

# **APPLYING POST-WAR COUNTRIES' EXPERIENCE TO THE RECONSTRUCTION OF REAL ESTATE IN UKRAINE**

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Master Thesis submitted in fulfillment of the Degree

Master of Business Administration

Submitted to Prof. Dr. Gunther Maier

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## **AFFIDAVIT**

I hereby affirm that this Master's Thesis represents my own written work and that I have used no sources and aids other than those indicated. All passages quoted from publications or paraphrased from these sources are properly cited and attributed.

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## **ABSTRACT**

The current research was carried out during the full-scale war between the Russian Federation and Ukraine. How unbelievable it sounded a year ago, yet a new considerable armed conflict initiated by Russia broke out in the middle of Europe in 2022. Modern powerful weapons bring devastation to huge areas, turning them into battlefields. Residential houses are ruined daily, leaving thousands of people roofless. Many of those whose houses were damaged have repaired them in some way by different available means, not willing or not being able to leave for other, safer places. It goes without saying, the victims of the war as well as all Ukrainians are looking forward to the country rehabilitation and complete rebuilding once the peace is restored again. Even though the main resources of Ukraine are directed to the military needs now, the country government has started the talks about Ukraine's reconstruction prospects since the very beginning of the war. Several international conferences have already been held. Filling the content of such official talks with meaningful materials is crucial for the reconstruction success.

The research is focused on the reconstruction of residential houses in other countries, where real property was destroyed in the course of military operations. The aim of the research was to study the experience of real estate reconstruction in the aftermath of the armed conflicts in order to trace the positive and negative practice, which could be adopted or avoided during the future reconstruction of Ukraine. Luckily, such experience is not a common case for many countries, what causes the necessity of both theoretical and practical knowledge of post war reconstruction process.

The research is based on the qualitative study of the available literature and case studies of housing reconstruction in Bosnia and Herzegovina, Kosovo, Azerbaijan, Rwanda, Northern Iraq, Eritrea, and Lebanon. The main findings reveal that most large-scale conflicts lead to the lack of proper logistics and infrastructure, shortage of material and human resources, specialized in construction or related fields. Community participation plays a crucial role in the sustainability of the new housing and their acceptance by the beneficiaries. Political conflicts often result in the absence of local government and relevant institutions. This facilitates the increase of corruption or bureaucracy and complicates management of the construction project. These are challenges in the complex projects of real estate rebuilding in the aftermath of a war.

This paper can be useful for international donors and local governmental institutions which will be participating in Ukraine's reconstruction, as well as for beneficiaries who want to play an active role in rebuilding their homes after the war.

**Keywords:** *post-war reconstruction, housing rebuilding, community participation, material procurement.*



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## **LIST OF ABBREVIATIONS**

BIH - Bosnia and Herzegovina

EAR - the European Agency of Reconstruction

EU – the European Union

HPR - the Housing Reconstruction Program

HVM - Housing Verification and Monitoring Unit in BIH

IDP – internally displaced people

IFRC - the International Federation of Red Cross and Red Crescent Societies

IMG - the International Management Group

KFOR - Kosovo Force of the NATO

MHC - Municipal Housing Committee in Kosovo

NGO – non-governmental organization

OHR - the Office of The High Representative in BIH

OSCE - the Organization for Security and Cooperation in Europe

RRTF – the Return and Reconstruction Task Force in BIH

SIDA - the Swedish International Development Cooperation Agency

SRSA - Swedish Rescue Services Agency

UNHCR – the UN High Commission for Refugees

UNMIK - the Interim Administrative Mission in Kosovo led by the UN

UN – the United Nations

UNHCP - the United Nations High Commissioner for Refugees

UN-HABITAT - the United Nations Human Settlements Program

WWII – World War II



## 1. INTRODUCTION

The 24th of February 2022 was the day that changed Ukrainians all over the world. It was the early morning when millions of people were awakened by explosions in the country. These were horrifying sounds of death, caused by the shelling of Ukraine by the Russian Federation. This was the day when Russia's full-scale war against Ukraine has begun.

As of January 17, 2023, according to the data of the Ukrainian governmental institutions, Russian army has destroyed more than 120,000 civilian infrastructure facilities, among which power plants, schools, kindergartens, and numerous residential buildings. More than 2,4 million of people lived in the damaged houses (Ministry of Infrastructure of Ukraine, 2023).

The estimation of the UN Human Rights Office as of July 2022 was that over five thousand civilians were killed and over six thousand civilians injured since the launch of the war. The military actions made about seven million people leave their homes for the safer areas in Ukraine, and another seven million left the country seeking refuge elsewhere (Berman, 2022).

As for financial losses, as of November 2022 the Ukrainian government together with the World Bank and the European Commission evaluated the direct damage about USD 100 billion, the destroyed housing for USD 39 billion, transport infrastructure of USD 30 billion, the damage to commerce and industry USD 10 billion and to energy sector US 3 billion (The World Bank, 2022). Taking into account the massive attacks on the energy plants and infrastructure started in October 2022, the losses in the energy infrastructure are much high already.

Inevitably, the country's tax returns became drastically lower, namely, are decreased by 27%, while the spendings increased by 40%. That is why, despite all the international aid directed to the country, Ukraine has the gap in the fulfilment of the country budget at the war time (Berman, 2022).

Further damage is to be considered in terms of business lost profit, lost agricultural production, which is a vast share of the country's economy. Huge areas of the land require demining. Relocation of population, loss of jobs and income, psychologically traumatized people – all that require additional funding. The factual indirect losses as of June 2022 were estimated in USD 250 billion, rebuilding and demining of the factually

affected areas will require USD 350 billion, other emergencies will need USD 105 billion budget (Uren, 2022).

Once the country reconstruction starts, the programs of the international donor organizations aimed at the reconstruction projects will be a priority for Ukraine. The efficacy of such programs will influence the country reconstruction in the aftermath of the full-scale war, Ukraine's near future and far prospects.

All the stakeholders involved to the post-disaster reconstruction projects believe in their success. The reality proves that many of such projects fail if judged on the basis of the set and achieved targets. The rate of failures given by the World Bank as for African projects until 2000 was 50% (Ika et al., 2012). Therefore, it is important to identify the criteria which facilitate the project's success or might lead to its failure. They will enable the project's participants to predict its performance to some extent and can serve as the milestones' orientation.

Following the war-related topics in social nets and news media, absence of general knowledge in the topic of the post-war reconstruction is obvious among the Ukrainian population. Already now there are thousands of people who look for different types of help for the reconstruction of their fully destroyed or partially damaged homes. People have questions in various aspects: planning and other paperwork, technical advice, construction materials, and finance. Unfortunately, one can hardly find any answer to these questions now.

This study of the relevant experience of reconstruction programs in the post-war countries is aimed to bring knowledge, clarity in the theme and help Ukrainian citizens, communities, and reconstruction actors in their tasks.

## **2. METHODOLOGY**

### **2.1. Research question**

*The aim of this research* is to study the process of real property reconstruction in the aftermath of an armed conflict, to identify its difference from a regular real estate development project, based on the experience of other countries, which faced a disaster in the past.

*The objectives are* to learn the peculiarities of post-war countries environment, which influence the reconstruction process, the critical factors which facilitate the success of rebuilding projects.



*The research problem:* it will be necessary to rebuild the real estate of Ukraine once the peace is restored in its territory. It is crucial for the country's rehabilitation and its future to make the process as successful and smooth as possible.

In order to solve the research problem, the research is focused around one main question.

*Research question:* what are the critical factors to be addressed for the success of the real estate reconstruction projects in the post-war environment?

## **2.2. Research design**

The thesis includes a review of the available literature and research findings in regard to the theoretical part of the real estate development in the post-conflict environment, and case studies to observe the findings of the first part of the research in practice. One of the goals of this study is to examine the available information and to systematize it. This will lead to better understanding of the possible patterns in the post-war reconstruction projects. Such patterns shall be either applied or avoided during Ukraine's reconstruction, depending on whether they may lead to success or failure of the development project.

In order to reach the aim of the research, it was framed as follows. First, the geography of the research was determined to identify the countries whose experience could serve as a relevant example. Second, the practice of the post-war reconstruction projects was scrutinized and framed into the theoretical basis. While researching the post-war reconstruction, *the objectives* were to look for specific issues of major importance in this process. The presented case studies showed how the available theoretical knowledge manifested itself in practice and which new issues were revealed. The solution of the research problem was seen in summarizing the important lessons of the post-war reconstruction projects.

*Research focus* was to find out how the reconstruction projects should be organized to reach their main goals – to be time and money effective and to facilitate the return of people home.

*The qualitative research method* was used based on the available written materials and evaluation of the research findings. Due to nature of the theme, the experience of other countries related to the paper topics was studied and evaluated. These were primary and secondary sources, such as books written by people who participated in the post-

war recovery programs, maps, photographs, governmental documents, reports of the international aid agencies and humanitarian organizations.

*The organizational theory* aimed at studying the interactions of different organization's members was applied in the research. Knowledge about the performance of different reconstruction actors, their productivity and expertise within a rebuilding project allowed to seize a wider range of factors and previous practical experience in the post war reconstruction, that led, *inter alia*, to a deeper theme disclosure.

### **3. STRUCTURE OF THESIS**

The chapters of the literature review disclose the theoretical overview of the post-disaster reconstruction describing the first signs of the rebuilding opportunities, identifying main actors of the process. Financing the reconstruction is the key question in the after-war environment. The options for financing are described in detail. The legal status of the real property is an important issue for the reconstruction project. Finding the building materials, human resources, choosing the beneficiaries, ways of the construction work execution are the topics that are considered further. The choice of the know-how and technology, the post-construction maintenance of the building, which is often related to the former, are the important issues to be taken into account by the reconstruction actors.

The topics of beneficiaries' selection, community participation and the resources procurement are given special attention, as these issues were revealed as significantly affecting the post-war rebuilding projects. The case studies of Bosnia, Kosovo, Lebanon, Eritrea, Azerbaijan, Rwanda, and Northern Iraq concentrate on the mentioned issues though are not limited to them.

The concluding chapters sketch the general framework of a post-war real estate development project, specifying its features. The main factors contributing to the success of the post-war reconstruction are summarized. Conclusions on reconstruction project management and its sustainability features are drawn.

The final chapter highlights the research limitations and further issues which can raise the interest for future studies.

### **4. DEFINITION OF TERMS**

**Project** can be defined as a large unit of work which requires substantial financial resources, labour forces and special equipment in order to carry out certain task or reach

a physical objective fulfilled in accordance with the time or phases schedule (Dzulkarnaen et al., 2014).

**Reconstruction project** is an alteration, redesign or complete substitution of a real estate object, what might lead to alteration of its size and main features, renewal of its condition, acquisition of new features and functions (Attalla et al., 2004). Reconstruction can be also carried out in order to restore the previously available features of the object, which were destructed due to certain circumstances.

**Reconstruction project management** is the process directed to define, schedule and implement the project stages. The aim of the reconstruction project management is to complete the project on time within the planned budget by means of coordination the project participants, leading the project phases from the start of the project till commencing the ready building (EcoSys.net, 2022).

**Post-disaster reconstruction project** is the real estate reconstruction project which takes place within or shortly after a disaster of any kind. Such projects are overburdened with political and economic instability, shortage of resources, and a number of complicated circumstances. The proper management of such projects can be hardly overestimated, as this is the only way to secure its performance and reach the target of physical renewal of real estate and acceptance by the beneficiaries. The pivotal features of the successful project are its timely fulfillment and within the estimated budget (Dzulkarnaen et al., 2014).

**Beneficiary** in this research is one person or a group of people having certain relation to each other, or a legal entity that get the ownership or other title to the newly constructed real estate object in the result of the completion of the post-disaster reconstruction project.

**Actor** of the reconstruction is the party participating in the real estate reconstruction. These are all private persons and legal entities, contributing to or having any interest in the reconstruction project.

**Disaster**, as it is defined by the International Federation of Red Cross and Red Crescent Societies (IFRC), is a sudden event that sufficiently destroys the habitual life of people, in the result of which the conditions obligatory for natural survival of people are partially or fully destroyed. Due to the complex nature of such devastation, which includes physical, social and psychological side, the victims of such events are not able to cope with the circumstances themselves requiring external help. Disasters can be caused by

natural conditions, intentional or unintentional manmade activity (IFRC, 2022). In the literature devoted to the post-disaster reconstruction, two main categories are distinguished: natural disasters, such as earthquakes, tsunami; and armed conflicts. These are two types of commonly happening disasters, that lead to vast areas of devastation and biggest life disorders and are the most demanding and difficult ones. In this research the stress is made on the post-conflict real estate reconstruction. Some examples are given regarding the reconstruction in the aftermath of the natural disasters though where their context does not interfere with the purpose of this paper.

**Internally displaced people (IDP)** are those people who were forced to leave their home due to military assault in their locality and who found a shelter in other places within their country of origin (UNHCR, Internally Displaced People, 2022).

## **5. GEOGRAPHY OF THE RESEARCH**

It is hard to believe that in the 20th century an armed conflict took place every year on the globe. The confirmed data says 187 million people died during the conflicts since 1990 up to present, and it is not known how many deaths were not counted (El-Masri & Kellet, 2001). Therefore, the geographical scale that can be applicable to this research is very wide. In order to narrow it, the most recent armed conflicts were chosen for the study. The speed of civilization's development brings considerable changes to any industry, including real estate. The geographical proximity of some of the studied conflicts to Ukraine allows to suppose relatively similar natural and cultural environment. Based on the above the following countries, involved into armed conflicts, were taken as the basis of the research:

1. Lebanon War 1975 – 1991.
2. Rwandan Civil War 1990-1994.
3. Azerbaijan War 1992 – 1994.
4. Bosnian War 1992 – 1995.
5. Kosovo War 1998 – 1999.
6. Eritrean–Ethiopian War 1998 – 2000.
7. Iraq War 2003 – 2011.

## **6. GENERAL OVERVIEW OF LITERATURE**

The research was carried out with the help of on-line resources and hard copies of literature, such as books, periodicals, and journals.

The on-line resources were retrieved from the databases Google scholar <https://scholar.google.com>, EBSCO Business Source Premier <http://search.ebscohost.com>, ScienceDirect <http://www.sciencedirect.com>, web sites of governmental, financial and humanitarian organizations, such as the World Bank, UNO, Amnesty International, UN-Habitat, UN The Refugee Agency (UNHCR), Ukrainian Ministries and other.

