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Sustainable development of marginalized urban areas by applying knowledge-based public policies

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Abstract

This paper addresses the sensitive subject of residents in marginalized urban areas and proposes solutions in order to improve life quality parameters by accessing multidisciplinary networks of knowledge and information. In the context of contemporary technologies, conclusions resulting from applied practices in strictly contextualized situation become important sources for the implementation of efficient public policies. Access to knowledge proves to be a primary necessity, in conditions when efficiency is imperative and sustainable development bases on a minimum resources input in exchange for a maximum values output. In the context of a mining zone that is in full economic decline, where the local identity is not built yet and the contemporary processes offer a priority to urban centres at the expense of the marginal areas as a development and economic growth engine, the necessity for public policies concentrated on the needs of the first is essential. Studying the ways in which resilient cycles based on production and consumption can offer to communities a raised degree of independence to the external context in trying to define a unitary development pattern, the authors propose the implementation of a public policies program, through which the inhabitants of every Vicinity Unit can access the most relevant information and can participate in multidisciplinary education and formation projects.

Keywords: Sustainable Development; Organic Growth; Colony; Community; Knowledge Networks;

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1. Introduction

Contemporary agreements oriented to sustainable development concentrate the efforts in central urban areas, in activity cores with a precise economic character, proposing social assistance and inclusion for the marginal areas in the effort to support the first (according to Lisbon Strategy). The result us an urban system with a hierarchical configuration, in which marginal areas are subordinated to the central ones, with various effects, from economic to sociological. Marginal areas exist, in this case, in order to economically support the central ones, and the central areas exist in order to support the marginal ones, economically as well as extra-economic. In Romania, according to a recently published atlas (MDRAP, 2015), there are six types of marginal urban areas (MUA, in Romanian ZUM). These include ghettos formed by collective blocks of flats, ghetto areas of former mining settlements, slums formed by household groups, slums formed by temporary homes, social dwellings in collective households or homes abusively occupied in historical areas. These areas are confronted to numerous problems, on different scales: minimal living conditions, total lack or reduced access to infrastructures, minimal legal incomes or total lack of incomes, vulnerable positions in labour market or restricted access to education for adults and high rates of school dropouts. In Jiu Valley, there are all types of ZUM previous presented, the urban areas in this micro-region being the ones that shows the highest marginalized population rate reported to a total number of inhabitants. The most complex problems overlap the areas that show the most stages of becoming in history, mixing various ethnical and social class groups.

We find a necessity for public policies that primary target these urban areas and the way in which, by processes of decentralization and delegation of tasks and responsibilities, can become freestanding communities by implementing public policies that are already successful on a world scale. The theme of knowledge, access to information and innovation necessitate a special treatment as essential factors in this process, creating non-material networks and a multidisciplinary cooperation in addressing specific problems.

2. Subject approach

Jiu Valley has a rich industrial culture, cultivated as a result of over 15 decades of intense industrial activity. The fact specific to the Valley is the process that gathered small communities around their families' etymology related to settlements close to Hateg basin. The place of these small communities complements the hearths of the new neighbourhoods, even though various stages of industrialization overlapped the traditional household groups. Historical maps (mapire.eu) show in the turning period between the 19th and 20th centuries an area consisting of rural communities and new workers' settlements. This cultural fragmentation between social groups remained strong between WW1 and the Stalinist period, but the late communist era vanished former resorts and societal relations through the implantation of modern collective housing units (figure 1).

Taking the cultural context into concern, we focus on the geographical morphology of the landscape, allowing cities and towns to settle only along the river banks and meadows. The outcome is a conurbation with a length of about 50 km between Tirici and Campu lui Neag, and a width varying from 100 m to 2 km. The genesis of these settlements is related to the positions of the mines, as presented in figure 2.

For the social profile of the community, we present recent official data. According to the document edited by the Ministry of Regional Development and Public Administration (MDRAP, 2015), there are three summative indicators for a marginalized urban area:

- Low human value, if two of the following three indicators present percentage values that overcome a limit established at a national level: active population with a low education level (over 22.05%), children (over 20.44%), or persons with disabilities or other health problems (over 8.00%);
- Low level of employment (more than 22.15%) for those between 15-64 years old;
- Precarious living conditions, if two of the following three indicators present percentage value that overcome a limit established at a national level: people that live in households without electricity (over 0.00%), people that live in overcrowded spaces (<15.33 sqm/person, over 54.73%) or households that are confronted with housing insecurity (12.32%).

