PUBLIC POLICIES FOR COMMUNITIES REGENERATION IN MONO-INDUSTRIAL AREAS
CASE STUDY: JIU VALLEY, HUNEDOARA COUNTY

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Abstract: 25 years after communism has fallen, mono-industrial areas suffer from passing to capitalism. All the mutations produced in time from workers’ migration in micro-regions, territorial closeness and the lack of identity produced closed systems based on the exhaustion of the prime sources that could have contributed to wealth. Jiu Valley is this kind of an example, being the urban area found at the greatest distance from the Western Development Region’s center, Timisoara Municipality. Sustainable development should have started in the Jiu Valley region from the lowest level, but restoring communities that have depended for over 150 years for mining exploitations represent a very slow process, deferred by the lack of concern and involvement from the local authorities. In this paper we analyze the possibility to implement public policies that can lead former industry workers and their families, living the urban fringe that is the most physical and moral degraded, to new means of improvement for their wellness parameters. This represents balancing the economic – ecologic – social – governance scheme through a correct exploitation of local renewable resources and utilizing the potential of environment, respectively by strengthening communities, civic spirit and education level in the essential domains. Being a bottom-up one, this kind of a project counts on fulfilling the prime needs of every family and forming prepared leaders that can be included in the process of strategic spatial planning for sustainable micro-region development. Creating resilient systems at a low scale leads to economic independency for the smallest community units (neighborhoods and proximity unit), and also to building-up knowledge and interchange systems.

Keywords: Des-industrialization, sustainable development, good governance, community, regeneration, resilience

1. INTRODUCTION

The transition from state economy to the capital economy represented the most perturbing moment in the second half of the XXth century, in Romanian space. Last century Romania includes 51 settlements with a monoindustrial status, which means that at least 50% of inhabitants are dependent by a single sector of industry. Out of these, four (Resita, Baia Sprie, Campina and Buhusi) were already in this category in 1948, the year of property nationalization. They were resorts of the interwar period, and two more (Borsec and Stei) represent the new type of monoindustrial areas based on private sphere profits (Mates, 2012). There remains 45 towns and cities made in communism, on the background of forced industrialization. The greatest density of these above is observed in Hunedoara County, Petrosani Basin, or the Jiu Valley, as it is popular known. The problems that this community confronts are the unemployment and low life quality standards, bringing with itself problems as depopulation, human capital aging, criminality and social conflicts, raise in social assisted number, corruption proliferation and the growth of school abandonment and illiteracy etc.. (Georgescu, 2002)

In order to understand the facts and the way in which this can be oriented to the objective, it is necessary to undertake a profound analysis over the specific industrialization process implications and the reverse process. Conclusions will be correlated with a similar sectorial analysis, and the authors propose an intervention model in a limited area, that can further use as an example for other similar areas. We first take into concern the institutional aspect of this problem, as long as the administrative tool is the primordial component in decision making regarding the socio-economic systems.

2. METODOLOGY

We use qualitative means by documentation and critical lecture of the scientific works elaborated between 1997 – 2013, out of which we extract practical data that concern life quality,
causes identified following the research, the purpose and proposals / conclusions. All these are used in order to underlain the scientific argument. Out of the works mentioned above, together with studies and reports taken in a quantitative manner, we will highlight the parameters that distinguish the urban area, after which we come back to the qualitative analysis and we present the results of a sociological study concerning life quality.

3. PREMISES. THEORETICAL FOUNDATIONS

Studying monoindustrial contexts, we naturally ask ourselves what determined their birth and we have to refer to the industrialization process and the way it interfered in the relation between socio-economic and natural-ecologic systems. Human population represented, from the beginning, a biocoenosis component with effects that are subject to the laws of nature. Together with the exponential growth of human population, it tended to neglect the importance of natural system processes in every human process, under the considerations that the nature is made for the humans, humans are in center of every process and they subordinate everything. The industrial revolution represented the culmination of this way of thinking, period that sets human needs at the the basis of every process. This way of thinking lasts until nowaday (Rebreanu, 2010). Out of some effects of uncontrolled human actions development, the following are relevant for our study:

a) In its evolution, the socio-economic system depends on the natural-ecologic system. By an exponential growth in number, the degree of use of environment taken products for processing and consume raised directly proportional. In this way appears an overexploitation of natural-ecologic capital resources;

b) In the extraction, processing and consumption process, unwanted produces result, along with pollutants and waste. These were put back into the natural system in another form than the way it presented initially, altering it. This is how pollution is produced;

c) On the strengths of needs fulfillment necessity, the need to spatially extend and intensify arose. Its effect is seen in biodiversity reduction and habitat fragmentation.