Barakat (2003) researched the practice of post-conflict and disaster reconstruction, carried out by international donors and humanitarian organizations all over the globe within the last thirty years. In his paper “Housing reconstruction after conflict and disaster” the scholar interprets the process of housing construction in the post-disaster environment within his findings. Though Barakat described post-conflict reconstruction in this paper, he pointed out that housing reconstruction in peace time required attention as well, as a big number of people in many countries did not have decent living conditions. According to the UN-Habitat findings, by 2030 three billion people (that is 40% of the world’s population) will not have proper housing, while currently about 100 million people worldwide do not have houses to live in (UN-Habitat Housing, 2023). Barakat differentiated the post-conflict and the post-disaster reconstruction process. Though the projects are similar in many directions, the post-conflict reconstruction encounters additional political and legal difficulties – absence of political will or strong opposition, destruction of legal data and registers, what can complicate the situation.

Barakat (2003) and El-Masri (2001) insist on the necessity to improve the practice of the post-conflict and post-disaster reconstruction. An organization specializing on this field is required, especially due to the fact that international donors often do not possess the necessary level of expertise in this field. The results of their studies show, the planning has a number of faults, the reconstruction process is difficult, and the work of the actors is counterproductive. One of the main tasks should be to provide the victims with a new home, and not with the physical structure. The outcome of many reconstruction projects is the houses which are either abandoned by the beneficiaries, or rebuilt by them, or in the worst-case scenario are never occupied. The major question Barakat places is why the reconstruction of houses has such a small part in the relief and aid programs, if the housing destruction is a major consequence of disasters and conflicts (Barakat, 2003). His answer lies in the attitude to the post-conflict or post-disaster housing needs. They are seen as the necessity of real estate development, and not as the humanitarian need. His research proves this theme is not given proper attention and not studied sufficiently.

Dzulkarnaen, Taksiah, Ruhizal and Noorazam expounded their research of the post-disaster reconstruction in the paper “Project Management Success for Post-Disaster Reconstruction Projects: Intentional NGOs Perspective” in 2014. Reconstruction is a complex process with many parties involved. Authors stress on the necessity to study previous experience of the reconstruction projects management in order to improve the rehabilitation programs of NGOs. The point is made on singling out the success and failure factors in the post-disaster reconstruction, which should be taken into account by NGOs during the project planning in the future (Dzulkarnaen et al., 2014).

Similar to the previous scholars, Bilau, Witt and Lill issued the article “A Framework for Managing Post-Disaster Reconstruction” in 2015 with the aim to improve the post-disaster construction projects management. The authors believe the construction as an industry is getting drastically more complicated, and such tendency influences the complexity of the post-disaster reconstruction projects even more. On the other hand, the innovations lead to disaster resilience and can mitigate possible real estate damage in the future. Bilau et al. have developed the framework of the successful reconstruction projects management, having identified the challenges and issues which should be observed by the reconstruction actors (Bilau et al., 2015).

Resource procurement is seen as one of the critical factors in the post-conflict reconstruction. In 2011 Chang, Y., Wilkinson, S., and Seville, R. P. studied the topic of donors’ arrangements of the materials procurement and logistics during post-disaster reconstruction. After researching the reconstruction in post-tsunami Banda Aceh, Indonesia, they found the procurement part of the construction project management often led to project stoppage and budget overspending. Key reasons were the NGOs’ incompetency in the procurement and the competition between them, that are caused by the post-disaster materials shortage and logistic difficulties. Next were the external factors, such as low capacity of the related business, faults of the contractors and absence of governmental help in the issue. Further issues were related to insufficient participation of the community in the subject and omitting the housing construction specifics of the area. The authors believe, donors must give sufficient attention to the procurement and logistics in the post-disaster reconstruction, increase their expertise in the topic, do better planning, improve the communication with other actors, and look for the government support. Addressing the issue jointly is likely to deliver better results in the construction projects (Chang et al., 2011).

Community participation is considered as the crucial condition of the post-disaster reconstruction project in regard to securing its success. Such opinion is supported by

international organizations, including the World bank, the United Nation, and other NGOs, cited in this paper, as well as this factor was revealed by many scholars in their research. Davidson, Jonson, Lizarralde, Dikmen, Sliwinski carried out a deep study of the topic in 2007 which confirmed the community plays a significant role in the housing construction projects in the aftermath of a disaster. At the same time, this topic is not well defined and clear, and thus is not being extrapolated in practice properly. The main issue consists in the different ways a community may be drawn to the post-disaster reconstruction. Far not all the types of participation secure the practical result and lead towards reconstruction project success. For examples, they can name as the “community participation” the employment or free labour of the community in the construction works, that does not really influence the project goals, and can hardly mean the anticipated meaning of the phenomenon. It should be clearly understood, the community participation plays its role in case the beneficiaries and other members of the community have the decision-making rights in the construction project. The scholars concluded the latter case is not often seen in practice, and thus the potential of the community is not explored, what definitely affects the effectiveness of reconstruction projects (Davidson et al., 2007).

The progress of reconstruction of the villages in the aftermath of the war in Lebanon was studied by El-Masri and Kellet in 1990. The results were followed up in 2001. Community participation was considered by the scholars as the key factor of the post-conflict reconstruction success, which was not utilized in the aid programs in the studied cases unfortunately. The scholars state, after-war reconstruction is a complex process, where socio-economic, cultural, and organizational constituents need to be taken into account. Such an approach leads to sustainable reconstruction and creation of new settlements. In opposite case reconstruction projects create physical structures which do not get the proper place in the area development after the conflict. In order to reach such a deep insight, the socio-cultural life and priorities of the community should be studied prior to a war and after it. The scholars studied the community of the village al-Burjain in terms of residents’ needs and wishes, their understanding of home as the place of living and village as a bigger social unit. They believe such work should be carried out before the reconstruction project in every case. The outcomes of such community study should be used in the preparation of the post-war reconstruction programs (El-Masri & Kellet, 2001).

Vladimir Gligorov, Senior Research Economist at the Vienna Institute for International Economic Studies, specializes in the Balkan region. Together with Mary Kaldor and Loukas Tsoukalis, they have elaborated a profound analysis of the reconstruction of

Balkans after the Kosovo war and the region's integration into the EU. The outcomes of the study were embodied in the article named "Balkan Reconstruction and European Integration" (1999). The scholars researched the topic from different angles, the post-war micro- and macroeconomic environment, security, and political factors were examined. Kosovo, Serbia, Montenegro, and Bosnia-Herzegovina were studied as separate geopolitical units and as the part of the Balkan region with its prospects and obstacles. Scholars were concentrating on the process of the transition from the war devastated and disintegrated region to the countries as the future members of the EU. The development of the civil democratic society and economic recovery was one of the internal priorities and the aim of the international community in the region. The physical reconstruction of the region was impossible without the economic, social, and institutional recovery. The authors suggested a number of measures which must be taken by the international community after an armed conflict to enable a full recovery of the affected areas (Gligorov et al., 1999).

### **6.1. Theoretical framework of reconstruction project in post-war environment**

Mankind inevitably faces disasters, which bring devastation and suffering. Disasters can have natural causes or are related to the activity of people. It can be stated though, all the disasters are caused by people. At the closer look even those which are acts of God at first sight can be clearly caused by people. For example, melting of glaciers and general warming are mainly considered the responsibility of mankind's style of life and irresponsible use of natural resources. Another example, ruining of houses on the coastline due to floods or tsunami could be avoided. For this purpose, the legislation in regard to housing location in geographically dangerous environment should be fulfilled (El-Masri & Kellet, 2001).

Civilization has advanced a lot since the end of XIX century. It does not decrease the number of armed conflicts though. War is a disaster that causes long-term damage and provokes the consequent further loss in different spheres of peoples' life. When we look at the number of armed conflicts taking place, the question comes where such civilization is being directed to. After WWII, that is within last 78 years, about 150 armed conflicts took place. The most damaging ones were in Sudan and Somalia, Lebanon, Afghanistan, Syria, Vietnam, Ethiopia, Iraq, Kosovo, ex-Yugoslavia, and the ongoing invasion in Ukraine. Hewitt (1997) indicates 5,5 million people were killed in different conflicts around the globe and about 25 million people were forcibly displaced since 1990, that is within thirty years. These figures show the scale of life destruction an armed conflicts bring,



and the importance of physical and psychological reconstruction later (El-Masri & Kellet, 2001).

An armed conflict unconditionally leads to loss – loss of friends, relatives, beloved ones. Another aspect of loss in such cases is permanently decreasing income. The loss of homes is envisaged as one of the most painful outcomes of the crisis. Most people who went through the loss of homes believe it is not only about material loss of the place to live. It is much bigger than that. It is about loss of life sense, loss of status and something firm and unbroken, what used to keep the psychological condition stable. By losing home, people lose social identity and belonging, feeling insecure and at a loss themselves (Brun, 2005).

It should be stated, a house has a different meaning to people, depending on the life circumstances. For those who were forced to leave their home this place is a row of souvenirs, the identity proof, the condition of material wellbeing and the reminder of the life “before”. Based on that, construction of houses after the war should be always stipulated by the local culture to turn those souvenirs back into reality, and this fact cannot be omitted during the post-war reconstruction process.

Housing has a strong political context. The international actors have to identify how local politicians can use the housing issue in controlling or manipulating the war victims. In some cases, housing distribution can even prolong or deepen the conflict. As it was stated already, a house has a symbolic meaning of identity and differentiation. Therefore, it is often the target of devastation to hurt the other party of the conflict. The conflicting parties often use the tool of the intended housing destruction to minimize the physical and symbolic presence of the other party in the area. After the conflict new social and political borders within every community are to be defined, the main goal of which is to bring people together. In case the new social and political reality is not reflected in the newly built real estate, the area may not find new inhabitants very soon (Minervini, 2002).

During the relief stage people are placed into common living spaces, created in the buildings with a big space like stadiums, hotels, halls in the best-case scenario. Unfortunately, these places often turn into long-term shelter, what requires increasing the standards of temporary housing. It is important to understand how the war and displacement of people influence their further preferences in terms of permanent residence. Based on these wishes, the choice should be provided to people in terms of the new housing reconstruction, its location and other crucial, inseparable characteristics (Brun, 2005).

Such ideas lead to the conclusion that the theoretical framework should be always in place to cope with the vast number of disasters happening on the globe. Such systemized knowledge should be aimed at improving the situation of the affected people promptly but carefully and in a sustainable manner.

## **6.2. Preconditions of housing reconstruction**

In order to understand the meaning of a home in our life, let's ponder how we choose the place to live in peacetime. We spend about half of our lifetime at home. Not surprising, the place where we live – a house, apartment, etc. – plays a very important role for everybody. We invest a huge amount of time choosing the type of real estate and its substantial features, its location within a city, in a certain community. We decorate it inside to our taste and care about the outside landscape and view from the windows. We choose the place, depending on our social needs, educational and health care institutions. Finally, home should be the place dear to our heart.

From the microeconomic standpoint, immovable property is an important constituent of a country economy. It is influenced by the local political trends a lot. Real estate is one of the biggest industries in any country, having high values, requiring a high level of financing and investments, and fostering development of other cross-industries such as banking, insurance, intermediary services, etc. (Dasso et al., 1995).

We can imagine from the above how complicated the real estate industry is and what an important role it plays in society. That is why when an armed conflict sparkles in a country, real estate objects are among the first ones to be destroyed. The destructed buildings show vividly the consequences of warfare in a country.

To the addition to the psychological trauma of a war, losing shelter is the biggest blow that happens to people at a conflict zone. Therefore, reconstruction of residential premises is among the most important tasks in a post-war country. As development of real estate is a long-term and complicated process in peaceful times, the task of its rebuilding is even more perplexing for a country torn by the armed conflict.

As it was stated earlier, the process of real-estate reconstruction after a natural disaster or a conflict is not always as sound as it should be. Many countries have failed with this task. There is no one professional agency which would elaborate the clear road map for governmental agencies, which have task of real estate reconstruction. The donors and the agencies, in turn, do not possess the required level of proficiency in the question (Barakat, 2003). The main difficulties, which international agencies face when dealing

with rebuilding, are underestimation of the task's complexity, its social and economic meaning, absence of proper communication of the parties, involved to the process, as well as lack of information exchange. Planning of the territories is not carried out in the proper way; the design of the houses is not based on the real needs of people. Consequently, the reconstructed houses are rebuilt by their owners later, or their owners do not return there. One of the reasons for such poor results is the attitude to rebuilding as to a pure re-construction process, omitting its social and humanitarian features. These are, first of all, physical access to water, availability of energy resources and other infrastructure. The necessity to restore the social relief of the war victims is not less important (Barakat, 2003). Due to the fact that the post-conflict situation requires immediate actions and results in the form of physical shelters, very often the mentioned crucial elements of a successful rebuilding project are omitted. This is usually explained by lack of time, physical and financial resources, but it does not change the attitude of the beneficiaries to the outcomes.

The starting point of the successful rebuilding project is choosing the proper time. The first question that should be on the agenda of the project owner is whether the project *should be carried out or not* at this point of time.

In order to find the correct answer, Barakat (2003) suggests considering the following issues *within the organization* that plans to initiate the project:

- Do we have the authority to start the project?
- Do we have sufficient expertise in the field and are we able to work on a long-term contract?
- Is the project required by the community at this moment?
- Is there a real need for full-scale re-building of a house, or could a temporary (or other solution) be sufficient?
- What are other organizations that might be interested in working on the project, and would cooperation be possible, or shall we leave the project entirely to them?
- Do we possess enough financial, labour and material resources to carry out the project, or do we have the contracts signed for the resources to be provided in a timely manner?

After the evaluation of the internal capacities, it is necessary to look at the *external factors*, what can be done by means of finding the answers to such questions (Barakat, 2003):

- Do we believe that the project can be realized in the current political, economic, and social situation in the region?
- What are the signs telling us about its probable success?
- Do we see the interest of the community in the real estate restoration and the development of the place in whole?
- Do people return to their homes in this area?
- Do people try to reconstruct their houses on their own?
- Are there any signs of the municipal and social infrastructure development? These are roads, energy, and water infrastructure, opening or rebuilding of educational and health care institutions.
- Do locals invest in real estate?
- Is there commercial activity in the region?
- How active is the local government in supporting the housing rebuilding projects?

It should be mentioned that many of the above signs can appear during the on-going armed conflict. It means, despite the absence of political agreement on the core conflict issues, the local population have chosen to return to their homes and to rebuild their life there. This is the true sign of the success for the planned rebuilding housing projects (Barakat, 2003).

Further the process of post-disaster housing reconstruction will be studied in detail with the aim of understanding its stages, possible participants, and other main issues to be taken in consideration when planning the real estate development project.

