Socio-Cultural Impact of Church Building in Russia (the Case of the Cathedral of Saint Martyr Catherine in Ekaterinburg)

L V Daineko, N V Goncharova, V A Larionova, N M Karavaeva and A E Sheveleva

1Ural Federal University (UrFU), Mira, 19, Ekaterinburg, 620002, Russia

E-mail: l.v.daineko@urfu.ru, v.a.larionova@urfu.ru, n.m.karavaeva@urfu.ru, shevelevaae@yandex.ru

Abstract. In recent years, Russia has been going through a boom of church building. In 2009, the Russian Orthodox Church (ROC) had 29,263 parishes and by 2019 this figure had risen to 38,649. In the last decade, the growth in the number of Orthodox religious organizations and places of worship has by far exceeded that of other assets of social infrastructure. While the number of churches is growing, however, the number of schools, kindergartens and hospitals is steadily falling. Unlike other elements of social infrastructure, church building is funded not from the state budget but is financed by donors, sponsors and by the ROC itself, with some of the funds coming from payments for religious rites (baptism, weddings etc).

This article analyzes the historical significance and socio-economic impact of church building by focusing on the case of the Cathedral of Saint Martyr Catherine in Ekaterinburg. The right choice of the construction site for the cathedral - the choice that would be agreeable to the metropolitan bishop, municipal government, businesses and sponsors, local community and opinion leaders - will ensure not only that the project will be duly completed but also underline the fact that local communities are able to establish consensus and recognize each other's interests in local decision-making. One of the possible locations considered for building St.Catherine’s Cathedral in Ekaterinburg was a former industrial site in the centre of the city. Eventually, it was chosen as the most suitable place for this large-scale project. Redevelopment of an underused or abandoned industrial site, resulting in the improvement in the quality of urban environment, can be seen as an effective instrument of project realization, contributing to the building’s social and economic significance.

1. Introduction

Ekaterinburg is located at the heart of the Ural Federal District – in the south of Sverdlovsk region, which is its most economically developed and densely populated part. The city's location determined its role as a major Eurasian transport and trade hub of regional and international significance. Due to its geographical and economic location and substantial industrial, research, labour, and cultural potential, Ekaterinburg plays an important geopolitical role. At the same time the city is situated quite far from Russian, European and global centers, which impedes its integration into the world economic system. These barriers, however, can be overcome with the help of modern IT technologies.

The fast growth in the number of churches increasingly attracts the attention of scholars and the general public. In this light, a comparison that inevitably suggests itself is the number of new churches...
against that of schools and hospitals. In 2020, Ekaterinburg has 50 active religious venues for a population of 1.4 million. The bishopric would like to have at least one church or cathedral per 5,000 parishioners, pointing out that there are currently about 1 million of Orthodox Christians in the city, which means that Ekaterinburg needs approximately 150 new churches or cathedrals.

Investment in church building yields no direct returns but can bring other indirect gains. It is crucial to choose the optimal site for construction and design the layout of the church and the on-site amenities in such a way that, apart from the main building, there would be enough space for recreation to attract residents and guests of the city. Places of worship should have not only religious but also aesthetic, cultural, tourist, and spiritual significance.

One of the strategic tasks of national development in Russia is defined as the "reinforcement of the Russian civic identity based on spiritual, moral and cultural values of the peoples of the Russian Federation" [1]. This task requires a thorough revision of approaches to the construction of cultural and religious buildings.

Our hypothesis is that church building can have a significant social effect if such projects help revitalize areas used irrationally or inappropriately. New churches also contribute to cultural and spiritual development of city residents and visitors. Thus, the purpose of this study is to analyze the social and economic effectiveness of church building.