These three indicators meet the two basic categories at the bottom of Abraham Maslow's updated hierarchy of needs (Kenrick, 2010). As a matter of fact, affiliation, or the sense of belongingness to a social group, is relevant

only at the third level, proving that the MDRAP Atlas only concerns communities from a quantitative perspective, in their physical context.
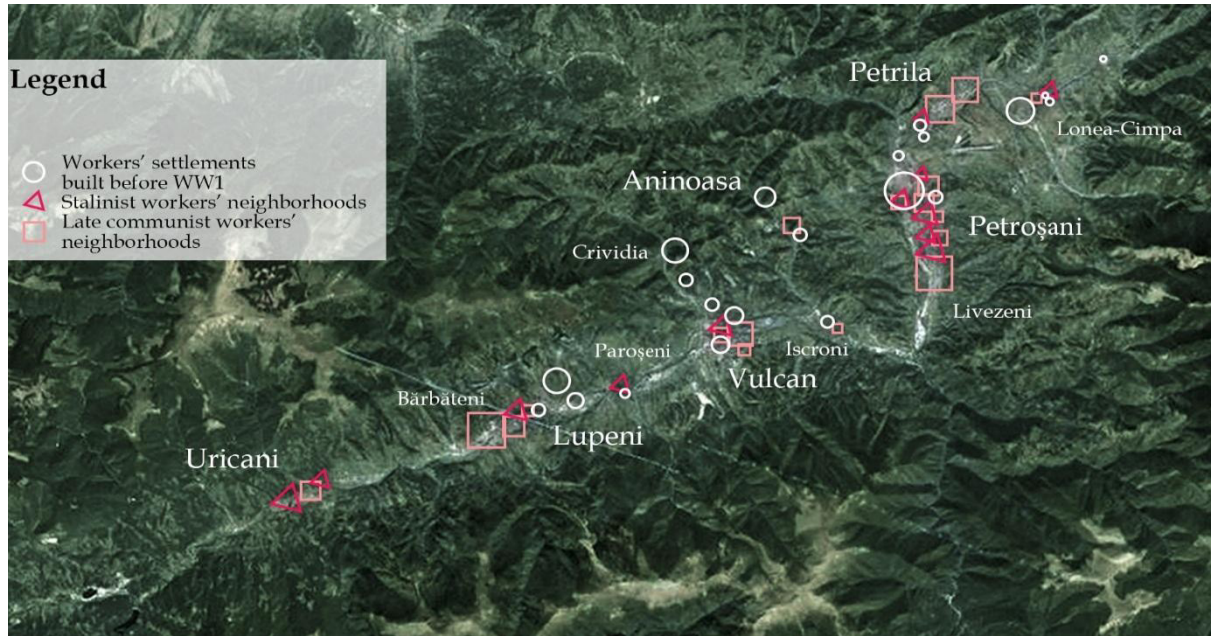

Fig. 1. Typologies of workers' settlements' built in Jiu Valley in modern times (source: authors' own contribution overlapping Google Earth Pro snapshot).

The data used in this document is provided by local authorities, and, in this way, the degree of relevance and truth is doubtful. A quick look over the information emphasizes inaccuracies in presenting limits of areas and their identity.

Fig. 2. Communities' dependency to the coal mines (source: authors).

We take every community's case in the following panel:

- Lupeni: there are 2970 inhabitants living in seven ZUMs. The marginal area types identified here are four ghettos in former workers' settlements, a slum formed by household groups and two ghettos formed by collective blocks of flats;
- Petrosani: there are 7826 people living in a total of nine ZUMs. The marginal area types identified here are two ghettos formed by collective blocks of flats, three ghettos in former workers' settlements, a slum formed by household groups, two slums formed by temporary homes, and one social dwellings area in recently modernized collective households;
- Vulcan: there are 8070 people living in three ZUMs. The marginal area types that local authorities presented here are one ghetto formed by collective blocks of flats, one ghetto in former workers' settlements and one a slum formed by household groups;
- Petrila: 1905 people live in twelve ZUMs. There are four ghettos formed by collective blocks of flats, six ghettos in former workers' settlements and two areas of social dwellings in recently modernized collective households;
- In Aninoasa, 47% of the inhabitants live in ZUMs, the highest rating for a town in Romania, and only 8.56% live in regular conditions. This situation isn't taken into concern by MDRAP because there are only 4360 residents and therefore it doesn't meet the most important criteria for a town;
- Uricani refused to offer data to MDRAP.