### **6.3. Actors of reconstruction project**

From the research of Minervini (2002), Barakat (2003) and Dursun-Ozkanca et al. (2009), the following parties can be considered as the key actors in real estate reconstruction process.

**National government.** The national government of the post-war country often initiates the programs of housing reconstruction, establishing the national policy, drawing budgets with major donors, and facilitating the process in general. Very often a special body is devoted or created for such a purpose. Such organization becomes the main contact on national level for other actors of the project, it coordinates information, activity, related to the general policy on rebuilding. This body can be empowered to solve any crucial disagreement and conflicts related to the reconstruction process.

**Local government.** Local government is responsible for managing the life of communities within certain areas of a city, or its district, a village or a couple of villages located close to each other. Such authorities are usually responsible for rebuilding the vital infrastructure of the place for water, electricity, and gas supply. Their executive representatives usually carry out the registration of the property titles. They oversee land cadasters, issue permits for planning and building works. The representatives of the local government are the first contacts regarding approval of project planning and its further implementation.

**Community.** At the initial stage of the project, it is necessary to study the social structure of the community to identify those who need assistance in the housing reconstruction in the first instance. The next important question is the leadership in the community. It is important to track the type of leadership - whether it is formal or informal, to identify the body or persons who carry out the control. These people, even not having legal power, will secure the absence of groundless opposition to the construction projects, and could also provide huge support of a different nature. They can provide historical data of the community, or ensure personal connection to local government and businesspeople, what can strongly facilitate the project execution.

**Private business representatives.** This sector of the economy is very important for the country recovery after an armed conflict. Therefore, the private sector should always be involved in any project to the extent it is beneficial to the project. War brings downsizing of most businesses what results in unemployment. Usually, it is paired with shortage of materials and difficulties with supply. Reconstruction projects can provide new opportunities to local businesses and those who work for salary by means of their involvement to the project. It can certainly be beneficial in terms of cost too, and in additional bonuses as rise of economy indicators. Nevertheless, there is a danger of turning the reconstruction project into a purely commercial one. That will result in unaffordable prices for the new houses. That is why it is advisable to deal with private business within the cost split approved by the financial institutions. This will secure that the available financing covers the work of the private sector.

**External organizations.** The organizations which are involved in post-war reconstruction are international humanitarian organizations, banks, donors and other financial institutions and unions of professionals like the World Bank, UNO, European Commission, etc. These are usually huge and, therefore, very bureaucratic institutions, and their operations are highly regulated and not flexible (Barakat, 2003). External help is usually provided in two forms – financial aid and technical expertise or know-how. Some organizations offer both types of aid, some only one of them.

National government (or its authorized agency) works closely with external organizations to develop the scope or programs of the assistance. It is a complicated process due to internal requirements of the donors and factual needs of post-war countries. These two factors often cannot be paired easily. Therefore, it is necessary to look closely at the offered help, its scope, duration in time, amount of money. The revealed information should be applied to the actual situation with the reconstruction project as transparently as possible. This will help to avoid the halt of the project due to an absence of financing or other aid, promised but not provided for certain reasons. A detailed plan of actions with milestone approved by all the parties would be a helpful starting point and the target for everybody involved (Nettelfield & Wagner, 2014).

#### **6.4. Financing reconstruction**

The question of reconstruction financing has many aspects, and the first one is who should participate in the financing of housing reconstruction? Assumingly, all the actors listed in the previous chapter might be able to contribute – people from the community as the future residents; local government; national government; external international organizations. Even private business, for example, can participate in the part of infrastructure reconstruction, which can be later serviced by these private companies. In practice, the situation is more complicated as the war-torn country hardly possesses sufficient financial resources for its rebuilding (OED, 2004).

According to Barakat (2003), there are three main schemes of the projects financing, which have emerged from the practice of the post-disaster reconstruction:

- Costs are fully paid by third parties.
- Costs are paid partially by the future residents, and partially by third parties.
- Costs are paid by the future residents in full by means of loans, received from third parties.

It is the major task for the project owner to determine which type of financing would be appropriate and beneficial for a certain project.

**The scheme of full financing** by third parties automatically creates difficulties in determining the circle of people who are entitled to such funding. At the same time, in case the correct circle of people is identified, the new houses will be a substantial help to the war victims. Such a type of financing does not require complicated financial schemes and it is usually cost-effective. On the other hand, such financing deprives the residents as well as local authorities of the initiative and ambitions to develop the locality

further. Other disadvantages are that houses rebuilt under such programs are usually highly regulated in terms of design, materials, costs, and space. Often they do not meet the real needs of people, and may require further reconstruction soon, what makes them not sustainable. The biggest disadvantage of this option is the fact that finances are limited. The programs of a full financial help for the whole project cannot cover big territories of devastation (UNDRO, 1982).

**The scheme of partial financing** foresees partial coverage of the project costs by third parties. The other part is paid by the beneficiaries. Such a scheme allows and requires the participation of the future residents in the project planning, what makes them more initiative, secures the construction of more sustainable houses. Often it leaves local institutions behind in terms of their involvement though, not facilitating their recovery and active position. There can be also conflicts between the beneficiaries and the donors, and the master plan of the project can be broken by any party for different reasons (OED, 2004).

In the first and second schemes of financing, described above, people become owners of the property and can use it further according to their needs. That makes them feel more secure and provides other financing opportunities.

**The scheme for granting loans** can be in the form of market interest loans or loans without interest. The scheme is usually possible in those countries only, where the financial institutions were well-established before the war, or in case the new effective credit system is created within a short period of time by national or international financial institutions. Another important precondition is that beneficiaries have come across loan administration previously in their regular life. They should be able to pay it off in the post war situation. The disadvantage of this scheme is the costly administration of the loans. It increases the financial burden of the future residents substantially, narrowing the circle of those, who are eligible for such financing (Barakat, 2003). To the addition, such scheme of financing makes people dependent on the financial institution till the full repayment of the loan, as the house is usually mortgaged by the latter.

It would be fair to say none of the listed approaches is flowless. All the pros and contras of each scheme should be studied in each case of reconstruction. It should be also mentioned, UN sees the full financing of the housing reconstruction as the least beneficial scheme on the condition victims have not lost all their assets and other means of living (UNDRO, 1982).

Table 1 summarizes the main attributes of the three schemes of reconstruction financing.

Financing Option	Description	Advantages	Disadvantages
<b>Full financing of construction on a gift basis</b>	Beneficiaries are chosen based on the elaborated criteria and receive the new houses free of charge	<ul style="list-style-type: none"> <li>• Absence of need to establish financial institutions to recover the loans</li> <li>• Immediate transfer of title to the commissioned real estate to beneficiaries</li> </ul>	<ul style="list-style-type: none"> <li>• Develops the feeling of helplessness and dependency on external help</li> <li>• Deprives the community of the initiative and self-development possibilities</li> <li>• The houses are standard having no individualistic features</li> <li>• The donor agencies cannot reinvest the funds to other projects.</li> <li>• The projects are limited in number of houses</li> </ul>
<b>Partial financing as a gift</b>	Selected beneficiaries receive free of charge certain help for construction of their houses. It can be financing, or materials, or technical advice. Houses are mainly self-build	<ul style="list-style-type: none"> <li>• Absence of need to establish financial institutions to recover the loans</li> <li>• Beneficiaries' freedom of choice how to use the granted help.</li> <li>• Presence of beneficiaries' involvement and community participation</li> </ul>	<ul style="list-style-type: none"> <li>• Stimulates the feeling of helplessness and dependency on external help</li> <li>• Does not foster the initiative of the community and its self-development.</li> <li>• Requires significant involvement of the beneficiaries to the construction process what is not always possible for many of them due to other vital priorities.</li> </ul>



<b>Loans</b>	Granting finances as a long term or short-term loans, with or without interest	<ul style="list-style-type: none"> <li>• People are often able to repay the loans</li> <li>• Beneficiaries are free regarding any decision in constructing their house</li> <li>• Develop independence, self-confidence and sustainability</li> </ul>	<ul style="list-style-type: none"> <li>• Renters are willing to become owners, what may create conflict</li> <li>• Financial institutions are to be established. It is time consuming and increases the loan cost</li> <li>• Beneficiaries are not always familiar with loans administration, what can cause issues both for them and creditors</li> <li>• Not many beneficiaries are able to provide collaterals for receiving the loan, thus the circle of the beneficiaries may be dramatically narrow</li> </ul>
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*Table 1. Comparison of construction financing options specified by Barakat (2003)*

## **6.5. Legal status of immovable property**

The next important factor influencing the success of the reconstruction project is the legal status of the buildings and land plots, eligible for rebuilding. Before starting a reconstruction project, its owner should clear out the right which the beneficiaries have to the property and whether it is sufficient for the project purposes.

### **6.5.1. Buildings**

The models of property usage differ from country to country. They can be classified under certain common features though. The most typical models of real property use are described below, based on Dasso et al. (1995) and stated in the concept paper of UN-Habitat “Global Campaign for Secure Tenure: a tool for advocating the provision of adequate shelter for the urban poor” (UN-Habitat, 2004). The offered classification describes legal rules and procedures to be considered before the reconstruction.

**Rent or lease agreements.** Such agreements provide access and use of the property for the defined period. The tenants or lessees pay rent for such a right. It is very rare that rent or lease agreements allow the tenants to carry out capital repair. Besides, it is not feasible for them to make it as their right to the property is limited in time and therefore the investments will hardly pay off. Thus, such type of property use can be deprived of the reconstruction possibility.

**Conditional ownership right.** Usually these are lease agreements which foresee the transition of the lease right into full ownership after meeting certain conditions. These could be the lease for a definite period with the fixed rent amount, which on a certain point turns into full pay off the property value. From that moment the lessee becomes the unconditional owner of the property.

**Collective ownership right.** The collective ownership right foresees the use of the property not by a single user or entity, but by a group of them. These could be cooperatives, associations, or corporate bodies, governed by a board. All the owners have equal rights in the property usage. Very often the owners have the priority right in case of the disposal of the property part by other members.

**Communal ownership.** This type of ownership may be performed in the form of local community ownership, represented by city executive authority or city district government, the rights of which are usually well regulated by the effective laws. The other option is the right of the community based on historical or cultural traditions, which may be not legally framed.

**Freehold ownership.** This is the most transparent and safe title document, which grants its owner a full set of rights in relation to real estate property. The owner is entitled to use, dispose, mortgage, rebuild or do any other actions with the property he owns freehold.

## **6.5.2. Land**

Buildings are inseparable from the land plot on which they are located. Thus, the legally grounded right to the land plot is the next condition to take the project into development. A land cadaster is the map of the territory, which comprises land plots of different owners, indicating their borders, purpose of usage, legal status of each piece of land, etc. The form of land usage is usually entered into the register of the immovable property and rights to it. The official extracts from such a register give reliable ground for the

development of the land plot, securing no further claims can be laid to this property. Similar registers are carried out in regard to buildings and structures nowadays.

The situation with the title to the real estate can be complicated in case of destruction of such registers or their insecurity. This can be the case when they are in hard copies only that can be easily destroyed, or if they are fully electronic, and the data can be hacked any time.

A bigger difficulty might be caused by the laws related to property ownership. Pre-war registers might not correspond to the real after-war situation. This may lead to the necessity to adapt the laws, regulating, for example, family and marriage heritage on the national level, as well as introducing some local executive orders, which should help to overcome gaps in the effective legislation. As an example, can serve the situation when one member of the family who held the title to the property is considered as missing. It takes years for the family members to gain the right to the property, what will hinder the reconstruction process in the after-war situation when the number of missing persons is always huge (Barakat, 2003).

There are situations when people sell property to each other at times, when the governmental authorities are not able to certify the deal and enter the information to the property registers. This will create obstacles for the usage of the property sooner or later, and it is highly advisable to regulate such cases ahead of time.

Therefore, the effective work of the legislative body on the national and local level is highly important to adopt new or temporary legislative acts, facilitating the process of property status verification, and minimizing the ambiguity in this field in the future.

## **6.6. Resources, required for rebuilding**

Based on the research made, resources exploited in the construction project can be split in three categories: material resources, intellectual resources, and labour resources (Dzulkarnaen et al., 2014), (Barakat, 2003), (IFRC, 2022).

First category, the material resources, include immovable and movable property, required for the real estate development project.

**Land and location** are the initial issues to be considered for the construction project. The first question that would arise is whether it is worth constructing on the same land plot where the destroyed houses were, or it is better to move the settlement to a new place. Here the dilemma will be whether traumatized by war people prefer to return to

the place where their sufferings took place, or they choose to build a new life in a new place. Even though it might seem a good idea to be far from the place where the victims' life was ruined, the earlier fulfilled projects showed that most people prefer to return to the place where they used to live. The cultural and social attachment to the place of living prevail over the bad memories that people have after the armed conflicts (Barakat, 2003). Another case might be in the situation where people look for an easier life than they had before the war. That is why many young people in rural areas prefer to move to cities where they might see more opportunities and their life could be more interesting and fulfilling.

The general aim for choosing a place is to find the land plot in a safe area suitable for the certain project, corresponding to the type of real estate to be built and in line with the local city planning. Land ownership is not a less important question, as was already mentioned earlier. The donors should be aware who has the authority to grant the right to the project development on the spot. The task is usually easy when the land cadaster existed before the war, and in case it was not damaged during the conflict. Once the land plot is within the local community possession, the title can be cleared quite easily and safely (Dasso et al., 1995). The land became a complicated issue once the plot was under private ownership and the migration within the country took place. In the latter case it is rather risky to start the project in favour of the new residents without clearing up the issue with the landowner. There must be either lawful regulation of the central government for such cases, or the probability of the housing title to be disputed by the landowners in the future shall not be fully expelled.

**Building materials** are the next material resources which require attention. War affects logistics of the country, increases inflation, and makes the prices for all material resources higher. It is advisable to make a thorough study of the available in the country or even in the project area material resources, their pricing, and ways of supply in order to secure the completion of the project in general, as well as within the estimated cost split (Chang et al., 2011). The question of sustainability should be considered too. Local resources are always more sustainable, their use improves the country economy, they are better accepted by local community as they are considered as "belonging to this place" (Minervini, 2002).

**Next group is the intellectual resources and know-how** available in the project location and which can be utilized in the project. This group includes the local professionals who could participate in any stage of the project, the local government, which shall issue permits and provide certain type of expertise, the NGOs, professional

organizations and private business, which can provide the know-how, promote the project and vector it towards the right direction (Brun, 2005). It should be stressed again, using local companies and know-how would secure the acceptance of the project by locals, will contribute to the economy, and provide employment to the intellectual and educated part of the community.

