point

- up to 50 people, 2 points - 51-100 people, 3 points - more than 101 people);

2) 20% - production capacities and their using in perspective: (3 points - without reconstruction, expansion and re-equipment, 2 points - need additional investments for re-equipment, 1 - new building);

3) 5% - the possibility of changing the locality boundaries: (1 point - due to agricultural land, 2 points - due to the poorer lands, 3 points - due to land not suitable for agricultural production);

4) 5% - observance of zoning conditions in the existing localities (protection zones, sanitary, veterinary, fire-fighting): (1 point - not observed, 2 points - partly adhere, 3 points - meet in full);

5) 5% - the presence of recreation zones: (1 point - the natural conditions do not allow to create a such zone, 2 points - possible creation, 3 points - there are recreation, medical, tourism zones etc.);

6) 10% - the presence of linear and node dominant of space: (the presence of state importance roads with stations, stops, etc. - 3 points; the communication of localities by motor roads with regional or district centers - 2 points; local importance roads that have a solid coverage - 1 point);

7) 10% - the presence of housing stock with a depreciation level: (1 point - 51%, 2 points - 31-50%, 3 points - 10-30%);

8) 5% - the presence and condition provision of social and household establishments: (3 points - there are establishments in the locality: administrative, trade, school, kindergarten, health care (full support), 2 points - there are 1-2 establishments (partial provision); 1 point - social and residential establishments are absent);

9) 5% - the possibility of using social housing and cultural and educational institutions in perspective (by their size, construction characteristics, location, etc.): 1 point - need replacement, 2 points - possible use after repair and construction works, 3 points - possible use in the future;

10) 5% - the presence of engineering infrastructure (water, gas and electricity supplies): 3 points - provision fully, 2 points - centralized water and gas supplies, 1 point - only electricity supply.

* Note: the specific gravity of the factor in the general set of conditions (100%) that affect the development of the localities, %.

In each locality, in the context of the proposed factors, a score of 1 to 3 is determined, and we can calculate the average weighted value of the development prospects of this settlement according to Eq. 1.

$$P_{dev} = \frac{m_1\gamma_1 + m_2\gamma_2 + \dots + m_n\gamma_n}{100}, (1)$$

Where: m_i - factor value, in points;

γ_i - factor weight, %.

At the result of 3-2 points, this locality needs minimal expenses for improvement of certain factors (reconstruction of social facilities, improvement of access roads, etc.)

At the magnitude of the score of 1.9 – 1.5 settlements, there is a need for a radical change (improvement) of several factors. At the value of 1.5 points - it is necessary to allocate funds for the significant development of the locality.

In order to solve the priority investments in the locality development, it is suggested that the factors be grouped into clusters: city-forming - 1, 2, 6 - 60%, spatial - 3.4 - 10%, comfort of living - 5, 7, 8, 9, 10 - 30%

The locality development state can be expressed graphically, Fig. (3).

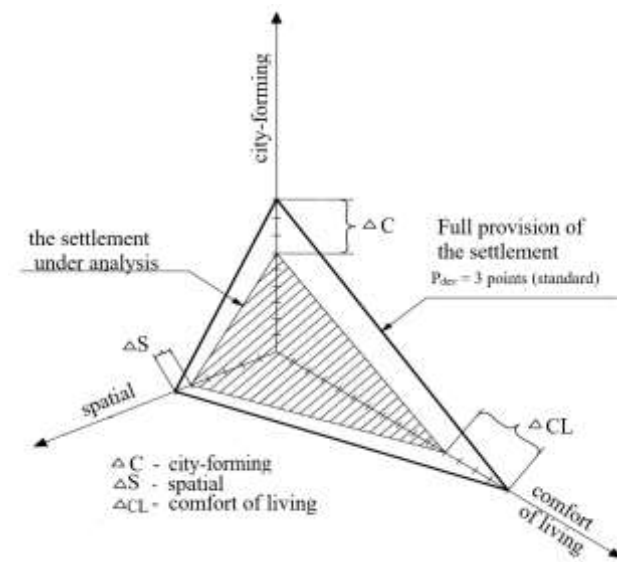


Fig. (3). The state of development of the settlement.
Source: formed by the authors.

Analysis of the development (state) of the locality in Fig. 1 indicates that top-priority investments must be made for cluster C (housing comfort), which has a biggest difference from the standard (ΔC).

4. CONCLUSION

It is necessary to review and improve the scientific level of all planning, land management and urban building documentation (general plans of settlements, zoning, land management projects) in order to fully reflect changes in socio-economic conditions, legislative and legal framework and ensure of the effective land use. This should be done to specify environmental measures and ensure:

- Preservation and further use of all existing rural settlements;
- Creation of conditions for their reasonable location and operation of new settlements (farms, private peasant farms, centers of cultural and domestic and educational and health appointments, etc.);
- Systematic and purposeful reconstruction and arrangement of existing rural settlements (area, configuration, architectural and planning structure, engineering and technical infrastructure, etc.);
- The close connection of the issues of rural settlement, planning and development of villages with the problem of the organization of agricultural production and territory, as

well as the use of land in various forms of management and property;

- Rational development and formation of the social sphere under the conditions of preservation of the future forms of settlement and arrangement of localities;
- Full account of natural conditions, the creation of favorable economic circumstances both in the locality and beyond (adjacent territories);
- Take into account modern requirements to review and update the official technical documentation, make (if necessary) changes to the current regulations, RBN, building regulations, etc., with the aim of accelerating and solving the problems of the social redevelopment of the village.

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