The data presented above neglect some of marginal urban areas, including the former historical centres in Petrosani and Vulcan and the entire surface of the Colonie marginal urban area in Petrosani, consisting of more than 5500 inhabitants (Danciu et al, 2014).

From the governance perspective, local authorities' concern for the development of these areas can be observed in the Jiu Valley Strategy for Sustainable Development (ADR Vest, 2008). The SWOT analysis offers data regarding the communities (Irimie & Irimie, 2007; Irimie et al., 2014), listing the following weak points: lack of work places, a declining mining industry, lack of urban utilities in the peripheral neighbourhoods, low quality for the public transit, the absence of social assistance institutions, insufficient number of centres dedicated to the disadvantaged social categories and low implications from the scientific research in the industry. Five axis were initiated, and 26 programs, but only one concerned communities in the first place: A20 Training trainers and facilitators inside the communities. Also, from the 14 project plans, only one specifically concerned the marginal communities, by creating a link between Vulcan and Merisor through Crividia and Dealu Babii. In Vulcan, the only administration in the Valley that has a Strategic Development Plan for 2014-2020, infrastructure modernization and development projects were specifically proposed for the former miners' settlements (CL Vulcan & PM Vulcan, 2014). Also, a kindergarten was proposed in an underprivileged community. These efforts that place Vulcan in the top cities in Jiu Valley regarding the concern for ZUMs can be interpreted through the advantageous placement of Crividia neighbourhood, along the historical road that linked the Valley to the Hateg basin.

There is one objective in both 2008-2020 Mining Strategy and 2012-2035 Mining Strategy, 2.5 (MININD, 2008; MININD, 2011), in order to reduce the social problems determined by closures, by promoting corporate social responsibility through state companies, promoting social protection and reintegrating former miners in the labor market. There is no mentioning about the communities involved in the mining process. Another relevant example that we use in order to present authorities' level of engagement in the problem of ZUMs is the mobility document produced by the Regional Development Agency, (ADR Vest, 2014). The street that crosses Petrosani from North to South is considered a bypass, managed at a county and national level, therefore every neighbourhood placed in the opposite side from the city centre is outside the city. In this way, the over 5500 inhabitants that we referred to above are marginalized and discriminated.

All the information listed below offer a perspective of communities that have to find their own resources in order to survive, based on their own strengths and capacity. There is a great potential for the usage of renewable resources (Irimie, 2014) but the technologies are expensive and require innovative approaches for cost effectiveness. Every strategy, program or plan is based upon innovations in order to streamline social, environmental and economic efforts and reach the targets of sustainability and resilience. The first issue that we focus our efforts upon concerns the identity of these communities. Living in poor conditions, without basic infrastructure and access to basic services, the inhabitants cannot see the horizon of fulfillment for their own needs. This adds to the continuous social

movement in and out of the neighborhoods and therefore the impossibility to gain trust in the newcomers. The same problem that emerged in the workers' settlements in their beginnings was attenuated by the safety of a workplace and lack of concern for the life worries in miners' families. The companionship was assured as long as everyone benefited from the same conditions and possibilities, and the same working places and social status. The struggle for wellbeing in the current market economy is understood as a focus on personal needs rather than community needs, without considering the fact that a collective approach is much more efficient than a personal one. Also, community is generally considered the reference aspect in addressing the recreation of identities (Ballesteros & Ramirez, 2006).