**Labour resources** indicate the ability of local people to contribute to the project fulfillment. These may include skilled and unskilled workers, builders, site managers, different technical and administrative staff, those people who can provide some services to those involved into construction (catering services, providing temporary shelter, sewing uniforms, etc.). Unemployment is the major complication of any post-war country, and it affects all layers of society. It is also an axiom that the poorest suffer most of all. Therefore, it is extremely important to provide such people with different kind of support – from being beneficiaries in the rebuilding housing project to providing them with the jobs and, thus, the possibility of earning money (UNDRO, 1982).

To secure the successful implementation of the rebuilding project, to make it sustainable and widely accepted by local government and community, it is highly important to evaluate all the above-described resources, available within the project adequate proximity, and to utilize them to the biggest possible extent.

## **6.7. Choosing beneficiaries**

Choosing the beneficiaries of the future property is one of the most difficult tasks to be resolved during the rebuilding process. To avoid arguments in this question, it is required to elaborate the system of criteria which will allow to identify those who are eligible to participate in the program (Minervini, 2002). These criteria depend on a number of factors – the financial funds available, the community size, the economic situation in the area and income possibilities for the locals, vulnerability of different population groups and their social position (El-Masri & Kellet, 2001).

In order to work out the sustainable criteria which would give the positive outcome of the project it is necessary to look at the community in general and the different groups of the population from cultural and social perspectives. Study of the available statistical and economic information about the families' income and expenditures, evaluation of the social environment, which will influence the habitation of the rebuilt houses are of help here. The fairness factor is very important to minimize the hostility between the inhabitants and to the organization, which leads the rebuilding process. Another important factor is the even distribution of the real estate to be reconstructed – not to

leave big territories without the expected assistance (El-Masri & Kellet, 2001). The opposite approach would be to invest in a smaller area and make the place fully inhabited instead of spreading the project for huge territory but leaving it hard to be occupied due to absence of water or electricity supply, for example. The latter strategy would work well in case such gaps in infrastructure are filled by local authorities' projects (Barakat, 2003).

Yet, it is usually very difficult to distinguish the exclusive criteria to identify very accurately which society representatives are vulnerable and which are not, it is difficult to determine the financial situation of each family and their income. For example, it can be seasonal or paid in cash. The factor of males and females count in the family often influences the picture a lot. Men are able to get more benefits in rebuilding projects usually, and therefore families with only female members should be given a special attention, especially in case they have small children and elderly on their account. Some will want to take advantage of the situation and will try to claim the help in many places or through different family members getting the excessive amount of help in comparison to other people (Povrzenic, 2004).

## **6.8. Different approaches to the creation of new housing**

### **6.8.1. Selecting type of help**

Davis (1978) and later Barakat (2003) described the following five approaches of providing help in the rebuilding of the housing:

- building temporary houses;
- repair of the damaged property;
- building new houses;
- “building yard” approach, when the construction is carried out by local forces while the required know-how, technologies and materials are provided by external agencies;
- “financial facilitation” approach, which requires external financing of the rebuilding project carried out by local forces in full.

The approach chosen for each project is determined by local factors and situation. The determinative circumstances influencing the choice of the approach will be further reflected in detail.

**Temporal or the more explicit definition “emergency” housing** foresees the creation of temporal places of living for people either in those buildings which were not destroyed or on the territory of the relief camps. The distinguishing feature of such an option could

be the urgency of the shelter for the vast number of people. They are not meant for long living, usually easily installed, made of light materials, suitable for such purposes as plastic, for example. Such shelters can be delivered in semi-collected form, and theoretically can be used in any part of the world independent of the climate and geography. They can be used immediately after the disaster takes place leaving many people roofless and without availability of the better options of housing (GTZ, 2003).

The disadvantage of the temporary housing is their short period of service. They are not immovable property, thus not being able to provide the comfort of the bricks and mortar building. At the same time, they are costly, require logistics for the delivery, expenses for their customs clearance, and local forces for the installation. Their performance can be very poor due to local weather conditions. Another question is where to locate these shelters. Vast land resources are needed, and they cannot be on the same land plots as for the permanent housing. On the other hand, the land which is used for this type of dwelling can hardly be returned to its initial purpose. As a result, they can be not much cheaper than construction of permanent real estate objects while taking the part of the permanent housing budget. Besides, the option of the temporary shelters does not contribute to the local economy, and often can be made by people themselves from the materials available at place or they can find the temporary shelter at the places of other people (Davis, 1978). The worst outcome of the temporary housing though is when they are used permanently due to absence of the necessary resource for the development of the immovable property or fears of people not to get the permanent houses on whatever reason (SIDA, 2000). To sum it up, the temporary shelters may hinder and negatively affect the permanent housing construction due to economic, financial, logistic, and social implications they have.

A better option for temporary housing is to make it of such materials and in such locations that they can be gradually transformed into permanent houses. It means, for example, the temporary houses can have a strong frame in order that the light plastic materials of walls could be substituted with more durable ones later. The experience shows that after the relocation to the temporary housing, people are often unwilling to move to a new place, as it is another trauma for them (IFRC, 2022). Therefore, such an approach is sustainable in many regards, as it saves costs for the materials, it economizes the use of land resources, and it protects people from further psychological burden of worrying where they will live in the future.

The intermediate solution between temporary and permanent housing could be the use of such buildings as hotels, hostels, hospitals, schools, kindergartens in case their stock

exceeds the needs of the community after the conflict, or they were not in use before the war. Such buildings can be relatively easily and cheaply adapted to the private dwellings and would provide certain level of comfort to people (Skotte, 2004).

**Repair of the damaged property** is referred to creation of permanent housing. It is a sound choice for the cases when buildings are damaged partially (and not in whole), and when not a large number of houses are destroyed. It is usually the choice of inhabitants to repair their house, especially if construction materials or financial help are provided, as people prefer to stay in their homes in any circumstances. Habitual place of living facilitates the return to the normal life, and psychologically it is much less traumatic for people than moving somewhere (SIDA, 2000).

The social role of housing repair cannot be overestimated. In most cases the repair is carried out by the inhabitants and members of local communities with use of local materials, what positively contributes to faster revitalization of the community in general. The role of the external agencies would be the financing of the repairs through specific programs, providing consultative help or specific expertise. Another way of the repair's facilitation is offering "repair kits" in the form of sets of materials or equipment necessary for the repair of certain parts of the building (Barakat, 2003). These can be, for example, tiles for the roof, doors and windows frames, kitchen, and sanitation equipment, etc. By means of this type of help the locals are encouraged to be active in restoring their life and at the same time people are given hope and the feeling of security that they are not left alone in their trouble.

It is generally accepted by international donors that the repair of the house financed by external agencies should be to the extent allowing to restore the real estate to its previous condition. Its further improvement shall be carried out on the account of the house owners. In real life the fear of extra spendings is groundless as after an armed conflict people do not tend both financially and mentally to overspend. The repair of the houses is mainly targeted to the reconstruction of the main facilities of the house, for instance, to secure the roof, walls, get the equipment needed for kitchen, bathroom, etc. (Barakat, 2003).

Summarizing the housing repair option, it should be stated it gives several benefits. In comparison to a new construction the repair process is faster, less costly, easier to perform from the design and planning approval point of view, requires the participation of the inhabitants, secures more accepted social and cultural result.



The kits offered as free materials can bring complications. They are not always of the best quality and may not be appropriate for the local architecture. It is not always easy to make account of the provided materials, there could be logistic issues with the kits' delivery. Finally, the locally hired people should be taught how to work with the provided kits, material, and equipment.

**Building new houses** foresees construction of the house from scratch. This option is the most time, money, efforts, and materials consuming way to supply people with the housing.

The first issue to be taken care of in the new construction is the location of the new settlement (GTZ, 2003). It is usually a complicated task as land resources are limited in those areas where people would like to live. There are always issues with land property rights, arguments with people from the existing communities near which the new ones are being planned. The local government and politics have their own priorities, they might have their own views in regard to the development area. It is important to consider ecological and recreation resources of the locality, water, energy and social infrastructure of the future settlement, labour market opportunities, relationship between the people in terms of different religion or other significant discrepancies of life values which might exist in the locality. All these details would tremendously influence the success of the new settlement in terms of its sustainability and demand among the future inhabitants.

Barakat (2003) suggests going through the following questionnaire and find the grounded answer for the choice of the construction site:

- 1). Access of the place. How easy is it to access the place at any season? The distance and accessibility to important social infrastructure. Quality of roads.
- 2). Security of the place in terms of the recent conflict and possible future implications.
- 3). Geography of the place, its climate, geology of the land plot.
- 4). Available infrastructure and possibilities of its improvement; water, electricity, gas and other energy supplies.
- 5). Property rights and governmental approvals. Who is entitled to hand over the land plot and authorize the construction?
- 6). Level of acceptance of the location by the future inhabitants and the nearby living ones.

7). Size of the land plot. Is it sufficient for the planned settlement? Are there areas for recreation, agriculture, small industries development nearby? Are there possibilities for the development of the settlement in the future?

8). Environment and ecology. Is the current land use different than the planned one? What will be the consequences? Are there any harmful industries nearby? What will be the logistics during the construction process?

Special attention should be given to the collaboration with the local government in this approach as it may facilitate or hinder the process significantly. The government, on one hand, approves the planning documentation, on the other hand, it may participate in the construction process and finance it (Leroux-Martin, 2014).

The next question the actors will face is the choice of the materials and the technics to be used in the construction. It is worth while giving preference to local materials, methods, and technics of the construction. They are usually appropriate for local climate, geography, cultural demands, and taste. It is expected that they would be cheaper than imported, logistics should be easier, local professionals and business will be involved, and therefore the local economy will benefit even more than just getting new housing (Davis, 1978). There is also a social effect of the materials to be used, which can be both positive and negative though. The positive effect will be reached in case the buildings with historical meaning are reconstructed with their original materials, for example. In case the new house is built from the materials of the house, where the family member was killed or buried under, it will become the sad reminder for its inhabitants (Minervini, 2002).

High demand for the materials and services at the same point of time can increase prices on them tremendously as well as lead to their deficit. Therefore, the idea of splitting the supply of materials and services between the local and the neighboring or assisting countries should be well thought over (Bilau et al., 2015).

As for the construction techniques, it requires more precise attention. The locally accepted methods of construction would be easier and faster to implement, involvement of local specialists would be more successful. Before approving such an approach, it is advisable to evaluate the safety of such methods and whether they are up to date taking into account climate change, political vulnerability of the area etc. It was discovered, due to the fact of long-term stability of the region, people and government tend to diminish the importance of safety measures, what might have caused a vaster demolition during

the disaster. The new housing should be more durable for such situations in the future (Barakat, 2003).

As an option of the new housing, the use of the prefabricated houses can be considered (GTZ, 2003). Among the advantages of such construction is relative fast creation of the new houses, what is important when many people become roofless within short period of time. Such buildings are delivered in big parts which are assembled at the location of the future house. This allows to create a stock of such parts also, which can be used any other appropriate or urgent moment.

The process of installation of prefabricated housing can be slowed down by logistic issues. There may be issues with their condition after delivery and their installation due to lack of producer's control. The design of such houses is very rigid and does not allow a big variety of space planning, thus may be socially and culturally inappropriate. It is important to correlate the quality of the materials to the climate they are going to be used in. It should be mentioned also, prefabricated or "semi-ready" houses structure are often considered as temporary housing, and the building created in such way usually used for other purposes as auxiliary structures (GTZ, 2003).

The design of the newly constructed houses requires attention too. The first question usually is whether the design should be improved in comparison to the previously existing building. The designers should be careful in this issue, as the cultural, religious, and local preferences can significantly differ from their own or what is accepted in "modern world" (El-Masri & Kellet, 2001). Especially it can be referred to bathroom and sanitary spaces, as their location is conditioned by water and sewerage systems, which are difficult to change later. Other house spaces might have special meaning and can have certain rules of use by different family groups, depending on gender and age. These requirements will cause important specifics to the dwelling's design. The cultural preference of common coexistence of many generations in one house casts important requirement to the design, giving the preference to big houses, consisting of many units, the communications between which may vary depending on privacy rules. The design of a city house and a village house very greatly both from their utilization standpoint and the taste and life habits of their inhabitants. Location of the house influences its design too, as economic situation of the area and the occupation of local people determine the structure of the household. Agricultural areas require a place to store the harvest, farming lands need housing for poultry or cattle. Residents of more industrial lands would need place to make workshops and small enterprises (Barakat, 2003). Thus, the new houses

should be created from the perspective of further development, adjustment, and expansion.

**“Building yard” approach** proved itself successful in the areas where local communities and house owners were able to carry out the construction and financed the biggest part of it, in case people were eager to rebuild their old houses, but lacked construction materials, knowledge and technologies to do that (GTZ, 2003). This option might be beneficial also in the areas with vulnerable environment which is likely to be hit either by battles or natural disasters again, thus requiring the reconstruction to be made using special materials and technologies to withstand the possible future attacks.

The assistance of such kind is focused on the production of the building materials, their distribution, training of the labour in special construction technics, and use of the new materials. Such an approach facilitates the initiative of the communities to rebuild their housing and other needed real estate infrastructure like schools, hospitals, and other administrative buildings. It preserves the local culture and views on construction design, at the same time improving them in terms of the materials and construction technics quality. It secures the availability of construction materials at times when they are in high demand in the country. Such assistance raises the education of construction professionals, as well as stimulates the development of small enterprises working in construction (Barakat, 2003).

As the building yard approach may offer the construction materials free of charge, there is a risk of unfair competition with the earlier planned or imported building materials and techniques as the demand for the latter can be decreased. It is also difficult to track the materials given under such programs. Donors are not sure whether they were used in the targeted construction or were sold further, thus not allowing to evaluate the assistance in general, what in turn may affect the desire of financing agencies to support the reconstruction where such approach is used. A further risk of the approach is the possibility for the people who were trained under such programs to migrate to other areas, thus not performing their function as they were supposed to. Some people who give consent to participate in the program on the condition to self-financing of the reconstruction can change their mind and wait for financial grants, what will stop the building process for indefinite period of time (Lizarralde, 2003).

The precondition of the last approach, **the finance facilitation**, is that communities are able to carry out the real estate development process, and namely there are skilled professionals and labour force to work in the construction, the technologies and materials

are available in the market, and there only constituent missing is money to finance all that (Barakat, 2003).

