

Complementary Economic Activities. Case Study: Training Center, Jucu Commune, Cluj County

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ABSTRACT

Cluj metropolitan area creates a favourable context for Jucu rural area offering proximity services and a chain of cultural and entertainment facilities located along Someș River creating opportunities for cultural and economic development benefiting from the local rural context and urban areas nearby. This context has created the opportunity for proposing the foundation of the Training and Recreation Centre of Jucu by the County Council. The project comes as an addition to sports amenities in the city and as a complementary facility for the international stadium "Ion Moina" - Cluj Arena. This sports facility becomes virtually a permanent training centre both nationally and internationally, a competitive Olympic centre and also a recreational facility open to the public. The great range of internal functions by the wide range and versatility of the spaces and categories of public uses makes this investment to be attractive for achieving public-private partnership with multiple benefits for both parties. The complex is developed on 5 ha area and is composed of: 120 hotel beds, a swimming centre with facilities for water polo, swimming and jumping, restaurant, two multi-sport competitions play courts, four outdoor multi-sport playgrounds, four tennis courts and a football terrain with the 6 athletic tracks, all designed for international level. By achieving such sports and entertainment facilities, the investment builds a growth pole in rural areas through the usage of local workforce, attracts additional services in the area, development of transport infrastructure, bringing Jucu commune closer to the urbanised area allowing the development of a future sub-urban pole within the metropolitan area of Cluj-Napoca.

1. INTRODUCTION

Jucu is a town located in the centre of the growth of metropolitan area of Cluj that benefit first from major urban and national road equipment, upgraded roads, airport and proximity to urban amenities and second of a natural meadow particularly given interference by Someș proximity to hills and meanders of Someș River. Jucu commune is village with high potential, included in the metropolitan area of Cluj-Napoca city but is a rather underdeveloped area searching for identity in the emerging metropolitan area. In the competition to overcome other areas nearby, the current study searches for the opportunities of Jucu commune and identifies one solution and implementation method as a

complementary activity for developing a rural area in the proximity of a big city. The context of a city offers proximity services and a chain of cultural facilities and entertainment located along Someș River creates opportunities for cultural and economic development benefiting the local rural context and urban areas nearby. The studied site is between an artificial lake created nearby Someș River and the non-polluting industry site Tetarom III where Nokia, Emerson and other big companies are having production sites. This context has created the opportunity for proposing the Training and Recreation Centre Jucu by the County Council. The project comes as an addition to sports amenities in the city and as a complement facility for the international stadium 30000 seats "Ion Moina" - Cluj Arena.