2. Materials and methods

2.1. Effects of social infrastructure investment: literature overview

The social impact of church building is more pronounced than its economic impact since places of worship often do not bring any direct returns on investment in the short term, but can become a driving force for social development. Seen from this perspective, the project's effectiveness should be associated with its social impact rather than its profitability. Indicators of social effectiveness demonstrate investment feasibility. Social outcomes of a church building project can encompass a wide range of effects, not only on the local but also on the regional level [2]. In this paper, we are going to consider social effect as a specific social qualitative result of this or that project [3]. An investment project should aim towards improvement in the quality of life in the city and enhancement of social services, which should become more diverse and accessible. The main difference between a social effect and an economic effect is that the former is primarily associated with value creation rather than value capture [4]. The social effect of a specific project can be measured at different stages – when it is in the process of realization (investment and construction stage) and when the building has been put into operation (operation stage). To evaluate its social effect, the project's results should be presented in economic terms, which may be quite difficult as not all aspects of social effect can be measured.

The existing body of research offers a variety of methods to measure the social effects of investment projects. The concept of social return on investment (SROI) has been widely used since 1996 [5, 6, 7] for analysis of social effects for all stakeholder groups. Social return on investment is measured at different stages. Vanclay suggests focusing on the changes in the sphere of services, education and culture as well as the recipients' satisfaction with their work, social status and/or financial situation [8]. McCreless, Fonzi, Edens, & Lall argue that the next stage in measurement should be Metrics 3.0, which would integrate impact metrics and put an emphasis on value creation [9]. In 2015, company Acumen created Lean Data, an indicator-based methodology to measure social impact by using customer feedback [10]. Sirotkina and Chudinova proposed a set of qualitative and quantitative indicators to evaluate the social effect of investment [11]. The methodology "Effective Social Investment and Social Partnership (ESISP)" is intended for evaluation of socially responsible businesses and uses two sets of indicators to assess how effective this or that company is for society and for business [12]. Shalina and Stepanova developed a method for measuring "social sentiment", which relies on indicators of socio-cultural activity and can be applied to evaluate the success of a redevelopment project by taking into account individual people's opinions about urban space development, redevelopment projects and their impact on local communities. The method is aimed at measuring public perception of redevel-
Development projects aimed at improving urban infrastructure. The level of "social sentiment" can be measured with the help of an integral index, calculated in several stages [13]. To measure social impact, it is necessary to build individual assessment scales based on international and Russian assessment methods, which requires professional expertise on the part of the researcher.

2.2. Construction of social infrastructure in Russia: trends and problems

The Russian State Statistical Service (Rosstat) considers the Russian Orthodox Church (ROC) as a complex of legal entities registered as non-profit organizations. Every year Rosstat publishes the data on the number of religious organizations in Russia with a breakdown by confessions and organization types. In total, in 2018, there were 30,896 religious organizations of all confessions and types registered in Russia [14]. The ROC ranks first in terms of the number of such organizations (18,550), followed by Islam (5,954) and the Apostolic Pentecostal Church (1,034). Thus, the ROC is unquestionably the leader in this respect: in the last ten years, the number of Orthodox Christian organizations has risen from 12.9 thousand to 18.55 thousand. In 2018 alone, 359 new religious organizations were registered. Therefore, quite literally, their number grows by day. Among other things, this growth signifies that the ROC’s very structure is constantly expanding and becoming more complex. In other words, the ROC is a centralized religious organization comprising other centralized religious organizations such as the Moscow Patriarchate, Synodal institutions, autonomous and self-governing churches, exarchates, bishoprics, deaneries, parishes, monasteries, religious educational establishments, brotherhoods, sisterhoods, missions, agencies, and metochions, which are hierarchically subordinated structures in Russia or overseas.

The ROC itself uses other criteria to estimate the size as an organization. According to the information presented at the Local Council, at the beginning of 2009, the ROC had 29,263 active parishes. Since 2014, a new system of measurement has been applied based on how frequently the Divine Liturgy was served. At the beginning of 2019, the ROC had 38,649 places of worship where the Divine Liturgy was served [15]. There are 977 ROC parishes in 77 countries. Thus, between 2009 and 2019, the number of ROC places of worship grew by 9.4 thousand, that is, at the speed of 2.6 religious sites per day. In the same period, the number of bishoprics rose by 150 and reached 309. The number of ROC clergy increased by 9.8 thousand, reaching 40.5 thousand.