In order take decision on how to finance the reconstruction process, it is advisable to study the experience of the community in construction financing before the war (El-Masri & Kellet, 2001). It is necessary to learn what was the main scheme of the private housing construction financing. Was it governmental or private financing? What were the sources of the money in both cases? What kind of institutions were granting the funds? The next step would be to learn the financial instruments which were used: were these grants or loans, which collaterals were used. After studying this information, the data on the financial situation of the population will be received, and the financial instruments people were used to before the war will be known. This information will help to create the correct instruments for the housing renovation after the armed conflict. For example, for international donors it could be easier to work with those institutions which are already present in the market and aware of its peculiarities, than to create new institutions for this purpose. Such an approach will also contribute to the recovery of the financial system of the country. Naturally, one of the most important questions would be how the poorest population was dealing with housing needs before, and what help they would need after the war in order to cope with the new housing difficulties?

There are various financial programs targeted at different groups of population with a certain amount to be borrowed depending on the level of the damage, income of the family, repayment schedule, etc. (Mumtaz, 1996). Financial specialists together with the construction industry are able to evaluate the construction's costs with all the required overheads in order to determine the necessary sums to be financed. It should be mentioned, even in peaceful time real estate development costs are difficult to fix and the estimate changes at different stages. It is advisable to put extra costs for the contingencies which will most definitely take place in the post-war unstable market.

The key actors in the reconstruction financing are national and local government, and international donor organizations. There could be the case when the local government does not exist as the result of the armed conflict, what will require the establishment of a new temporary body, for instance, local councils, which can be responsible for the financial side in the housing rebuilding process (Minervini, 2002). Yet, the local council can rather facilitate the financing while the central government plays a major role in finding the funds. First, it has resources to negotiate the needs on an international level with the most significant organizations involved in the field. Second, seeing the picture country-wide in terms of the rebuilding, the country government has a prerogative to pass

the laws obligatory to all the regions, which would frame the financing of the reconstruction process. These could include such issues as taking over by the government the obligation of partial or complete payment of the loans interest, simplification of collaterals and mortgage requirements, issuing governmental guarantees to lenders, implementing tax and other privileges to businesses, contributing to the construction, and many other ways to support the housing rebuilding. One of the worst scenarios is when the financial resources are available, but the rebuilding cannot be carried out due to the country ineffective laws or other obstacles created locally (Nettelfield & Wagner, 2014).

In order to stimulate the activity of the community, some donors intentionally give financial aid to the community directly under the specially elaborated programs, which foresee certain way of people's participation in the construction. People can perform building works or be employed in the businesses, servicing the construction. Donors pay for the construction materials and allocate the finances in phases depending on the performance providing subsidies for the construction period, etc. Violation of the established rules may lead to cancellation of the financial aid. The crucial task for all the participants remains in the use of money according to the grants' purpose – to the reconstruction of housing. This rule shall work independently on which level the aid is distributed – to central government, to local authorities or to families. The donors and the government should be aware of the possible situations when the financing is available, but there is shortage of construction materials and workers to utilize them (Barakat, 2003).

The financial aid can be either expected to be returned (with or without interest) or granted unconditionally. The financing programs are considered successful if, first, the housing rebuilding is fully completed and, second, the displaced people returned to their homes. The experience of international organizations shows such targets are more likely to be reached in case the aid is conditional, as it requires the awareness and responsibility of the borrowers when signing up for it. It is important though to create programs with repayment schedules which are manageable by the different strata of society. The loan recovery can foresee a partial return of the sum or payment in kind, or performance of certain work required in the community at that time (UNDRO, 1982).

### **6.8.2. Evaluating success of the chosen approach**

Any of the mentioned approaches was probed in practice in different parts of the world after natural disasters or armed conflicts depending on the immediate circumstances and proved to be successful or not depending on the given circumstances. The general

requirements to the approach choice which are usually expected by the donors are the potential of the programs in terms of the availability of all the resources needed for the rebuilding to be completed. These are financial resources, material resources, labour and inhabitants willing to return to their homes. The balance between the cost and quality is always important. Ideally the future houses should be socially, culturally, and economically harmonious with the local environment. The new settlement should offer the necessary infrastructure and municipal services, water and energy supply, show the signs of employment market development and evidence the comfort of living (Barakat, 2003).

The question of new technologies' exploration arises during the planning stage of the rebuilding process. New technologies are usually well grounded in case of the necessity to improve the resistance of the buildings for future possible threats. Though it may seem reasonable to improve the technology in any field, it might have negative effects as well. First, it can be too expensive in the present situation to the addition to the future maintenance of the facility. If the new technology is based on imported goods and services, the local economy will be affected. In case the new technology is widely used during the housing reconstruction, it may lead to the elimination of local knowledge in construction, spoil the traditional architecture and challenge the acceptance of the result by the inhabitants. For instance, the omission of these circumstances led to issues after the reconstruction projects were successfully completed in Bam, Iran, when the maintenance of the buildings was on the agenda. As the used techniques were not properly transferred to local specialists and beneficiaries and imported materials were primarily used, people faced the issues of using old technics and local materials over the new ones during the ongoing servicing of the buildings (Gharaati & Davidson, 2008).

## **6.9. Execution of construction works**

The next step in the construction project is to determine the way the construction works will be carried out. There are two main ways to implement this – either through a contractor option, or by means of self-building by the community and future residents.

### **6.9.1. Contractor-build model**

The contractor-build model foresees the engagement of a professional construction company to carry out the construction works. According to Barakat (1993) such option would be beneficial in the following cases:

- when a big quantity of square meters should be built within the shortest possible time;
- when the local community does not possess the required skills, forces and will to carry out the construction works (including absence of local small and medium size construction companies);
- when the community does not command technology required to construct safe and durable real estate taking into account the current circumstances.

The contractor method is considered safe for its stakeholders, better planned in time, easier to be forecasted and tracked. Therefore, it is often preferred by donors and international agencies which do not seek active participation of the community. The positive results are reached by contractors due to the working specifics of such companies. They tend to create the project design, which is easy to perform and to work on “copy – paste” mode not bringing big diversity into real estate they build. At the end the community gets houses which do not always meet the earlier set needs and often require further replanning and redesign which can be performed by the inhabitants in better times (Barakat, 1993).

The strong argument for a contractor-build method is construction of multistorey buildings in cities where the self-building is practically impossible to realize or building housing for such groups of people as retired people, women with or without children not having a male family member (Barakat, 1993).

In the smaller communities where the self-building of houses is still a common practice, the involvement of big professional construction companies would deprive the community members of their business, affect the ambitions and initiative of local people which might affect the project results. As an example of the wrong choice, the project in the post-earthquake Gujarat can be taken. The contractor-build approach led to the beneficiaries not accepting the newly built houses due to their quality and used materials. Instead of moving to the new homes, many people switched to repairing their old ones (Barenstein, 2006).

To the addition of the above, the question of local or international contractor should be considered. In the studied cases, the post-conflict countries possess enough capacity in construction business to carry out the works by local companies. There might be difficulties in organizing the process due to the absence of certain constituents in the building industry – from skilled people and managers to construction materials. The most important parts are know-how, knowledge of the construction process, local peculiarities



are always there. A big construction project given to local companies may return the industry to the pre-war level, while engagement of international companies would bring the benefit to donors' economy (Davis I. , 2006).

Another argument against the international contractor is the time required for the latter to establish a business in the new country. To register a legal entity, to hire personnel, to arrange the logistics and supply necessary to set a business and to fulfill a project are time and resources consuming tasks which will influence the project cost and timing (Barakat, 2003).

The main document regulating the project progress is a construction contract which should be signed by all the parties for the project to be successful. It is a binding document for all the parties involved which should describe in detail the project phases, financing, object quality and size. The contract should include as detailed terms as possible to mitigate the deviation of the finished product from the planned one. It is a crucial document for the project to be completed in general and in time, and it must stipulate the sufficient liability of every party for any possible breach. Financing of the project is one of the main contract provisions, and it is always reasonable to foresee the project financing according to its progress (Dasso et al., 1995).

Speaking about reconstruction in developed countries where the rule of law is already established in order to filter the contractors, open tenders are carried out. The construction contract draft should be presented there. At this stage the circle of the contractors will narrow automatically after disclosing the project terms. Competition is a feature of the market economy, and the market of construction business is not an exception. The more transparent and realistic the project terms, the bigger competition it will fetch, giving the chance for the project actors to choose the best contractor for the rebuilding works (Barakat, 1993).

The tendering procedure engage the following steps (Kreutner et al., 2003):

1. Prepare the description of the project, stating what object and other facilities should be built.
2. Obtain information on the relevant construction companies (local and foreign) which might be interested in the project.
3. Make a list of contractors which will be invited to participate in the tender.
4. Deliver the tender documentation to the chosen contractors (with the description of the work to be done, terms of the participation in the tender and information to be provided by the tender participants).

5. Contractors submit the required documentation within the established deadline.
6. The provided documentation shall be analyzed by a tender committee and opened to the public.
7. One contractor (or more if required) shall be chosen for the project and announced in public accordingly.
8. The negotiation between the project actors to be carried out in order to sign the contract on construction works. The draft can be amended according to the newly discovered specifics or the contractor's reasonable proposals.

Despite the fact tenders are considered the reliable way to choose the contractor and define the scope of the project, it is always problematic to take into account all possible obstacles during the project performance. It is highly recommended for the project participants to learn as much as possible about the project initial data, the local natural conditions, culture, and traditions which may influence the project progress. The local government which must facilitate the project may not be very experienced in delivering such work (UNHCR, 1998). Therefore, not a small assumption should be taken for granted and every detail of the planned project should be double checked in order such a complicated process as building real estate is completed successfully.

### **6.9.2. Self-build model**

The self-build model is the option of building houses by the family or community. It is a good choice in the locations where such tradition is still alive and in case there is human force to carry out such works. The design of the houses is rather simple in such cases. The time frame foreseen for the construction should correspond to the realistic timing of such a method of building works. The last but not the least precondition is construction by own force was a normal state of things in the area before the war period (Barakat, 2003).

Usually, the community or the inhabitants contribute financially to such rebuilding works, what secures the completion of the project and its further occupation. The donor organizations should give financial aid, supply construction materials, provide engineering advice, or other services related to the construction works, for instance, offering free food and uniform for the workers. Advice on safety of construction, supervision of the construction process are important tasks too to secure the quality of the self-built buildings. Another option is adoption of the up-to-date building codes where the building norms and specifications are set, that will allow the local government and the donor organizations to evaluate the construction quality of the self-built housing (UNHCR, 1998).

In general, the self-build model is shown to be less costly, while the occupancy rates of such houses are higher. Another big advantage of the self-build option is the possibility to occupy the house before it is 100% ready and commissioned. While the real estate built by contracting companies can be transferred to the inhabitants only after it is fully commissioned. If the house is being built by the family or community people can occupy it at an earlier stage and continue the construction further. Participating in the construction of new homes, imagining the prosperity of the community, physical planning and “constructing” the life for future generations make people feel being a part of the big new dream both physically and psychologically. It restores the hope for a good future and improves state of mind. Working on common tasks unites people who could have been separated during the war. Participating in such projects and being aware of external support, and finally successful completion of construction lead to increase of self-esteem and bring happiness to people’s hearts what is an important task in post-war rehabilitation process (SIDA, 2000). Thus, self-build model brings non-material assets to the people who went through the horrors of armed conflict and many of whom fell into disbelief for a better future. This is a positive side effect on the whole community, which should be definitely taken into consideration.

The practical outcome of the self-build approach, summarized by UNHCR, the UN Refugee Agency, used in Bosnia in 1996 showed that less amount of people was de facto able to reconstruct the houses than was assessed before the project. Therefore, it is necessary to evaluate both the damage and the construction skills of the locals before putting a stake on such an option. It resulted in poor construction quality in some cases and spending 60% of the given money not on construction, but on prevention of further destruction of the buildings (UNHCR, 1998).

Benefits of self-build approach to the construction works were clear in the reconstruction of the city Popayan in Columbia, where three quarters of existing buildings were destroyed after the earthquake in 1983. There were about 2,500 wrecked houses, 6,900 badly and 4,500 lightly damaged houses.

The special interest was raised in the way the community was organized for the self-build construction works. The area was divided into units, called “modules”, where about 15-20 households were united. Each unit was headed by a board and its chairman. The secretary, treasurer, and supervisors were elected from the module members to assist in the management of the unit.

Each module received a different type of help depending on its needs. These could be loans, supply of construction materials or their subsidizing, payment for the construction

work. In each case people had to invest their own money as well as to cover part of the construction costs. They could also receive loans from government or other financial institutions, which were operating at that time.

Further analysis of the project showed a very positive result of such reconstruction organization. Most of the houses were occupied by the people who participated in their reconstruction (about 87%), and more than 50% of the residents were able to pay off loans granted for this purpose (Aysan et al., 1995).

SIDA's experience in self-build projects has proved its beneficial potential in the Balkans between 1993-2000 (SIDA, 2000). It is typical for the Balkans residents to build their houses on their own. Much of the construction is done by the family, relatives, neighbors, while some certain tasks requiring special skills are given to more professional workers. That is why such an option was seen as preferable for a number of municipalities after the war in the region. SIDA's participation was providing financial, or material help to self-build construction in Bosnia, Croatia, and Kosovo. Independently on the family size, whether the family was headed by male or female, its members were able to carry out construction of their houses in case financial and construction materials supply was in place. Naturally, to build from scratch or reconstruct a house is a difficult and big project for the family and the contractor option would need much less effort from their side. But when taking into account the social benefits, such a choice seemed more appropriate.

The main conclusions pointed out by SIDA were:

1. Self-build houses are 40% cheaper than contractor-build ones.
2. People are eager to participate in construction, giving special attention to the quality of construction, using the appropriate technologies and getting psychological satisfaction from the process.
3. Self-build projects require technical advisors, but external agencies should not demand strictly defined construction standards (except for the safety measures and features).
4. Self-build projects are at higher risk of corruptive demands by local authorities in terms of commissioning of the houses and granting the property rights. These could be the issues where the external help is needed – legal or lobbying.
5. Occupancy rates are higher in the self-build houses than in the contractor-build ones within the similar locality.

6. The accounting of the provided financial and construction materials should be clearly established and announced to the beneficiaries, as well as that the resources which are not used at all or for not the right purpose will be reclaimed.

7. The external agencies representing donors should forebear the delay in timing schedules as every household has its own capability in this regard.

An interesting case where both contractor- and self-build models were used was housing reconstruction in Maharashtra, state in India, where about 230,000 houses were damaged after the earthquake (Greene et al., 2000). The affected communities were divided into two categories – those, where the relocation of people was inevitable, and those where the reconstruction or strengthening of houses were possible. To understand the scale of the work to be done in the second category, it included about 1,500 villages with about 190,000 families.