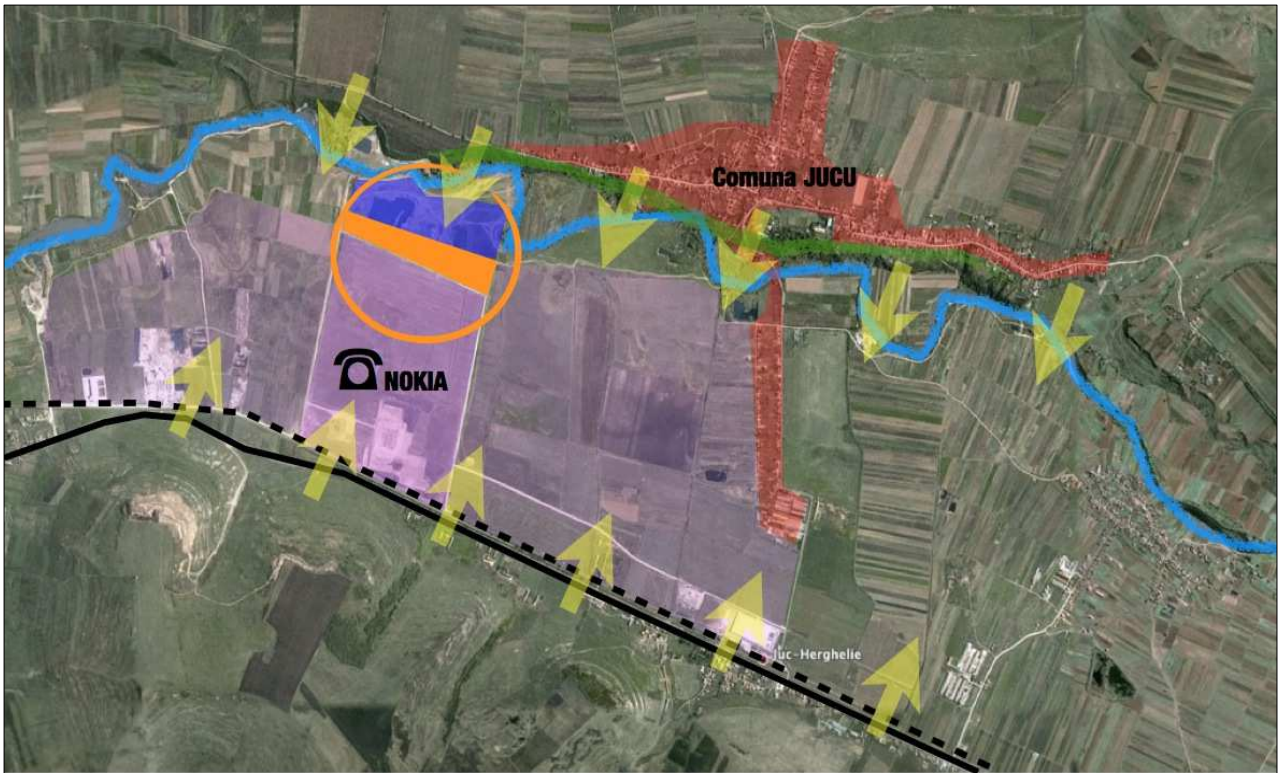


Fig. 1. Satellite view over developing Jucu rural area.



Fig. 2. Aerial view of Jucu Training Centre project [3].

2. MATERIAL AND METHOD

The complex is developed on 5 ha and is composed of: one 120 beds hotel, a swimming centre, one restaurant, a double multi-sport competition indoor play court and several outdoor facilities.

2.1. The hotel

The hotel is a 6 storey building designed in a radial disposed concrete structure. It houses 55 rooms that can accommodate 120 persons. Even if part of a sports facility the building was designed as a 4 star hotel considering the possibility of mixed use: sportspersons and tourism. The hotel has a conference room for about

80 persons that can be used for trainings for the team-sports and a panoramic bar situated at the last level. The hotel is linked by indoor connections to the Swimming and Treatment Centre but they all can function individually for maximum of flexibility even in the construction phase.

2.2. The swimming centre

The Swimming Centre is composed of 3 swimming pools: one 50m long Olympic pool, one 10 m height Olympic diving pool and one outdoor semi-Olympic pool. The building has a mixed structure: concrete slabs and poles and metallic roof and facades. The Swimming Centre has all the need annexes for

sportsmen and coaches, a 400 person tribune and technical spaces required for water treatments.

2.3. The treatment centre

The Treatment Centre is a building connected both to the hotel and to the Swimming Centre 2 levels height with a concrete structure beams and poles. The Centre houses several treatment areas, fitness rooms, spas and recreational areas. The Centre includes a 150 seats restaurant designed to work together with the hotel.

2.4. The multi-sports facility

The Multi-sports Centre is a metallic structure building one level height that houses 2 multi-sports playgrounds. One of the playgrounds is as large as 3 basketball transversal disposed courts intended for

international competitions or by means of moving walls to be used as 3 training courts. The playground has a 500 seats tribune connected to an indoor multi use large foyer. Between the 2 playgrounds there are the sportspersons and coaches annexes.

2.5. Outdoor sports facilities

The site, large enough, was designed to accommodate several outdoor playgrounds as follows: 1 multifunctional football and athletics playground with 6 running tracks, 4 handball/basketball playgrounds and 4 tennis playgrounds. All these facilities are integrated with the designed buildings on one side and another of a pedestrian track. For amateur sportspersons that use the playground occasionally we designed a small facility building with changing rooms, lockers, toilets and several spaces for sport equipment and different individual trainers.