Synergetic effects were only made aware in the 7th decade of the XXth century, together with the energetic crisis. The result was reflected in a number of publications and reports and presented in several events (Meadows et al, 1972). This is how the foundations for the sustainable development concept were laid, starting from environment problems as a result of mass industrialization. In 1972, United Nations’ Declaration after the Stockholm Conference laid the foundations for conservation and environment improvement, after which the Rio de Janeiro conference series (1992, 2012) and Johannesburg (2002) permanently updated the problems and transformed them in necessities and current challenges. The sustainable development concept is sketched inside the works of the World Commission on Environment and Development, namely Our Common Future Report, led by Gro Harlem Brundtland, as being the satisfaction of contemporary needs without comprising future generations’ opportunities to satisfy their own needs (Brundtland, 1987).

The current period is one of awareness and because it is more than human intervention for the purpose of fulfilling their own needs (systems theory: in order for a system to resist, its fulfillment needs to be outside of it) is the period of holistic, integrated thought placing sustainability and resilience in the first place, in order to resist to historic challenges. There is a series of theories, reunited under the concept of sustainable development model, (Center for Environment Education, 2007), all converging to the idea of equilibrium in interaction between humans and environment.

In this context, we analyze the concept of a monoindustrial city, a settlement in which at least 50% out of the labor force is dependent of a single industry sector. Having a programmatic origin, it serves a precise purpose: goods production and outsourcing. Extending the way of approach to the subject, we can realize a radiography of the ways in which these settlements function and according to the organic growth (Cambridge, 2014), concept taken from the management domain. If in the initial case it is seen as a growth in company sales and profits as a result of business development and not of other companies purchase, in territorial development it is seen as a sustainable development (concerning social, ecologic and ecologic aspects) of territorial units (Radoslav et al, 2010). In this way, the influence of stakeholders over the changes in a territory is admitted and a new rule is introduced: the greater scale, in such a way that every growth, by every gesture, needs to be realized in full conciliation to the higher order whole (territorial structure of greater dimensions). Practically,
Organic growth is an applicable instrument for sustainable development in urban and territorial planning. This concept, on which the whole activity of the Research Center for Urban Planning in Timisoara (CCPUT / RCUPT) is focused, as well as the Urbanism courses at the Faculty of Architecture and Urban Planning, Politehnica University of Timisoara (Radoslav et al., 2013), is based on a concept of decentralization and territorial autonomy. This means that every social group level (socio-economic systems) has a right to govern over the area in which it develops its activities. The territorial limits of this area are subordinated to territorial limits of natural systems (biotopes and biocoenosis), without any exception. This sort of approach presumes responsibility assumption and the right to decide for the members of each hierarchical level, in an ascending order: household – family, household group, street, vicinity unit, reference territorial unit, community, neighborhood, settlement, urban system, microregion, county, independent region, macrorregion, state union. The process that can obtain this kind of hierarchy must be born, not designed, and it is based on the natural evolution of socio-economic systems, until the industrial period (Alexander et al, 1987) in relation to the natural-ecologic system. Each of this kind of systems can acquire in this way valences of a socio-economic-ecologic system with its own identity.

Recently in spatial theories, the concept of landscape ecology proposes a shift in perspective from equilibrium to dynamism (Turner et al, 2001), in a way in which every ecosystem, microregion, or patch is balanced by composition, but it doesn’t neglect the exterior environment. Being open, energy and matter fluxes between ecosystems and the environment are realized through the most favorable corridors, the ones which require the least amount of energy and are proven secure (Irimie, 2014). Applying this theory in the build-up of our hypothesis, we can observe that none of the socio-economic-ecologic systems presented above in a hierarchy is not isolated, but it realizes a continuous process of matter and energy exchange with systems that can be found at the same hierarchical level. By interaction, superior scale systems result (example: the interaction of elements forming a household to the elements that forms another 7 – 11 households, according to Christopher Alexander, can create a group of households that have their own identity).