The part of the project meant for relocation and construction from scratch was given to contractors. Nevertheless, the community participated in the decision making on the main questions of their concern like the relocation places, beneficiaries of the new houses, planning of the new villages and layout of the new houses. There were village committees which interfered in smaller issues during the construction process as well.

Those houses which were allotted for repair were handed over to the responsibility of their owners. The government and donor organizations were supporting such families with financial aid, construction materials, technical assistance and know how. Besides, every family was granted a bank account with a certain money amount which could be used for acquiring construction materials. Women organized themselves into committees, participating in the selection of beneficiaries, and were trained in regard to their rights and procedures to exercise them.

In the result of using both contractor-build and self-build models and broad community involvement, the reconstruction of the real estate was a smooth process where all the issues were resolved with the acceptance of the inhabitants on any stage of the process. The reconstruction after the earthquake turned into a massive upgrade of the real estate in the area. A number of new social objects were built. The coworking on many issues brought ordinary people closer to the government, which in turn looked more attentively at the needs of the former. People learnt about their rights and the ways to benefit from them. Last but not the least, involvement into the reconstruction of the villages helped many people to see the light ahead after the darkest day in their life (Greene et al., 2000).

Cooperative construction described by Barakat (2003) is a sub-option to self-build construction, where the community is obliged to carry out the building works. In such case the construction materials are given under community responsibility, and not to a family as a unit, and the construction project is scheduled for the community, not singling out separate households.

Similar to self-build approach, the cooperative approach improves the communication within the community, strengthen people's physical and psychological condition after the armed conflict. The main benefit of such an approach is distribution of resources and work among all the community members including the neediest ones. With such an approach people will not have to go on their own through a complicated procedure of beneficiaries' selection, personal obtaining of financial aid or construction materials as this is done by the appointed community representatives. Such an option will work on the condition the community is very well organized and managed, trusted by its members and external agencies. For the reconstruction process to go well with cooperative construction, the preparation phase before the construction is crucial. It is necessary to ensure the community management is an efficient body having trust by its members and able to be the counteragent with third parties commissioning works and services on behalf the community. International agencies should control the objects set for the reconstruction, their characteristics, volume, and quality. The financial and material aid should be distributed in case the construction implementation is in line with the planned schedule, and fair distribution of the reconstruction benefits between community members is fulfilled (Barakat, 2003).

Independently of which model is chosen for the building works, there are criteria which are applicable always. The qualitative data received by Kim and Choi (2013) after interviewing officers and technical engineers working on post-disaster reconstruction project shows there are determinative conditions for the project execution phase. These are detailed project execution schedule; flexible design management; possibility of adjustment during planning, designing and construction phases; choice of the proper contractor and possibility of its substitution any time (cited by Dzulkarnaen et al., 2014).

## **6.10. Ready houses delivery and their further maintenance**

The transfer of the finished real estate object consists of two main parts usually. First, assigning the title documents to the owners who are construction beneficiaries in the given post-war reconstruction project. The second part is handing over the object to the person or organization which will be further responsible for the safe running of the

building. This party is usually in charge of contracting the supply of electricity, water, gas and other needed resources, and further house maintenance.

While the first part can go quite smoothly, the second one can be problematic for many reasons. Organizations which were responsible for such a function before the war can be either non-existent anymore or not able to perform such function in the post-war time. In case of a big project where lease of the property is foreseen the property management company may be needed which might be not available at the time of the houses commissioning. Thus, additional time, efforts and mechanisms might be needed to complete this part of the real estate delivery. For the cases of community-build option, the transfer of the property can be rather formal as community management is ready to take over such responsibility in most cases (Barakat, 2003).

As an option, the beneficiaries may establish an organ which takes over the responsibility over the functioning of the newly constructed houses. The legal form of such bodies should be chosen based on the local legislation in force.

Therefore, it is important to bear in mind the transition period which in most cases will take place after the houses are built and are ready to be fully handed over. The dangerous assumption which should be avoided is that the international agency which facilitated and financed construction will be in charge of the real estate in the long run. The bigger difficulties can bring the projects where new technologies were implemented and house management systems were offered to the beneficiaries. The public should be aware and ready to take over the responsibility for the newly constructed real estate objects (Barakat, 2003).

## **7. RESOURCES PROCUREMENT IN POST-DISASTER RECONSTRUCTION**

International donor organizations often choose the way of infusing their aid by provision of financial resources, technical assistance, and construction materials. Timely and adequate resource procurement can be a challenge in a post-war project that may lead to serious progress impediment.

The research carried out in Indonesia during the reconstructing of houses after tsunami in 2008 has identified three groups of factors that bear the risks in donor driven procurement (Chang et al., 2011).

The first group of risks are the competences of international organizations in procurement, and the competition that may arise between the aid agencies due to lack of resources.

The second group of risks in procurement by donors is related to external factors which could be considered without the proper importance or accuracy. These are possible issues with local transportation and logistics systems, low competency of the hired contractors, difficulties in cooperation with the local government.

The third group of factors are related to the community where the project is carried out. The donor agencies may lack knowledge of local construction traditions, housing culture and general behavior of the people which may influence the project performance.

International organizations come across difficulties during the project realization due to their internal structures and habitual practices which are not always proactive or effective. This point refers to materials procurement too. Davis (2006) points out the issue of competition between the donor organization for the resources during the reconstruction project. He underlines the importance of communication between all the actors working in the post-conflict territory and insists on working out the agreed approach to the procurement. The issue is often caused by the inability of donor organizations to forecast the resources needed, especially in large-scale projects. The sufficient number of resources at the beginning of the project can dramatically change during its further implementation stages (Davis, 2006).

Very often such agencies lack the competence needed in the post-conflict projects, as their routine work differs sufficiently from what is required in reconstruction projects. This is also the reason why they often hire external specialists who might not possess the necessary level of skills either. The low level of expertise results in drafting projects' plans which are impossible to realize in the conditions of the post-conflict country (Harris, 2006). Or another tendency is when procurement is not well planned or underestimated and is carried out on "last minute" basis as communicated by the people on operational level what inevitably leads to lack of materials and stoppage in construction. Another possible outcome of such situation is big amount of the inventory which cannot be used due to changes in planning and building (Lyons, 2009).

Thus, the studies discovered the insufficient knowledge of donors in construction process, in the required materials and procurement what reflects on the project implementation. To minimize the difficulties in procurement, the donor agencies should be able to work on the procurement from the earliest stage of the project and have



enough skills to evaluate, plan, purchase, supply and distribute the resources needed. Well trained and experienced staff are required in order to perform such tasks on the professional level (Davis, 2006).

Another group of impediments in supply of materials is related to external factors. The biggest one here is infrastructure. As it was stated earlier, infrastructure is the first target in any armed conflict, and its reconstruction is determinative to the rebuilding of real estate. Previous studies demonstrate that concentrating the resources on housing reconstruction and underestimating the importance of the infrastructure building by the external agencies may lead to the impossibility of the housing reconstruction. Absence of roads and logistics systems for the materials supply will complicate the housing reconstruction tremendously (Limoncu & Celebioglu, 2006).

Singh and Wilkinson (2008) believe that collaboration with local government secures a smoother project performance on any stage. The government can provide the much-needed information on local materials and construction technics, can advise on local suppliers and producers as well as facilitate the materials supply process in many other ways. As a negative example in case of lack of the cooperation between the agencies and the government, the country government can bring into effect laws related to import, new customs duties for the materials needed for construction and it can sufficiently affect the project in terms of its cost and lead time in case new supply sources and routes have to be built (Singh & Wilkinson, 2008).

Choice of the contractors by the donor organizations influences the supply of the construction materials too. The low expertise in work exercised by the contractor will lead to a weakly organized process of purchase and supply. Thus, the agencies' low capacity in real estate development may be sufficiently increased by the contractor's low professional knowledge. At the same time, outsourced expertise increases the project cost and may prolong the time schedule. The skills and capabilities of all the contractors should be carefully evaluated to find the optimal solution for the balanced project budget and timing (Chang et al., 2011).

As suggested by UNDRP (1982), the condition of construction market in the post-war country is a huge factor of the reconstruction success. International actors should carefully evaluate the level of construction companies working in the market and their ability to build the planned housing. Another factor is the state of manufacturing enterprises and those participating in supply. Armed conflict affects all the industries of the country, and these are the fields where first and sufficient investments are needed for the country recovery and housing projects delivery. Local government is required to

support the investments in small and middle size enterprises working in construction production, supply, and logistics. Donor agencies should evaluate the capacity of the industry at the moment of the project onset and plan the import of the required resources accordingly. Here the important task is to combine the locally used materials and those which shall be brought from abroad. As the big bonus in working with the local players of construction materials' market, they often become good partners to the donors and could be very helpful in solving procurement and other issues which will arise in the long run of the project (Chang et al., 2011).

The last group of factors influencing construction procurement refer to community participation. Involvement of the community in the reconstruction is often highly encouraged, yet it may have negative effects too including complicating the materials procurement as it is described below.

Humanitarian organizations consider local housing culture and construction technics should be followed in most cases. Nevertheless, in the areas with outdated materials and know-how used, there is a big temptation to modernize the construction industry offering new materials, designs, and techniques. Very often such an attitude shall be welcomed by the community and beneficiaries themselves at the project's outset. As the project develops further, people can change their opinion drastically or further maintenance of the building can turn into a very complicated task what could not be obvious at the project start. These examples may lead to huge issues with the materials needed, budget overrun and delayed project delivery due to the necessity to make substantial changes in the house planning and construction (UNDP, 2007).

Yet, community can bring much needed resources to the construction project, expertise in certain fields, may connect the donors with the right local people and organizations, and help in procurement in general. The ability of the international agencies to hear the voice of the community is always appreciated by locals. At the same time, there must be a procedure or a body through which such communication can be carried out and formalized. This will help to avoid the situations when either donors believe the community is not active enough or when the community complains their opinion is not taken into consideration (UNDP, 2007).

The top ten areas where the key risks may appear for external aid agencies in materials procurements identified by Chang et al. (2011) are:

1. competition between the agencies for the resources;
2. issues with the transportation in the region or country;

3. kind of the building;
4. timing of the supply;
5. culture of the housing in the region;
6. participation of beneficiaries and locals;
7. relations with the local authorities;
8. professionalism of the contractor;
9. donor proficiency in purchasing, supply and logistics;
10. situation in the materials' local market.

Summarizing this chapter, the key factors of the successful procurement of resources include the capacity of NGOs to fulfill this function, their ability to cooperate and not to compete in this task. Timely materials purchase and sufficient stock, securing smooth materials delivery and following up the situation are the priority tasks of the reconstruction actors. The involvement of the community in the construction procurement must be balanced with the donors' expertise, grounded on the factual situation not having strong inclinations to one side, that may lead to failures in the project realization.

## **8. COMMUNITY PARTICIPATION AND BENEFICIARIES' INVOLVEMENT IN RECONSTRUCTION**

As it was mentioned earlier, community participation was revealed as the important factor of the rebuilding project success in many projects on post-disaster reconstruction (Aysan et al., 1995), (Davis, 1978), (El-Masri & Kellet, 2001), (Ettouney & Abdel-Kader, 2003), (UNHCR, 1998). This chapter is devoted to a closer look at the community participation in the rebuilding projects. Namely, which way, on which stages and in which forms the community participation was evaluated and which outcomes it brought.

It is pointed out in most research that community participation is a valuable contribution to the real estate reconstruction in the low productive economic environment of a post-disaster country (Davidson et al., 2007). At the same time, without identifying the definite way the community is to be involved, it is difficult to predict which outcomes should be expected.

More than that, when talking about community participation it is not fully clear what is meant by the term "community" and what is understood under "participation". In other words, the issue requires a more precise study and classification. We will look further on the ways and fields where the community involvement would be more beneficial and where it can endanger the success of the project.

In Meriam-Webster dictionary, in Cambridge Dictionary, the word “community” is applied to a wide range of notions. These are residential neighborhoods, self-organized groups within the district, just a group of neighbors, all the people living within the settlement, or any other union of people related to each other based on some features. It is not clearly defined in academic research either, who exactly participates in the reconstruction project and in which ways, when “community participation” is under discussion.

When we read about the “participation”, it can mean informing people about the planned reconstruction, discussing by residents the offered project, getting their feedback in the form of opinion, recommendations, or requests. It can also imply handing over some responsibilities to the beneficiaries in the form of taking decisions, initiating certain actions, or performance of some work for the project. In other words, the level of involvement varies a lot (UNDP, 2007).

Therefore, the exact definition of the community participation in the reconstruction project neither exists nor it is framed. As a result, there are no unified rules for the most beneficial role of the residents in the reconstruction of their houses (Davidson et al., 2007).

Below are different vectors, where the community participation can be directed in the post-war environment, which identify the meaning of this phenomenon.

**The macro approach** of involving the community to the settlement management, either a village or a big city. It implies participation of the local representatives in the settlement management, namely, in working out procedures and rules, setting standards, participation in decision making, and other ways of the power decentralization (Choguill, 1996). Besides the benefit of general improvement of the settlement management, people tend to identify their first needs in the post-conflict time and where the resources of the donors can be directed (Maskrey, 1989)

**Community participation is an obligatory component of receiving the funding.** Many donor agencies set it as the condition for receiving the funding, what implies direction of the resources to strengthening civil society by means of development of self-management bodies such as unions, NGOs, and enterprises. Such approach facilitates building of a community with equal rights for different strata of the society, gender equality, attention to vulnerable layers of people, including when these policies are brought to the reconstruction process (Zanetta, 2001).

**A doctrine in regard to housing reconstruction** means that people in one community have their own culture and values, possessing enough knowledge and skills that enables them to contribute sufficiently to the reconstruction of their houses (Choguill, 1996).

The approach of **policy on decentralization of the reconstruction project** underlines the necessity to leave the management decision to the community organizations instead of adopting directives by state policies and public companies (Keivani & Werna, 2001).

**Community knowledge in construction techniques and know-how** is a valuable source to be used during the reconstruction of housing. It is believed, the community possesses enough expertise on the building of houses in the given locality, is familiar with appropriate designs and building materials. Therefore, its participation may considerably simplify the construction process and reduce the necessity to attract the external professionals (Pugh, 1997). Beneficiaries will act as the strong force for the building activity, and they must be given the right to take decisions in regard to their own houses. Thus bottom – up instead of top-down approach is being promoted, as the latter one often leads to huge investments in the housing which are not accepted by the community, require modification, or remain not occupied (El-Masri & Kellet, 2001).

**Involvement of community as the way to reduce the construction costs.** Community influences the project costs by means of free work in the construction or providing private investments to the project. Together with the donors' funding, such project will encompass more housing units (Ettouney & Abdel-Kader, 2003).