Fig. 3. Aerial view of Jucu Training Centre project [3].

We have assessed the entire capacity of the future developing calculated efficiency, and estimated impact of the whole direct and indirect investments considering the best and worst scenarios.

All the work has led us to a series of conclusions upon the impact of the investments intended by the Cluj County Council as follows.

3. RESULTS AND DISCUSSION

3.1. Investment objectives

We have identified a series of important key objectives that make the investment capable of developing different areas of interests in the region for

certain possible stakeholders. So we have classified the objectives into two general and specific objectives as it follows:

General objectives:

a). Economic and social development and solving certain problems regarding teenagers formation in the spirit of European culture and civilisation including sport.

b). Growth of educational role of civic and social cohabitation through sports for the population of Cluj-Napoca Municipality and Cluj County.

c). Subscribing Cluj-Napoca in the list of organising European, Olympic, international contest sports centres in the world.

d). Development of sport movement addressed to target groups: sports for everybody, sports for undergraduate and university population, professional sports.

Specific objectives:

a). Solving the crises of sport bases adequately equipped in the region.

b). Solving the absence of any cantonment, recovery and treatment centre.

c). Attracting European, Olympic and international contests in Cluj region.

d). Attracting private investors' partnerships with Cluj County Council for solving economic problems regarding sports in Cluj region.

3.2. Investment Impact

Regarding our study we have identified the investments' impact that is to be considered direct or indirect benefits for certain stakeholders:

a). Social impact on labour market: employees in execution: 4 with higher studies (qualified) and 84 without studies (unqualified); employees in exploitation: 28 with higher studies, 42 with medium studies and 29 workers.

b). Economic impact upon sports associations in the region: costs reduction of 13-15%.

c). Impact upon business environment: growth of interest in the region.

d). Impact upon Cluj sports in general.

e). Socio-educational impact on students and teenagers.

3.3. Indicatives of quality

Because of the large scale investment and its impact we have established certain quality indicators that prove the opportunity and feasibility of building a Cantonment, Recovery and Treatment Centre in Jucu commune. We have identified quality indicators in the socio-economic field but also quality indicators aspects that have a multiplier effect as follows:

Socio-economic benefits: ensuring conditions for cantonment, recovery and treatment for sport

persons at the necessary level for Olympic and international contests; perception of costs accessibility for professional sportspersons; growth of prestige of Cluj County; reducing the unemployment rate using rural labour.

Indicatives of the multiplier effect: recruitment and promotion of new talents in sports; training of specialist to ensure sportspersons trainee; increasing the role of formative and educative in civilised cohabiting for the teenagers in particular; regional development of complementary services and similar services polarisation.

4. CONCLUSION

This sports facility virtually becomes a permanent training centre, both nationally and internationally, a competitive Olympic centre as well as a recreational facility open to the public.

The great range of internal functions by the wide range and versatility of the spaces and the wide range category of public uses makes this investment be attractive for achieving public-private partnership with multiple benefits for both parties.

By achieving such sports and entertainment facilities, the investment builds a growth pole in rural areas through the usage of local workforce, attracts additional services in the area and the development of transport infrastructure, increases the proximity to the urbanised area of Cluj-Napoca city and allows the joint development of Jucu future sub-urban pole within the metropolitan area.

We propose the project as a Pilot-Project that could be a model in the whole country for the revitalisation the socio-economic plan in a lot of regions in Romania, which need both the specific function in sports for a harmonious society development and an economic implant for future indirect developments.

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REFERENCES

- [1] **Guagsen, He** (2008), *Olympic Architecture - Beijing 2008*, ed. Birkhauser.
- [2] **Culley, P., Pascoe, J.** (2009), *Sports Facilities and Technologies*, Routledge, 2009
- [3] *** "Ion Moina" Training, Cantonment, Physical Rehabilitation and Treatment Centre - Jucu village, project designed by the Technical University of Cluj-Napoca and Workshop RVD.