As we presented in our recent work, in the case of Colonie neighbourhood in Petrosani (Danciu & Berindeanu, 2015), in our work we propose a contextualized administrative system for the former workers' settlements, based on the concepts of decentralization and local autonomy, around community centres. This communitarian system divides large communities into smaller sized ones, for a maximum of 500-700 inhabitants, and it is resilient by using local resources in order to fulfill its needs, without being dependent to external factors for existence (Figure 3). As a local town hall (Alexander et al, 1977), the community centre is the place for gatherings, being managed by a Community Initiative Group (GIC) formed by representatives from the local authorities, reliable residents and other stakeholders. This group is responsible for the public space and the wellbeing of every individual in the community, treating the community as a firm that has to meet performance indicators.

The main threat for this type of system is the lack of knowledge and institutional capacity for GIC in order to implement the best policies for community management. The CCRAM model for community resiliency lists Leadership as being the most important component (Leykin et al, 2013), therefore the leading group must take responsibility in decision making. The leaders plan for a identity based community, oneness being the motivation that ties the small society together. Both social trust and place attachment reunite under the goal of a community identity, a strategic resource close to the corporate identity concept, the latter being different by the fact that the former is based on visual identity, hierarchic behavior, corporate culture and market conditions. (Melewar&Jenkins, 2002).
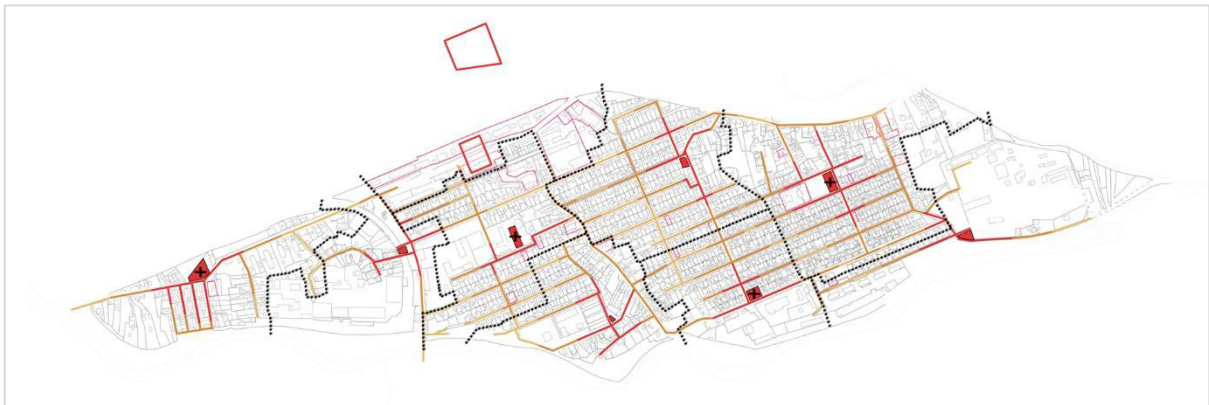

Fig. 3. Example of administrative decentralization in Colonie neighbourhood, Petrosani, communities of 500-700 inhabitants around community centres and an area of maximum 300 meters from the centre (source: authors).

Contemporary issues find solutions in contemporary concepts. Therefore, the economic component needs to develop through disruptive concepts in order to reach the primary goal of sustainability, being driven by constant innovations and a structure of multidisciplinary crossing networks (Considine et al, 2009). Developed communities offer good practice examples for the underdeveloped, in planning, organization, leadership and control, and serve the others by reducing costs and efforts.

In the context presented above, we see public policies based on knowledge developing in two main directions: local and global. The local implementation seeks a better collaboration between scientific research (the university and other learning centres) and practice. The global direction aims to enrich communities through empirical knowledge gained through collaboration on several levels, considering that every community has unchangeable