**Instinctive way of recovery.** It is publicly known that immediately after a disaster people do whatever they can to improve their living condition using their internal abilities and informal organizations not waiting for external help. Thus, their participation in the housing reconstruction is conditioned by their instinct of survival (Fergusson & Naverette, 2003).

Davidson et al. (2007) suggest not to theorize this phenomenon at all, as the community participation is discussed within the conditions of a certain construction project and thus can be considered only under the circumstances within the project design and when the roles of other actors are clear (Davidson et al., 2007). The stress should be rather made on creation of the feasible scheme of project where the role of the community is clearly determined, that will bring the biggest benefits to the project and to the community in general. By “biggest benefits” are assumed the accurate financial planning and budget performance, proper construction procurement, project timing performance, final quality of the project's objective in a broad sense. The final important achievement to be

evaluated as the project result is the political involvement of the settlement’s residents in all the decisions taken in their regard.

Case studies show community can be efficient at any stage of the project development: at the design phase, the construction phase, in the maintenance of the ready object. Beneficiaries can facilitate the supply of the necessary materials and services, take lead in the project management, help in the search of the financing and the budget control (UNHCR, 1998).

The type of participation of the community in the project determines the level of influence of the community on the project execution and results. Arnstein (1969) and later Choguill (1996), formulated the “ladder of community participation” which reflects how the role given to the community in the project either has the powerful influence on the project, or is merely taken as the opinion of the public without proper reflection in the project. Table 2 below presents the effects of different levels of community participation.

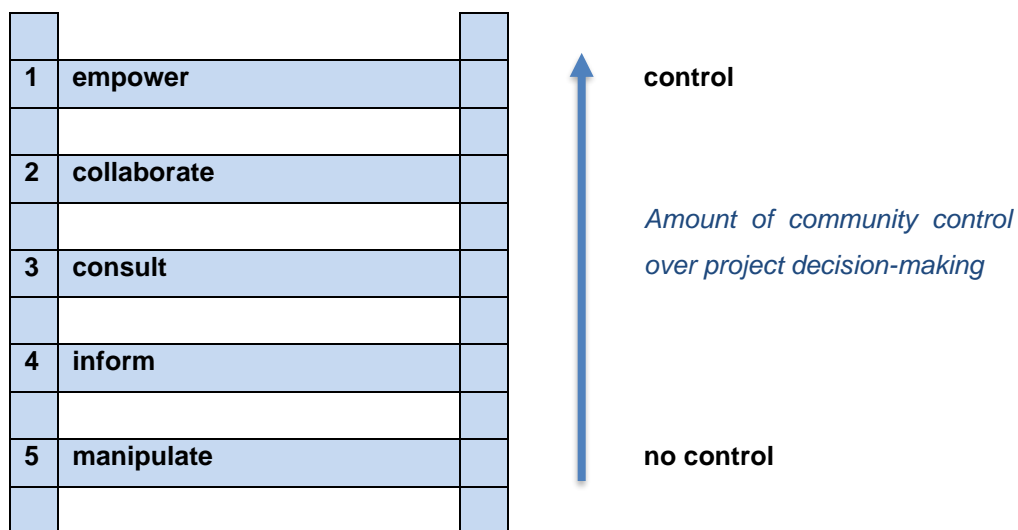


Table 2. Ladder of community participation of Davidson et al. (2007)

The ladder of community participation proposed by Davidson et al. (2007) shows that it can range from total absence of control in the project to the increasing level of influence. It depends on how other actors see the role of the residents in the project. In case beneficiaries are entrusted with the decision-making power in the project, they gain real control over the project. When local people are involved randomly in certain tasks, their control over the project decreases. In the cases when they are just informed about the decisions made in regard to the houses or even manipulated in certain issues, such involvement shall not be regarded as “participation” even though many scholars have referred to it as it is (Arnstein, 1969) (Choguill, 1996).

When beneficiaries do not have the decision-making power in regard to the project, they have no influence or control over it, thus, bringing zero benefit in terms of project management and people satisfaction. It should be kept in mind that international humanitarian organizations consider the latter as a must condition for rebuilding programs.

El-Masri and Kellet (2001) described the community participation from a different angle, what has not changed its meaning for the construction result though (El-Masri & Kellet, 2001). They say, the practice of post-war reconstruction has delivered *two approaches in the designing of this process: top-down and bottom-up*. The top-down approach has evolved as a fast solution for big areas of destruction leaving many people roofless. It foresees the use of standardized responses, planning, technology, and process for the reconstruction projects, what often results in budget over-spending, dissatisfaction of the house beneficiaries, abandonment of the constructed houses and general failure of the reconstruction project, led by international and local rehabilitation actors. Such outcomes can be explained by dealing with the post-war destruction in a narrow way as the need of physical creation of the buildings, missing its psychological individualism, social meaning, and potential.

Unlike the first one, the bottom-up approach implies the initial identification of the war victims' needs and further relevant choice of the appropriate standards and technology of the reconstruction project. The crucial point in the bottom-up approach is the sufficient work with the beneficiaries, applying the findings properly and on-time in the project schedule. In such a case the project shall be more time and money saving, securing better results in general as they will be framed according to the requirements of those who they are created for. Easy to say, not easy to do though as the process is based on the cooperation of people with different backgrounds and views, general policies may be not in line with such strategy putting some bounds on the initiative (El-Masri & Kellet, 2001).

The idea of incremental learning by the community implies the reconstruction process, where people are responsible for the final result being part of the process as well. It is difficult to expect that beneficiaries will immediately identify themselves with the newly reconstructed houses. The precondition of beneficiaries' participation in their creation could make the process faster, easier, and more probable.

In such an approach the professionals should change their position of the project leaders to the project advisors who facilitate its implementation offering their professional knowledge and expertise. Another important consequence of the bottom-up approach is

erasing the disagreement between the beneficiaries and the authorities, what is often the issue in such projects. In other words, the bottom-up approach is based on the reconstruction process carried out hand in hand with the community, what secures the successful results of the construction (El-Masri & Kellet, 2001).

Recent armed conflicts took place mainly in the developing countries which have different cultures and traditions. Before entering the country with the ready programs of help, the international actors have to learn deeply the peculiarities of the given environment which can be very different from the Western one. The task is to find the way of these peculiarities' implementation in the reconstruction project. It can be reached by promoting local initiative and leadership, what in turn would bring the community together and ease the project running due to the contribution of the latter (UNDP, 2007).

## **9. OTHER IMPORTANT ISSUES IN POST-WAR RECONSTRUCTION**

The word "house" has many synonyms – dwelling, home, shelter, residence what reflects the different meaning of this notion. Therefore, when we talk about reconstruction of houses, we should be always aware that we talk about reconstruction of home, shelter and much more. Those projects of reconstruction which are concentrated on the physical restoration of the buildings only do not include this social phenomenon and are far less successful.

Hans Skotte, being an architect, discovered very low quality of construction works as well as incorrect technologies used in the construction on the assumption that after-conflict situation would legally allow such things to happen. Such practice takes place due to the absence of qualified specialists on the staff of international donor agencies which provide financial help, not being able to control the construction process. On top of that, donors often believe they are not responsible for this side of the project and may not accept any claims in this regard once the construction is completed. The beneficiaries, in turn, do not have any legal relationship to the contractor very often and thus cannot claim anything to this actor finding it even impolite to blame the party which financed the project (Skotte, 2004).

Finding the location for a new settlement always has political context and bigotry. Due to the after-war circumstances, international organizations look for a location in a hurry not being able to tackle the issue as professional planners. They often rely on the decision of local authorities, which hardly put the displaced people's needs as priority. In the result the new settlements are very often organized in the areas difficult to reach and which are not being considered as perspective, what of course influences the quality of life of its



inhabitants. People do not have the proper means of transport to reach more economically vibrant districts for employment or other market opportunities. The settlements lack educational, medical, and other social infrastructure, which may be the sufficient sign of the short life of such settlements (Barakat, 2003).

Skotte (2004) puts under question the use of the standard units in the construction project. Not only housing but streets and other infrastructure under construction can be planned “standard”. After such planning approach the new settlement resemble rather a prison camp than a new home for people recently suffered the horrors of an armed conflict (Skotte, 2004).

Inappropriate materials, provided by international organizations used for temporary and permanent shelters can make the living in the new houses unbearable due to the climate conditions of the place. Such weather conditions as high humidity, strong sun radiation, low temperatures in winter require to be considered while planning the humanitarian aid not to be waisted shortly (UN-Habitat, 2004).

The space standards raise further questions in the opinion of Skotte (2004). Usually, the minimum space standard of 4,5 sq.m per person is planned in the residential building. It is fairly considered those who flee from war do not have many belongings. At the same time, acquiring new staff is what makes the place a home and features its social meaning. Such home items require their place in the house, and it should be considered in case the new shelter is planned to become the new home of the displaced people and not the impersonal night quarters.

The above house criteria are closely connected to the understanding that the place becomes home when it is chosen by free will. We have different tastes and needs which condition different choices in terms of where to live, in which surroundings. These very conditions turn the new place of living into the cozy homes one wants to live in. One of the ulterior motives of a war is to deprive people of their homes as the symbol of their identity (Brun, 2005). When a human being loses a house, he or she loses the life sense and the desire to continue living without exaggeration. The good thing is it works in both ways – the acquiring of a new home brings the life sense back to the people. Based on that it is so important to let people choose the place and its characteristics in order to gain the feeling of “home” back. When people are given choice in this regard and their preferences are taken into consideration, many of them prefer to take this option and occupy the new houses unless they got such feeling in the temporary place already which might become the permanent one with time (Brun, 2005).

On the above reasons, most people choose to participate in the reconstruction of houses, bringing in both material and non-material assets. The appearance of new houses embellished with personal contributions is an utter sign of return for those who were previously expelled to destroy this identity. On this very reason the reconstruction of houses is considered as a separating factor and not the uniting one after the war in case the armed conflict had a civil character in the community like in Bosnia, for instance (Skotte, 2004).

Reconstruction projects can sufficiently contribute to the recovery of the local economy. Post WWII fast recovery was conditioned by creating the chain of local industries servicing the construction in full. Investments in such industries increase employment and improve the economic indicators greatly. The present world is very globalized and international aiding organization are related to global corporations. As construction materials make up 60-80% of the construction costs, these actors insist on saving costs by means of import of cheaper materials through the familiar for them logistic channels and actors located worldwide (Chang, et al., 2011). Still saving on the initial stages of the economy recovery may affect further development of the after-war country (Gligorov et al., 1999).

## **10. LESSONS LEARNT IN REBUILDING BOSNIA AND HERZEGOVINA**

As it was mentioned earlier, destruction of houses is often intentionally targeted in armed conflict bearing symbolic meaning. This was the case of the civil war in Bosnia and Herzegovina during 1992 – 1995, when 37% of residential houses were destroyed or badly damaged. When peace was reached on the terms of the Dayton agreement, about half of the country's population was displaced internally or left the country. About one million people were living in specially organized places like camps or in the houses of other refugees. The after-conflict laws envisaged the return of the property to the owners independently who occupied it during the war. The purpose of such regulation was to facilitate people's return home as well as to reestablish the ethnic diversity of the country where before the war Bosnians, Serbs and Croats were living together (Fischer, 2007).

The process of housing reconstruction and actual occupation of buildings was a difficult one, as the strategy of the international community participating in the process was far too different from the wishes of the local politicians. While the international organizations were targeted to the minorities' revival at their pre-war communities, the local actors were operating against it mainly both from Bosnian and Serbian sides (Leroux-Martin, 2014).

In 1999 the international community founded the Housing Verification and Monitoring Unit (HVM), the organization which was responsible for taking the lead in housing reconstruction projects and real property issues. The tasks of HVM were to collect the data on destructed houses, control the occupation of the newly built houses, identify those beneficiaries who have occupied somebody's homes or applied for more than one unit ("double occupant") (Povrzenic, 2004). The main target of HVM was to create an environment favorable for return of the displaced people independently of their origin.

HVM interviewed more than 250,000 people, studied 53,000 reconstructed houses cases, and examined over 13,000 houses belonging not to those who were occupying them. It has also registered above 68,000 houses which were the temporary place of living for the displaced people. Such amount of processed information makes about 70% of all the beneficiaries, what allows to presume the high accuracy of the research on the return of the displaced people after the war (Povrzenic, 2004).

After completion of the reconstruction and occupation process, it became obvious that the factor of the actual return to the reconstructed houses should be considered in order to evaluate the success of the international rehabilitation projects. The data on actual return was not very favorable. Only 43% of all the reconstructed houses were occupied by the assumed beneficiaries. On the date of the research 11,304 units were never occupied, which makes up about 21% of the total number of the provided units. Taken euro 10,000 as the minimum costs of one house construction, it will amount to euro 113 million of investments which were spent in vain (Povrzenic, 2004).

The main reasons which prevented people from active returning home were, first, badly damaged or completely destroyed real property. Second, the survived houses were occupied by other displaced people and often from the "enemy" side. Third, people did not see their future due to high unemployment rates. Fourth, families were afraid to return to the community where they were targeted recently and where the risk was still in the air. The feeling was still that those who were in power, or the majority living there may exercise violence any time again.

Oddly enough, such factors as absence of the infrastructure, water and energy supply did not determine the desire to return home in the given case. The prevailing reasons were of a demographic nature. People worried because of the nationality they belonged to and of the unemployment risks, as many of those who returned could not find any occupation to provide their living (Fischer, 2007). The last factor explains why 38% of the returnees were over 50 years old. The world trend of young people's preference to live in urban area played its role in this case too (Povrzenic, 2004).

Povrzenic (2004) believes, the main failure of the international community in Bosnia was inability to identify the beneficiaries which non-ambiguously needed a home and were sincerely planning to return to the pre-war places of living. Instead, the list included many of those who merely wanted to restore the pre-war status of their property, which in other circumstances can be considered as a natural wish too though. The intention of people is the most difficult factor for identification for those who were not involved in an armed conflict. On this reason the big share of investments of international organizations was directed to people, who were not supposed to obtain it in the form of housing reconstruction (Povrzenic, 2004).

Further to the described above, once peace was restored on the BIH territory, many donors and NGOs rushed to the country to give a helping hand. Many construction companies comprehended the favorable situation and were offering their services to the agencies, which often had not experience in after-disaster housing reconstruction projects. Such combination resulted in a number of contracts signed and quite a fast delivery of the projects on housing reconstruction (Fischer, 2007). But many of those newly built houses were never inhabited by people. Donors and NGOs were concentrating on delivering the real property, not paying the necessary attention to the social situation in the region and the prospects of this property there. Their false perception that new houses would inflow residents ended in number of photos of foreign representatives, construction companies' engineers and the beneficiaries on the background of the new houses many of which would never be occupied by these beneficiaries. The international organizations did not intend to check the occupancy either (Povrzenic, 2004).