Therefore, in the last decade, there has been a substantial increase in the number of religious organizations and places of worship in Russia. This growth far exceeds the growth in other social spheres. For comparison we are going to use the data on pre-school institutions, schools and hospitals provided by Rosstat [14]. In 1990, there were 87.9 thousand kindergartens in Russia. This figure fell dramatically in the following periods and in 2018 it was 47.8 thousand. The number of kindergartens has been declining by 200-1,000 organizations a year.

According to Rosstat, the same trend is characteristic of secondary education: the number of schools is steadily falling: from 68.8 thousand in 2000/2001 to 42 thousand in 2017/2018. This trend mostly affected rural areas (the number of schools fell from 45.5 thousand to 24.1 thousand) while in cities and towns this figure dropped from 23.3 thousand to 17.9 thousand, that is, 3.6 schools are closed every day.

According to Rosstat, the number of hospitals in Russia declined almost twice between 2000 and 2017: from 10.7 thousand to 5.3 thousand, which also resulted in a decrease in hospital bed capacity. In 2000, there were 115 hospital beds per 10,000 people and by 2017, this figure had dropped to 80.5 beds.

One of the reasons behind this trend in education is young adults’ migration from rural to urban areas and the resulting decline in the number of children. Lots of school and kindergartens were closed during the demographic slump of the 1990s. Yet another reason is that schools and pre-school institutions need qualified personnel, whose salaries are covered from the municipal budget. Local authorities consider it economically infeasible to maintain a staff of secondary or pre-school teachers for a small group of children. On the contrary, to keep a parish going, at least one priest is needed and it costs nothing to the state budget. It should be noted that the decline in the number of hospitals and
educational institutions is not connected to the ROC's activities and the increasing number of churches and cathedrals does not explain the fall in the number of social infrastructure objects. Church building is funded by the ROC itself, by sponsors and donors. Moreover, the ROC cannot and should not be responsible for building such facilities as hospitals and schools.

In comparison with other sectors, even those outside the social sphere, the tremendous growth in church building is astounding. According to Rosstat, the number of religious organizations is growing on average by 3-5% a year while the number of businesses, according to the Federal Tax Service, has fallen from 4.54 million to 3.9 million. According to the Patriarchate of Moscow, the increase in the number of religious organizations is 32%. This figure is comparable to the growth in the amount of housing constructed. In 2000, the total floor area of housing in Russia was 2,787 million square meters, in 2018, it was already 3,780 million square meters, which shows a 33% increase.

As for the number of churches per capita, most of them are concentrated in the European part of Russia. In some regions, the ROC's desired ratio of one church per 5,000 people is met. On average, to build a church with a 500-person capacity costs 250-500 million roubles and a church with 250-person capacity, 90 million roubles.

According to the Pew Research Center [16], Russia ranks 17th in the world in terms of religiosity. The survey is based on four criteria: importance of religion; worship attendance (times per month); frequency of prayer; and belief in God. It was found that in Western European countries there are less people who believe in God than in Eastern European countries but, surprisingly, Western Europeans attend church more regularly. In Eastern Europe the situation is the opposite: more people believe in God but attend church services less often. It is worth mentioning, however, that religiosity is a complicated matter since a person may claim to be a believer or maintain appearances while having no internal commitments to religious precepts. No less controversial may be "belief in God" as a criterion: on the one hand, not all religions posit divine entities; on the other hand, many individuals know of religions but reject them whereas these same individuals may be essentially religious persons.

2.3. The Case of St. Catherine’s Cathedral in Ekaterinburg
Ekaterinburg boasts a long and rich history. Since the very moment of its foundation in 1723, the city has been home to multiple Orthodox churches. In the last two decades, Ekaterinburg has acquired a number of new religious venues, which blended seamlessly into the city landscape and soon became popular attractions. There are currently more than 50 Orthodox churches and cathedrals scattered across the city.

