CENTRAL PLACES IN RURAL AREAS: 
THE CASE OF THE REPUBLIC OF MOLDOVA

Igor G. SÎRODOEV
Institute of Ecology and Geography, Moldavian Academy of Sciences (Republic of Moldova)

Abstract: Regional development policy in the Republic of Moldova faces significant problems in contributing to the development of rural areas. The work proposes including villages that function as central places in deep rural areas into national regional development policy. In order to determine such villages a new method is presented.

Key-words: central places, rural areas, regional development policy, Republic of Moldova.

1. INTRODUCTION

Present regional development (RD) policy in the Republic of Moldova is based, among others, on the network of settlements, where cities play main role (Strategia, 2008). However, there are large rural areas where urban influence is weak and RD policy results are expected to be not very promising. Therefore, there is a need of developing economic tools or organizational structures to supply this disadvantage. One of the measures to transform the weakness of rural areas into the opportunity of development is represented by constructing a network of growth centers in the deep rural zones, located out of the urban areas of influence.

The idea of such a network has its origin in the theory of growth poles by F. Perroux (1955), who considered these poles as a development result of certain elements with different intensity, which is extending over other elements in economic and geographic space. In terms of this view, growth pole is a generator of economic activity, and its main role consists in amplification of this activity, especially in the area of its immediate influence (Ianoș, Humeau, 2000).

Two types of poles influence accelerated development: natural poles, defined by the presence of energy source or raw materials, which can attract heavy or mining industry, by the presence of communication lines, of transportation nodes, ports, financial and banking institutions; and compensational poles, which are formed in the regions with additional
possibilities to development (intensive agriculture, regional trade and administrative centers etc.) (Ianoș, Humeau, 2000).

Compensational poles represent special interest for rural areas because they develop themselves on the basis of competitive advantages, which are characteristic to countryside. However, these poles would not have enough polarization potential to penetrate far enough. Therefore, they need a sort of intermediary in the rural areas. Such a role can be played by the developed villages, which actually function as central places in rural areas. These villages (growth centers) have economic potential enough to intermediate rural-urban relationship, but insufficient to transform them into veritable small towns. Thus, growth pole theory will come close enough to rural areas. Economic development measures, being focused on “activating” such centers, will get closer to economic actors and population of the region, at the same time, financial means will not be dispersed, but concentrated in certain points and sectors. Thus, a compromise between dispersing resources for equal development and their concentration in the cities will be achieved.

2. METHODS

Key element of the implementation of this idea in the Republic of Moldova’s rural area is represented by selection of potential growth centers in order to maximize investment efficiency. Crucial criteria boil down to the following: critical level of development, sufficiently remote from any town, being dynamic (having active relationships with other settlements), and, finally, more or less central position in economic, geographic and administrative space (Сыродоев, 2005).

The level of complex development of the villages is determined using complex development index, which included 39 primary indicators reflecting economic, social and infrastructural components (Sirodov, 2006). The index is calculated using Hull score (Ianoș, Humeau, 2000):

\[
I_d = 50 + 14 \left( \frac{\sum I_{p_+} - \sum I_{p_-}}{n} \right)
\]

(1)

where \(I_d\) – complex development index; \(\sum I_{p_+}\) – sum of the primary indicators having direct action; \(\sum I_{p_-}\) – sum of the primary indicators having inverse action, \(n\) – number of primary indicators.

The results of the calculations have shown that development index \((I_d)\) varies in the interval of 43.5 and 155.7 units, having average value around 90. Thus, we considered 110 as a threshold value for the complex development of the villages, i.e. according to the proposed model villages exceeding this value are considered as having socio-economic and infrastructural potential to sustain the planned activities.

Distance criteria, comparing to the previous one, is more flexible, and it varied from case to case: position of the village in the deep rural area, out of the urban influence zones (more detailed presented in Sirodov, 2006), is the only strict condition in this case.

Village interaction dynamics is determined on the basis of two formulas: polarization intensity index (2), which determines the level of dependency of certain village
from neighboring town (Muntele, Istrate, 2002); calculation of the degree of “closedness” of
the villages (3) is introduced in order to differentiate potential candidates into those who
actively interact with their surroundings and those that have closed in a semi-autarchic
economic system:

\[
I_p = \frac{d_j}{100} \sqrt{\frac{I_{di}}{I_{dj}}} \\
(2)
\]

\[
C_i = \frac{I_{di}}{I_{pi}} \\
(3)
\]

where \(I_p\) – polarization index, \(I_d\) – complex development index, \(d\) – distance, \(C\) –
degree of “closedness” index, \(i\) – certain village, \(j\) – town the closest to the village \(i\). As a
threshold value \(C = 1000\) was taken.