specific characteristics and changeable aspects that drive development (Figure 4). We present here the proposal for the two public policies based on knowledge, taking into concern the complex task of defining the community (Niven, 2013):
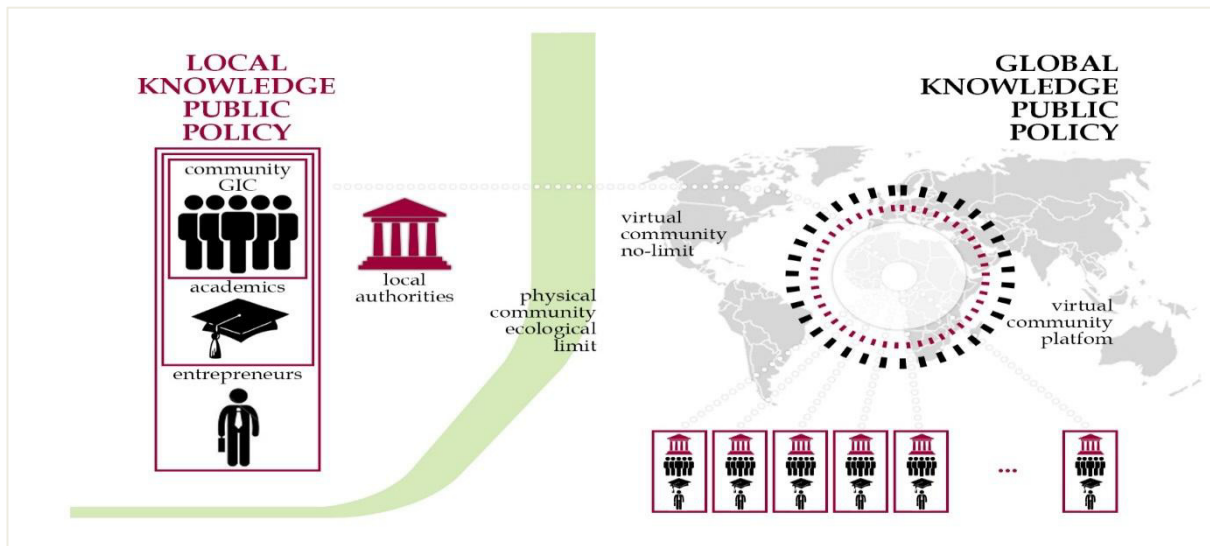

Fig. 4. Relations between the local and global knowledge public policies.

1.   Public policy for local knowledge transfer between the academic research and neighborhoods. The problems addressed by this policy are described above in this paper. The objective is to overcome the issues through a direct involvement of professionals in education, production and consumption food chains, building technologies and social cohesion. The primary beneficiaries are the members of every community involved, the other ones being the academic staff and the University itself. Parties' intervention mechanisms concentrate on creating a close collaboration in the field of social entrepreneurship in order to highlight and address community issues. This policy is based on physical based communities and their relation in the territory.

2.   Public policy for global networking between stakeholders of various communities all around the world. The objective is to find the most appropriate solutions in order to improve the sustainability indicators for communities, using communication tools offered by social media and other virtual platform in order to allow communities everywhere to connect driven by the same field of interest. The beneficiaries are the communities themselves, transferring innovative concepts and establishing partnerships. This project does not need a consensual approval from community leaders, being freely accessible to everyone. In order to implement the policy, it needs a central administrative hub with legal representation in order to invite communities to join and stir the communication and debates. This policy is based on virtual based communities and their relation in the field of an ideas exchanging process.

These policies can only influence the sustainability goals if the decision making process is delegated to the communities, together with responsibility. The lack of acceptance from the local authorities can easily convert into a drop in trust from the GIC members, academics or simple residents. This is why the two public policies must be sealed by a third one through which local authorities can only affect decisions made by communities if disasters occur. In the remaining period, local councils' vote is advisory, the GIC and residents being the only ones that can decide regarding their own territory.

3. Conclusions and Original Elements

This paper is the first one in the Valley that addresses the specific problems of marginal urban areas with a cultural background in the context of a post-industrial society. The proposed outcome is a multidisciplinary virtual

platform that benefits from the emergence of social and professional networks and offers space for the exchange of knowledge between stakeholders working in similar situations, all around the world. Benefits include knowledge transfer between communities, stronger relations between practitioners in the same field of interest, the possibility to avoid mistakes and to implement strategies that are already verified in similar context.

The authors' contribution in this paper is the two proposals for public policies, proposing the first system that strengthens local communities and creates links to other similar communities in the world. We presented the first integral representation of workers' settlements, classified by the period of their emergence, all around the Jiu Valley and connected their problems to the academic and entrepreneurship sector, without waiting for the interventions of local authorities.

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