The first cathedral built in the city was the Cathedral of Saint Martyr Catherine, which was demolished in 1930. Time and again, the question about the rebuilding of this cathedral was raised by the bishopric. In March 2010, Ekaterinburg Bishopric supported by the Governor of Sverdlovsk region declared its plan to build the cathedral in Truda Square. To this end, it was decided to remove the fountain "Stone Flower", which is a popular attraction among city residents, and the surrounding greenery, put a fence running around the perimeter of the main space, and organize an underground parking underneath the building. This initiative was strongly resisted by the public (according to different polls, from 70% to 92% of city residents were against the project), mainly because the authorities had chosen a landscaped urban space with a working fountain. It should be noted that the ROC intended not to reconstruct the old cathedral but to build a new one in a new location with a contemporary design and by using modern technologies.

In December 2016, a new location of the cathedral – on an artificial island in the centre of the city pond – was presented and once again it triggered vigorous debates. Opponents of this project held several flash mobs 'Hug the Pond', involving from 300 to 1.5 thousand people.

In September 2018, the city’s town-planning council officially approved the concept for the construction of the Cathedral of Saint Martyr Catherine in the park on Oktyabrskaya Square, next to the Drama Theatre. Major metallurgical enterprises of the region were ready to invest in this project. The beginning of on-site preparatory works in May 2019 sparked public outrage. After the civil protests and riots were followed by detentions, the President Vladimir Putin had to intervene and came up
with an idea to conduct an opinion poll among city residents. On 22 May 2019, the All-Russian Public Opinion Research Center (VTsIOM) released the results of the official poll, which showed that 74% of residents were against building the Cathedral on the site of the park. The City Administration undertook to gather suggestions from city residents concerning alternative sites for future construction. In the ensuing weeks, over 11 thousand of suggestions were submitted with 61 alternatives to choose from. These were ranked according to the number of mentions. Then another poll was conducted and the majority of votes (57.66%) were given to the location formerly occupied by an instrument-engineering plant in the centre of the city opposite the site where the Cathedral used to be situated (17 Gorky str.).

The new site is situated near the city pond in Kirovsky district, in the historical heart of the city. The district has a developed cultural, business, social and transport infrastructure. There are no residential buildings near the site and it is easily accessible by public transport (there are several stops within 50-100 metres). The instrument-engineering plant moved its main workshops from the embankment to the nearby town Aramil. In 2014, after the relocation was completed, the site was considered for different purposes, for example, an apartment hotel, a mixed-use apartment building with retail and office space, a cultural centre and so on. However, in 2019 the site still lay vacant.

2.4. City of Ekaterinburg: background analysis
Ekaterinburg is the capital of the Ural region. It is the fourth largest city in Russia. Ekaterinburg is an influential economic and industrial centre, its economy is dominated by the machine building industry (51%), which includes heavy engineering, instrument and machine-tool manufacture. In terms of budget volume, the city ranks fourth in the country after Moscow, St.Petersburg, and Novosibirsk. Ekaterinburg is also the third in the country in terms of retail turnover and is the leader in terms of retail space. The annual increase in trade returns is 15%. In 2019, freight and passenger traffic increased by 25% in comparison with 2018. In the first half of 2019, the city launched 45 new bus routes replacing less cost-efficient trolley-bus routes. The city ranks third in the country in terms of high-rise apartment buildings, with 2.42 thousand sq.m. under construction. The number of small- and medium-sized businesses in the city is constantly growing.

3. Results and discussion
Redevelopment of a former industrial site to build the Cathedral of St. Catherine is expected to create a point of attraction in the historical centre of Ekaterinburg not only for parishioners but also for the general public.