In the first phase of the modelling, 138 villages were selected, which, thanks to their
development potential, can serve as rural growth centers. Further sifting foresaw elimination
of the villages according to the following conditions:

• to be located in the deep rural areas;
• to have big demographic size (threshold varies depending on the context, but, generally, exceeds 1000 inhabitants);
• to have bigger polarization intensity index (in the case of conflicts);
• to have smaller degree of “closedness” (in the case of conflicts);
• to have administrative functions (center of commune), however, there were 7 exceptions in the case of villages with very high position potential;
• in order to exclude the conflicts there should be just one village per one district.

Finally, there were selected 36 villages representing potential candidates to rural
growth poles (fig. 1). To these one village has been exceptionally added: Giurgiulești
although did not accomplish all the criteria, however, due to its exceptional geographical
position and developing functions of transportation node (railway station and river port) it is
worthy of being included among the candidates.

In addition, there were identified 91 “close” villages, being characterized by a very
high degree of “closedness”. These villages weakly interact with their neighbors, being
omitted from the processes of interaction within national settlement system.
Fig. 1. Rural settlements with central place function
Așezări rurale cu funcție de loc central.
3. RESULTS AND DISCUSSIONS

Potential candidates to rural growth centers are distributed more or less evenly over the country (even after the first phase of mechanical sorting by complex development index). At the same time, “closed” villages are exclusively concentrated in the deep rural areas, at the maximal distance to neighboring towns. Their presence will make regional development policy to accomplish its goals more difficult. Localization of such villages should be separately marked at planning measures of territorial development. Special attention should be paid to situations, in which these villages “compete” with central places; regional development policy in this case should enjoy special measures that take account of self-isolation of certain territorial actors.

Selecting the settlements according to the first three criteria can be made relatively easy, if certain threshold values are established. Taking into consideration the criteria of centrality is problematic and often requires revolutionary revisions of the administrative-territorial organization of the entire country.

The latter issue has its special particularities in the case of the Republic of Moldova. On the one hand, population distribution is close to the classical principle of transport by Christaller-Lösch (Sîrodoev, 2005). On the other hand, administrative districts are formed in such a way that their contour is more or less isometric, and their capital is located close to their center (sometimes there are two towns in the district, while presence of three towns is extremely rare). Due to this situation, villages that better fit the function of central places are located close to district’s boundary. This position strongly diminishes their potential for development and creation of a rural growth center because virtual area of influence would be limited by district’s boundary. In addition, peripheral infrastructure (especially, transportation and communication lines) is unequally developed and differs from the one characteristic to classical growth pole.

Thus, planned measures have to take account of the administrative factor and its consequences. Possible solution would consist in the revision of administrative-territorial organization of the country (Sirodoev, 2009). But, this issue should be thoroughly examined because it exceeds the framework of the regional development policy.

In spite of its advantages, growth pole theory has significant disadvantages represented by the following factors: structural inertness, weak perception at the regional level and general strategy of the big firms (Ianoş, Humeau, 2000).

4. RECOMMENDATIONS

In order to overpass the obstacles government has to play significant role (of controlling or regulation agent). That is why, the measures to be developed in order to influence rural growth centers, have to be correlated with general purposes of the complex national social-economic policy and with state policy of regional development. At this phase, proposed measures should be divided into general and specifically focused on the growth centers.

**General recommendations:**

- to determine and emphasize among the principles of national regional development policy the leading role of settlement system;
to establish the zones with declined economy and rural areas that need special policy programs; these zones should be established by central authorities in order to coordinate the policies in the case when these areas are divided by administrative or planning boundaries;

- to determine the nature and criteria of the creation of growth poles and central places in rural areas; the approach presented in the article is just one of the many possible;

- to propose measures to influence growth poles and central places at the regional level: the concept of central places in rural areas should be included into the National Strategy on Regional Development for increasing efficiency of the investments.

**Measures to stimulate consolidation of central places in rural areas:**

- decentralization of public administration;
- setting legal and administrative prerequisites for proper function of the central places;
- consolidation and specialization of farm enterprises;
- development of industrial and trade infrastructure and communication lines;
- development of labor-intensive production for export and local consumption;
- implementing fiscal and financial privileges according to the two schemes: (a) local taxes – local producer – local consumer, and (b) state taxes – local producer – export.

Main factor for the policy to be successful consists in passing all the phases of the implementation cycle: from feasibility analysis to creation of the legal base and its integration into the long-term development policy of state.

**CONCLUSION**

Central places in rural areas come to supply the gap existed in the growth pole theory between highly ranked growth and compensational poles and deep rural areas, usually located outside the areas of urban influence. The way of determination of the villages functioning as central places proposed in the article is just one of the many possible. The most important issue is that this tier to be included in national regional development policy. Considering central places will certainly increase the efficiency of governmental efforts in economic planning.
REFERENCES