4. THE JIU VALLEY. EXISTENT SITUATION

The territory of the Jiu Valley microregion can be established as being the superior basin of River Jiu, between the surrounding peaks: Parângul Mare – Parâng, Peleaga – Retezat, Vârful lui Pătru – Şureanu respectively Oslea – Vâlcan; and the main gorges: Merișor, Groapa Seacă, Surduc, Vâlcan, Cerna. This area is remarked as having a different historic evolution in relation to the areas around the Carpathian Mountains. This fact is a result of a weak accessibility (Petrosani basin is considered by geographers as being the least pervious out of the Romanian Carpathian interior basins, fact that can be easy to observe if you look at the two main access points: Jiu Defile in South, respectively the Merisor gorge in North) and because of the different way of soil and subsoil resource capitalization, according to different eras. Until the end of XIXth century, the main occupation of the inhabitants, inherited from the predecessors, was the livestock raise, using the low agricultural potential of fields in the basin. Abundant food sources are represented by beekeeping, fishing, berry and mushrooms picking. Sometimes, even agricultural lands were exploited, on small plots along the rivers, by families.

The first settlements sat in the most propitious places, upper river courses. Starting from the XVIth century, settlers are colonized from Hungarian state lands, attracted by pastures and meadows in the Valley. The major event, that changed for good the ecologic equilibrium, was the discovery of coal at the end of the XVIIIth century. Industrialization process that followed was extremely violent, inhabitants being forced to give their lands for new exploitations. This fact led to a negative attitude from the local people in front of the newcomers. The first received the appellative of momarlan, and the latter baraba. Once the mines were opened, first miners’ settlements are built. Towns existed in order to host settlers brought from all around the Empire. They worked at the mine, on satisfactory salary conditions. The evolution from village to town is fast, reaching a peak in the communist period. In 1968, Petrosani was entitled Municipality, first of all Jiu Valley towns.

After an unsustainable growth inducted in the 90th years of the past century, industrial period decline was felt after 1997, on a background of layoffs and Mass movements directed by the workers’ unions. All of these offered a negative image and the status of a deprived area. Far from the target of bringing foreign investors, this status facilitated the enrichment of some unions’ and mines’ leaders.
The highest degrading stadium got worsen, resulting that from the 55000 miners employed in 1990, there are only 6000 left today. The perspective means closure for another 4 mines, therefore remaining 4 viable mines in a county energetic complex. There is supposed that the soil resources can be exploited for at least another 80 – 110 years (Georgescu, 2002). According to sustainable development principles, this fact is unacceptable, because it doesn’t offer the future generations an access to the same quantity of resources and opportunities.

5. WORKERS SETTLEMENTS TODAY. CASE STUDY: PETROSANI’S COLONY

In order to contextualize the premises and to apply the theories that stood at the basis of reorganization, we propose to focalize on one of the best structured entity, concerning the morphology and urban functions, in the Jiu Valley, the Colonie neighborhood (Colonie de Jos, or the Bottom Colony) in Petrosani. Studies realized by coordination of RCUPT / CCPUT reveals the main characteristics.

Geographically, the area in which the urban structure is placed is a river meadow, on the left shore of the Eastern Jiu River. By analyzing the limits of the ecosystem (water streams, slopes and watersheds) we can conclude that this is part of the same morphological unit as the one that supports the Northern Petrosani neighborhood, between Jiu River, Maleia stream and Maleia hills. Taking into concern the reason of being, the neighborhood was built in order to house the families colonized from the Austro-Hungarian Empire. They were linked to the Dilja mine (on the right shore of the Eastern Jiu River). Passing through diverse catastrophic events (floods and fires), the ensemble was built in several steps after a clear initial model: long, straight prospects in dominants winds’ direction in order to clean the stationary air and for the easement of goods transports from the mines society distribution points to the households. A dependence to the coal society was total, being taken over in the period of communist industrialization by the national mining institution. Year 2005 represented the mine closure and the start of the greening process for the mining perimeter, without any strategy to include the former miners in education and formation processes in order to orient on alternative living means (Mateș, 2012). Regeneration means to raise the values of life quality parameters by resetting the connections onto which they resided before. This fact means, actually, a socio-economic system reorganization that is based on efficiency and the principle according to which the future generations need to be educated in order to find the best ways in which they can find the most efficient ways through which the way to consider their own needs to be one that allows ecologic systems to develop according to their own laws.