The design of the future Cathedral comprises a four-storey building with rooms for the metropolitan bishop and his guests; a prayer hall, which can accommodate up to 800 people; the ground- and first floors intended for ROC hierarchs, priests and support staff. The gross building volume is 298.85 cubic metres (see the preliminary site layout in Fig.1). The total cost of construction, including landscaping works in the adjacent area, is about 3.5 billion roubles.
To evaluate the effectiveness of church building projects aimed at meeting social, cultural and spiritual needs of people, the focus should be made on the resulting increase in the social impact. Such projects do not yield direct financial benefits. The effect from investment in building objects of social infrastructure is achieved by enhancing the quality of education, cultural, information and consumer services and can be evaluated with the help of financial and non-financial indicators. The main criterion of effectiveness in this case is the degree to which social needs are met, in particular the needs associated with the development of the human capital.

Table 1 shows the predicted social and economic impact of the projects for building St.Catherine’s Cathedral in Ekaterinburg.

**Table 1.** Social and economic indicators to measure the effectiveness of the project for building St.Catherine’s Cathedral.

| Indicators | Social impact | Expected result |
|------------|---------------|-----------------|
| New employment opportunities | 180 new jobs at the investment and construction stage; no less than 26 new jobs at the operation stage |
| Generation of funds for the regional economy during the construction period | 21.1 million roubles in land rental payments |
| Financial | Tax receipts of the local government from the Cathedral’s construction and operation | The amount of insurance premium is 173.66 million roubles at the investment and construction stage and 61 million roubles at the operation stage; The amount of the corporate income tax payable is 56 million roubles; The amount of the personal income tax at the construction stage is 85.9 million and 26.43 million at the operation stage |
| Improvement | landscaping |
| Non-financial | of the quality of urban environment (redevelopment of a former industrial site brings an extra social effect) | redevelopment of former industrial sites; enhancement of the quality of urban environment |
|--------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Expansion of the tourist flow to Sverdlovsk region and increase in the scope of tourist services | increased tourist flow; increased number of hotel beds in the adjacent districts; improvement of the city’s attraction as a travel destination (can be monitored through tourist surveys) and reinforcement of the positive image of the city among tourists; increase in the number of repeated tourist visits |
| Increase in the public prestige of religion | fostering positive public attitudes towards believers; historical heritage revival |
| Support of health and well-being of Orthodox believers | palliative care; ministry to the addicted and recovering; stimulating Ekaterinburg’s progress in city rankings |
| Promotion of moral, social and cultural development | organization of Orthodox festivals; parish school; recreational opportunities for city dwellers; promotion of spiritual and moral values |
| Social integration and community engagement | intensification of urban land use; improvement of services for daily living and cultural services |
| Promotion of community participation and engagement and enhancement of social dialogue to reinforce social stability | reduction of social tension in the region; raising life satisfaction among city dwellers |
| Use of awareness raising campaigns and charities | charity, ministry on addiction issues (drug and alcohol abuse, smoking); promotion of healthy lifestyle and family values; |
Our calculations have shown that since local companies will be commissioned to carry out works in the five-year period of the project, this will bring 56 million of tax receipts to the local budget. In total, at the construction stage, there will be created 180 new jobs, resulting in 260 million roubles of budget receipts, while the land rent payments will exceed 21 million roubles.

It is planned that at the operation stage there will be 26 permanent jobs available at the site. The income from the Cathedral’s activities will add up to 52.5 million roubles a year (the main revenue sources include payments for religious rites and ceremonies, sales of church goods and religious literature and so on). The average annual maintenance costs of the Cathedral (utility expenses, staff wages, insurance payments and so on) are predicted to be at the level of 27.75 million roubles a year. The annual tax revenue will be about 90 million roubles.

Thus, this project will create employment opportunities for city residents and attract new specialists to Ekaterinburg, increase the tax and non-tax receipts of the governments of different levels, improve the quality of urban environment and local amenities.

St.Catherine’s Cathedral is likely to attract religious tourists and people interested in the history of Ekaterinburg, provide a perfect venue for cultural and educational events and thus contribute to social stability in the region.

4. Conclusions
One of the main indicators of urban development is the quality of social infrastructure and the number of cultural institutions. A modern city needs all kinds of spaces and facilities that contribute to public life, including kindergartens with dance rooms and well-appointed swimming pools; schools with computer classes, laboratories, sports grounds and interactive whiteboards; new hospitals with advanced medical equipment; and churches, which provide a foundation for spiritual, cultural and moral development of urban dwellers.

Church building brings no commercial profit and has a low economic efficiency. What matters is the historic, cultural and social effect of such projects for all stakeholders. Therefore, selection of an adequate site location is one of the most important factors affecting the success of church building projects. The layout of the adjacent area should be designed in such a way that there would be enough space to meet the recreation needs of city residents. A productive way to realize a church building project is to redevelop an underused or abandoned industrial site, which will improve the quality of urban environment and create a positive social effect.

An indirect economic effect can be achieved if the church fulfills its potential to become a popular tourist sight. There are many success stories from all over the world when places of worship turned into influential symbols and a part of their cities’ brands. A modern religious venue can be a creative and enduring contribution to the urban landscape, a unique asset to the city and its neighbourhood, an important cultural, educational and spiritual centre.

5. References
[1] Decree of the President of the Russian Federation of 07.05.2018 г. № 204 "On National Goals and Strategic Tasks of Development of the Russian Federation Until 2024"
[2] Ivushkina N V 2001 Social Effect of Investment Processes (doctoral dissertation summary)
[3] Sindyashkina E N 2010 Evaluation of Social Impact in Investment Project Implementation Problemy prognozirovaniya 1 140-147
[4] Santos F M 2012 A positive theory of social entrepreneurship Journal of Business Ethics 3(111) 335–351
[5] Nicholls J 2017 Social return on investment – Development and convergence Evaluation and Program Planning 64 127-135
[6] Arvidson M, Lyon F, McKay S, Moro D 2013 Valuing the social? The nature and controversies of measuring social return on investment (SROI) Voluntary sector review 4(1) 3-18

[7] Cordes J J 2017 Using cost-benefit analysis and social return on investment to evaluate the impact of social enterprise: Promises, implementation, and limitations Evaluation and program planning 64 98-104

[8] Vanclay F 2003 International principles for social impact assessment Impact assessment and project appraisal 21(1) 5-12

[9] McCreless M, Fonzi C, Edens G, Lall S 2014 Metrics 3.0: A new vision for shared metrics Stanford Social Innovation Review 4 21-27

[10] Acumen Academy: The World’s School for Social Change https://www.acumenacademy.org/ last accessed 2020/08/08

[11] Sirotkina N V, Chudinova L N 2015 Methodology of Evaluation of a Company's Performance in the Sphere of Investment and Innovation Delta nauki 1 69-75

[12] Tulchinsky G L, Veksler A F, Leshchenko O A, Oleynik O V, Tulchinskaya L E 2008 Program "Effective Social Investment and Social Partnership (ESISP)" https://publications.hse.ru/mirror/pubs/share/folder/zy9qa673eu/direct/67369549 last accessed 2020/08/08

[13] Shalina D S, Stepanova N R 2019 Social Sentiment in Redevelopment Projects as a Key to their Successful Realization Sovremennye naukoyemkie tehnologii 12-2 395-400

[14] Russian Statistical Yearbook 2019 https://gks.ru/bgd/regl/b19_13/Main.htm last accessed 2020/08/08

[15] Life and Ministry of the Russian Orthodox Church from 2009 to 2019 http://www.patriarchia.ru/db/text/5359105.html last accessed 2020/08/08

[16] Pew Research Center https://www.pewforum.org/2018/10/29/eastern-and-western-europeans-differ-on-importance-of-religion-views-of-minorities-and-key-social-issues/ last accessed 2020/08/08