6. PROPOSED SOCIO-ECONOMIC SYSTEM

In order to establish the characteristics of an efficient system according to the square scheme of economic-ecologic-social-good governance principle in order to regenerate the community in the exemplified neighborhood, we first need to establish the reason: why there is (still) the Colonie neighborhood as long as the mine does not exist anymore? The answer is given by the character of this entity, between the natural borders: a) The morphology needs to allow smaller communities organization, with potential to coagulate around some representative public spaces, with their own identity and residents solidarity (ex: Daranesti church, No.2 School, No.2 Kindergarten, The Old Theatre, Constabulary etc..). In this way 8 vicinity units are identified with potential for collective organization in bigger territorial reference units (UTR) for each two of them; b) The street layout allows to separate residential quiet streets, from the commercial busy streets; c) The row type distribution of households allows the use of common laturi in order to build some new energetic efficient structures; d) Extended brownfield surfaces with a great potential concerning the sun exposure and water streams proximity; e) The main condition that impose, as natural reasons imply, the collaboration to Northern Petrosani neighborhood, urban structures between which the most important microregional exchange core develops, the Petrosani main railroad station.
The first principle is that every household has to be resilient before engaging in exchanges with neighboring households. If resilience cannot be obtained at this level, it should be extended by assignment to the urban structure of a superior hierarchic level. The final structure where it is compulsory to achieve resilience is the microregion, in order to maintain intact major biocoenosis fluxes (example: migration paths). This system, analyzed at a neighborhood scale, bears a clear identity, with characteristics claiming a cultural landscape title (Danciu, 2014). This system’s relations to the natural system are very complex.

7. PUBLIC POLITICS THAT GOVERN THE SYSTEM

In order to be resilient, this kind of system should govern itself by innovative politics, calling to innovative principles and efficient methods to capitalize its own potential:

a) Social policies:
There are 37160 people in Petrosani (People and Households Census, 2012), out of which Colonie bears 5500 inhabitants, 14.8% out of the total. It should contain a school and a kindergarten...
with an integrated study approach, having a possibility to continue in the next level (high school level) in the same landscape unit (between the same geographic limits). In this way, students studying in Colonie should continue their studies at the high school that already exists in Northern Petrosani, Mihai Eminescu Theoretic High School, and all these three must be included in the same College. In sustaining this principle, spatial arguments arrive (a pupil must walk on his own to the school that is placed below 1 kilometer to the house (Alexander, 1977)) and inclusive (sending pupils to other high school means a separation that holds onto social hierarchy principles, so discrimination). Through decentralization policies for the learning process, a specialization for youngsters can be obtained already since adolescence. This can be realized by reducing information quantity included in general disciplines and introducing specialized optional ones that can bring pupils closer to a proposed purpose for their own professional evolution. These modules can be realized through a collaboration with small neighborhood enterprises, based on processing or services (carpentry, mechanics, agriculture, clothing etc.). Elders can become teachers (mentors, masters) on their working places (even home, if there are conditions for this kind of process generation), and pupils results can be evaluated inside the educational institution and marked after an approved standard.

Concerning the higher education level accessible to the inhabitants, Petrosani University is continuously diversifying its educational profile. In order to survive pressure and long term pressure, there is a regional strategy that imposes itself, in which the university must collaborate with similar institutions, orienting its profile to an ecologic one, addressing cultural landscapes in their complexity (Petrișor, 1997).

Social aspects are managed in a neighborhood at every governance level, through democratic principles, favoring the common good. The first institutional organism that has an audit role (formal or informal) in this process is the Community Center, for about 700-1000 residents. Aspects are discussed through periodical meetings in an agora (exterior public space) or an indoor room, and provisions have a normative role for the institutions of conventional administration systems (City Hall, Local Council, Prefecture etc.) with an eye to decision making in the specific community. This policy allows transparence in decision making processes and the residents’ access to decision making. Social isolation is avoided through social and open-source networks, through which beneath social contact there can also be implemented a learning process.

b) Economic component:

Resilience is a produce of every resident’s participation. The economic profile of the neighborhood, historically tied to the former Dilja mine, diversifies itself and should profit from its advantages. Placed in the meadow area of the Eastern Jiu River, Colonie neighborhood is formed out of individual households (constructions + garden), collective housing, production and service units, streets, green space and brownfields. In order to gain economic sustainability, this territory needs to produce enough food for all of its residents. Public policies, in this case, need to follow the forming and education of people process in order to change the paradigm that says that there is a dependency to the administration system, either public or private, for existence. Households profile allows a diverse utilization (Radoslav et al, 2014) and, by organizing local fares, mutually beneficial exchanges can be created. Residents’ occupations, being included in a local food production system, will include: agriculture in greenhouses that can replace the unused attics and on parcel’s back limits, storage space for produces in the parcels that can be accessed from the main commercial street, beekeeping, extensive and greenhouse agriculture for traditional households, aquaponic vegetable gardening or mushroom cultivation etc.. Regarding the collective households, the food production system can be oriented to brownfields remaining following the industrialization process (8.37 hectares only in a radius of 750 meters), and public policies must offer an opportunity for cooperation in order to produce food in greenhouses. This is the area that can register overproduction, reported to community needs, offering a possibility to send produces in Northern Petrosani neighborhood.

The tertiary sector comes as a supplement of the production system. The neighborhood can be a place for the development of informal sustainable tourism, in which the people can learn urban modes of existence and in the same time protecting the environment. Here, educational system can help in preparing residents for a social dialogue and recognition of their own value system. The neighborhood can become a brand on its own, by strategies focused on neighborhood marketing and producing objects under de label: DIN COLONIE (from Colonie) (textile items, bottled products, berries collected from the nearby hills etc.). These policies must be accompanied by entrepreneurship formation and creativity in the microenterprise development (Irimie et al, 2008).
c) Ecologic component:

In order to balance the ecologic component, reported to the economic and social component, we think the neighborhood as a socio-economic system, integrated element of the whole Jiu Valley microregion. This is the only extended area in Romania that is surrounded on all sides by bio-diverse protected area. Their connection to urban areas is realized through water streams, as a support of green corridors. Building limits imposed through normative acts (10 up to 50 meters) are insufficient in order to represent green corridors through which the biotic components develop their natural processes. This is the reason for us to propose green corridors on Eastern Jiu River, respectively Maleia stream, intersected by the least amount of communication systems and representing a natural continuation of the protected areas listed above. In the first place, this supposes to form a paradigm according to which the natural system’s importance is above the financial interested one, induced by the local learning system profile. Green spaces homogeneity has to be supported by initiatives that produce fewer initiative with plants that are not indigenous.

The paradigm that still resists in the microregion, towns and neighborhoods is that of a dependence to the mining system, one that exploits non-renewable resources for the fulfillment of their own needs. This is how ecologic imbalances are brought up and the future generations’ access to the same possibilities to fulfill their own needs. Educational formation begins at a superior level, by educating generations for creativity in the formation of mechanisms that utilize renewable resources and the less amount of energy consumption.

d) Good governance

All these above can be fulfilled only through a good governance system that allows everyone to the decision making process. This has to be accompanied by continuous education for civic and ecologic values, common good and responsibility. Administrative organization in the above mentioned hierarchy gives possibility to form local political parties (500-1000 members) that can play a decisive role in the immediate superior hierarchic levels. In this way, external influence is reduced and local decisions are applied, as a following of local debates concerning practical processes.

8. DISCUSSIONS AND CONCLUSIONS

All these above can be considered part of a utopic system. In the contemporary period, the antithesis between globalization and (g)localization creates paradigms but not development directions. The postindustrial context, in this antithesis, brings to discussion the sustainable growth (globalization) or decrease (glocalization). This paper aimed to highlight the potential of a monoindustrial area, especially Jiu Valley, to reorganize. The first main target is to fulfill its own needs according to the sustainable development, and the second one is to educate the future generations in order to avoid the deadlock seen today.

FIGURES

- Figure 1: Danciu, M.I.

REFERENCES

Rezumat: După 25 de ani de la căderea comunismului, zonele mono-industriale suferă în trecerea de la sistemul anterior la cel capitalist. Mutările produse de-a lungul timpului de migrația muncitorilor în microregiuni, izolarea teritorială și lipsa de identitate au produs sisteme închise bazate pe epuizarea surselor de prim ordin care ar fi putut contribui la bunăstare. Valea Jiului este un astfel de exemplar, fiind arealul urban aflat la cea mai mare distanță de centru Regiunii de Dezvoltare Vest, Municipiul Timișoara. Orice construcție durabilă ar fi trebuit să poată funcționa într-un cadru de după al treilea mileniu, înlocuindu-se astfel cu noi mijloace de îmbunătățire a calității vieții. Această înseamnă echilibrarea schemei economice – social prin exploatarea corectă a resurselor regenerabile locale și utilizarea potențialului factorilor de mediu, respectiv prin întărirea comună, a spiritului civic și a nivelului de educație în domeniile esențiale. Fiind de tip ascendent, un astfel de proiect este total necesar pentru dezvoltarea durabilă și microregiunii. Crearea sistemelor reziliente la scară mică conduce la independență economică pentru unitățile de comunitate cel mai mici (cartiere, unități de vecinătate), precum și la formarea unor rețele de cunoaștere și schimburri reciproce. 

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POLITICI PUBLICE PENTRU REGENERAREA COMUNITĂȚILOR DIN ZONELE MONO-INDUSTRIALE STUDIU DE CAZ: VALEA JIULUI, HUNEDOARA