In 1995 for the implementation of the Dayton Agreement, the Office of The High Representative (OHR) for Bosnia and Herzegovina was established which was headed by the High Representative. To counteract the above-described circumstances, the Office of High Representative established another committee, the Return and Reconstruction Task Force (RRTF) in 1997. Its task was to collect information on IDP and refugees through their local offices as well as through other NGOs and professionals working in fields. They were also working with community representatives and local authorities to accumulate a better understanding of the real situation on reconstruction needs. Attempts of RRTF were often met with confrontation, as there was often a resistance against the return of the minorities, and some officials were even fired by OHR. The reason for such extreme actions was their position was contradicting Dayton Agreement, and they were often giving a misleading information on where to invest money (Leroux-Martin, 2014).

Further policies were known as “Return Axes” and “three S”, which were developed on more realistic and better contemplated information from the fields. Return Axes studied the environment where the displaced were living at that moment, and it was reflected in the projected place of residence – they should be related to each other in certain terms. The Three S policy meant the availability of security, space, and sustainability in the new place of residence for the displaced people. This included the possibilities of employment, secure environment for the minorities, other intangible possibilities and know-how handed over to the beneficiaries to make the future place of living a sustainable and wished locality (Povrzenic, 2004).

There was also a program for “spontaneous return”, targeted to occasional cases of return where people needed money urgently. Another important task for international rehabilitation actors was facilitation of “secondary movement” which required the construction of houses for those who were occupying the houses of the displaced people. The policy was meant to create “a chain policy”, which should guarantee the living space to those who were ready to return to their pre-war property. The least effective policy was directed to cross-border return of people. Those who were living abroad were offered financial help or construction materials. This mainly resulted in unfinished houses and a piles of construction materials next to them or sale of the latter but not in the return to pre-war homes (Povrzenic, 2004).

The general opinion about the reconstruction experience of international community in BiH, that it was not very well planned (Minervini, 2002). The process lacked coordination between different actors entering the country with the purpose of real estate reconstruction. Obviously, it was necessary to get a more realistic image of the situation at that time, what would disclose a clearer perspective and actual tasks.

According to Povrzenic (2004), the work of the international agencies could have been more successful in the following aspects:

1. **Choice of beneficiaries.** The donors have not devoted the needed resources to identify beneficiaries properly. BiH residents were providing false information, and the donors have not been checking it. Many families received financial help or reconstructed houses in more than one place within BiH. Many of such families have not returned to BiH at all. In order to understand the genuine plans of people, it is necessary to collect the information on the pre-war family situation and their occupation, their preference in terms of living – together as a big family or split including the perspective of living in different countries, and evaluate the current living situation (El-Masri & Kellet, 2001). The provided by the potential beneficiaries’ information should be cross-checked. The

projected social infrastructure – healthcare, educational, entertainment, etc., should be evaluated too. Safety was one of the concerns as many areas were contaminated and full of mines. Employment and other economic factors should have been taken into consideration. Based on the above analysis, the beneficiaries must be split into categories with different priorities as for return, that should have been reflected in financial aid programs meant for the reconstruction of real estate for the displaced people.

2. **Lack of communication.** BIH was full of international agencies, donors, and NGOs which were neither communicating properly nor exchanging information. These organizations were not able to cooperate with local authorities either. Such mainstream led to many difficulties in housing reconstruction projects, which otherwise could have been avoided. The proper coworking of the actors would help to make the reconstruction programs sounder and more accurate in terms of their aim and delivered results.

3. **Clear financial policy.** At the beginning of the recovery stage in BIH, chaos prevailed in the financial aid policies. Gradually it had improved, but still the aiding organizations should have had a joint policy on financial aid distribution, and namely for the housing reconstruction. Such decisions should be made before or shortly after entering the country. Different variations of aid made it possible for people to apply in more than one agency as well as take the aid for granted without having any accountability for it.

The above stated factors confirm the outcomes of other research, referred to in this paper earlier, and namely those of Barakat (2003), Chang et al. (2011), and in the reports of international agencies (UNHCR, 1998).

Leroux-Martin (2014) pointed out, OHR has contributed a lot to the return of people to BIH against the resistance of local politicians and the prevailing population. Povrzenic (2004) states, within four years from 2000 to 2004 all the outstanding claims for houses were satisfied, what was the proof of the targeted work of OHR. The negative result is that more than one million people have chosen not to return home and about one fourth of the constructed houses remained empty despite billions of dollars poured into the country as post-war aid.

The important trait of OHR strategy was training people in further real estate reconstruction and management. Povrzenic (2004) underlines that the success of housing reconstruction projects depends vastly on non-housing projects. It is not about construction of the houses only, it is more about making the area alive by achieving community interaction and prosperity, providing security and employment, delivering

important infrastructure for healthcare, education and other activity to people who were traumatized by the war.

Hans Skotte (2004) described the example of the successful community participation in the reconstruction of a Bosniak village Grapska in the Republika Srpska of BiH. Swedish NGO SRSA (Swedish Rescue Services Agency) offered the community committee to prepare the criteria which will be the base for beneficiaries' selection. Interestingly enough, the list turned out to be very similar to the one which the US Housing Agency prepared for the soldiers returning from WWII, but rather different from the criteria usually chosen by international humanitarian organizations. The beneficiaries were obliged to register the property with the new government authorities and to obtain all necessary title documents in their name by their own (Skotte, 2004).

SRSA in turn was supporting the community with technical advice, transport and other help requested by the community. The lead in the process of organization and fulfilment as well as the responsibility for it was totally on the community. People hired contractors, participated in the planning and construction works, invested in the construction in order to make the house a vibrant place to live and similar to how it was before the war. At the end, 300 houses were rebuilt on the finances provided by the Swedish NGO and another 100 houses were reconstructed by means of investment of the locals and help of their relatives who lived abroad. Such an approach to the construction works made people believe in their future in the place of the recent disaster. It created the good platform for formation of the local leadership too (Skotte, 2004).

Minervini (2002) adds, NGOs and international organizations got the positive practice in Bosnia reconstruction in terms of minority return and their re-integration into the community. He underlines the following conditions for this condition realization:

1. Local government, sometimes with the participation of humanitarian organizations, should create circumstances where different minority groups meet. These could be holiday celebrations, children's recreation activity, community gatherings.
2. People should see the economic development of the region to feel secure in terms of well-being possibilities.
3. Physical and financial participation in the rebuilding of the local infrastructure, planning and rebuilding of public buildings and services, taking decisions on the community self-management.

In order to turn the above into reality, a special executive organ is needed to organize the process, direct it and sometimes fight for it. It shall play the intermediary and mediating role between different actors of the reconstruction. Its absence hinders the reconstruction and leads to final negative outcomes.

## **11. KOSOVO RECONSTRUCTION: FOCUS ON DAMAGE EVALUATION AND BENEFICIARIES' SELECTION**

### **11.1. Kosovo political context and post-war governance**

To cope with Kosovo post-war critical situation, when there was no local government or similar institutions to take the lead in the rehabilitation, based on the Security Council Resolution 1244, the two main institutions were given the prime authority in Kosovo – Kosovo Force (KFOR) secured by the NATO forces and the Interim Administrative Mission in Kosovo led by the UN (UNMIK). The latter had to work on the political, economic, social, and physical rehabilitation of the territory initiating the development of these fields and administering them (HCIC, 2000).

Three giant international organizations, the United Nations, the Organization for Security and Cooperation in Europe (OSCE), and the European Union, have identified the main goals of Kosovo rehabilitation to be carried out by UNMIK. These were, first, humanitarian assistance led by the UN High Commission for Refugees (UNHCR), second, civil administration carried out by the United Nations, third, OSCE oversaw the formation of political governance. The European Union took the lead in Kosovo economic reconstruction and development (HCIC, 2000).

The first step in administering the territory of about 11,000 sq. m with two million population was the creation of thirty municipalities in Kosovo. The purpose was to facilitate the self-governance of the area with the future aim to transfer the power from the international organizations to the decentralized local committees (HPN, 2003).

The Housing Reconstruction Program (HPR) was unfolded within 1999 till 2001 which was mainly led by the United Nations. The leading organization in the territory reconstruction, created by the United Nations, was the Municipal Housing Committee (MHC) which, being a specially created institution, can serve as a good example in the post-war reconstruction management according to Minervini C., who was one of the Program's staff members (Minervini, 2002).

Prior to the war, Kosovo was a poor part of the Federal Republic of Yugoslavia, where rule of law, minority support and property rights were not exercised well. After the



bombing of the territory by NATO, the area was horribly devastated, having from 50% to 70% range of housing destruction. Yet, most of refugees returned home once the security was established and hopes were seen for the assistance of the international organizations in the reconstruction. The European Union has established special institutions for the recovery process: the European Agency of Reconstruction (EAR) which was dealing with physical reconstruction; the task of the International Management Group (IMG) was to evaluate the damage and provide technical expertise in the physical reconstruction process (HPN, 2003).

## **11.2. Damage evaluation**

The first issue that the international donors faced at the real estate reconstruction was evaluation of damage to private and public real property. Two international organizations carried out the evaluation independently – UNHCR and IMG – both considered experienced and trustworthy. IMG was in charge of the damage evaluation in Bosnia in 1993 having experienced staff already, establishing reconstruction standards and serving as the reference in many construction issues there, being the supervising actor on behalf of many donors in Bosnia. UNHCR was occupied with African projects previously as well as in South and Central America upon civil conflicts and natural disasters on those continents (Minervini, 2002).

The damage was studied from satellite data and the on-site evaluation. The final evaluation results of the two actors differed tremendously – the two reports contained far too different numbers of the houses damaged and destroyed. Additionally, the system of evaluation was different. IMG identified four categories of damage, and UNHCR had five. The specialists who had to work on the reports further simplified both to two levels of damage – to damaged and destroyed categories. Such actions have not eliminated the issue of different quantity in the two reports. The discord in the results led to distrust to the data provided by the international donors' representatives as well as to arguments between all the actors of the reconstruction programs. The biggest issues were created by the municipalities' officers, many of whom refused to accept such data and prepared their own damage survey, which, naturally, differed from the first two reports. This led to the first argument between UN and EU in Kosovo reconstruction, as the former was supporting their representatives in each municipality and the latter oversaw the reconstruction management (HPN, 2003).

This case showed how important it was to have clear technical procedures, common terminology, standards, and scales of evaluation for every actor occupied with the same work. The process of the damage assessment should have consolidated the actors at

the beginning of the reconstruction program and not divided them. Naturally, such discrepancies in data led to different cost estimates and to unclear allocation zones of the financial assistance. The next mistake of UNMIK which was managing the reconstruction process was to allow and to accept the two different methodologies of the damage assessment, what became the first fatal mistake in Kosovo reconstruction programs.

### **11.3. Managing reconstruction process and beneficiaries' selection**

Davis (1986) underlined the importance of the creation of the institution responsible for managing the reconstruction process and coordinating the activities of all actors involved. In Kosovo such a role was assigned to Municipal Housing Committee (MHC), established in 1999, thus at the early stage of the reconstruction. In Bosnia such an organ was not created what is believed to be a considerable mistake of the reconstruction actors.

MHC was an executive body of the collective body - the Housing Directorate, which in turn was one of the departments of the Department of Reconstruction. The general task of the Department of Reconstruction was to improve the housing situation in Kosovo by means of providing houses to those who needed them, particularly to the minorities. The Housing Directorate was drafting the building directives obligatory for all reconstruction actors. It established the procedure of beneficiaries' application for the housing reconstruction at the municipal level, where MHC was further responsible for the fulfillment of the Housing Reconstruction Program. This organ had strictly carried out the procedures in the process of beneficiaries' selection and choosing the houses for the reconstruction foreseen by the relevant official paper aiming to be clear and fair. Easier to say than to do though. In practice the work of MHC was sufficiently affected by political forces, the local clans, and other donors (Minervini, 2002). Yet, the work of this reconstruction actor was much more efficient in the reconstruction process of Kosovo if compared to the same issues in Bosnia reconstruction.

UNMIK prepared the guidelines, which outlined the following vectors of the reconstruction activity (Minervini, 2002):

- Beneficiaries' selection.
- Repair and reconstruction of the houses.
- Implementation procedures.
- Coordination of process and its participants.

It was MHC which was taking the final decision in regard to reconstruction activity, such as finalizing the beneficiaries list, account of houses, approving the technical documentation. Thus, MHC was the consolidating organ for many actors of the Program, and namely for the representatives of the international agencies, municipal administrators, the officers of the Housing Reconstruction Coordination Unit, NGOs, different departments heads, and beneficiaries. It was a difficult task, but generally the outcomes of MHC work were considered positive. It has fulfilled the prime task of the fulfillment of the guidelines stated in the Housing Reconstruction Program and the subordinate documents, making the process as transparent as possible and showing a good example of democratic management. Most of the actors accepted the well-organized work of MHC promoting the organizational structure prepared by the international agencies. Even the locals elected to the municipal government, being skeptical about MHC role at the beginning, accepted the efficiency of their coordination and decision making with time as well as learnt from the organization a lot (Minervini, 2002).

Talking about the flaws of Kosovo reconstruction, the number one would be given to the dilemma of prioritizing the urgent physical reconstruction or taking steps towards broader actions of the post-war recovery. Nilssen (2001) (cited by (Minervini, 2002)) pointed out the importance of the development of the social capital on the post-conflict territories as the precondition of their sustainable development. Awotona (1992) (cited by (Minervini, 2002)) stressed rehabilitation of the building industry should surpass rebuilding real estate. These two important and widely researched postulates were not implemented in Kosovo reconstruction.

Building materials were imported from the neighboring countries improving their economy. Even if the local facilities producing building materials were considered, it was done by industry giants to grasp the local opportunities. Small and middle size local enterprises were not given any assistance to get the chance to participate in their home's reconstruction. Such approach was explained by the fear of influence of local and Albanian mafia on the construction materials market and territorial assets in general and the need of wider integration of Kosovo into international trade community. It should have also facilitated immigration of Albanians to Kosovo and not to Europe (Danemark, 1993).

The construction process was featured with the elements which excluded small local business from the process, have not encouraged the community participation and deprived the residents of the traditional self-building of the houses. The main constraints of the building progress were as follows:

1. Most of the construction materials were bought from abroad.
2. Logistic of construction materials was interrupted by other parties in the conflict on the Macedonian border.
3. New technology of reinforced concrete was widely used in the reconstruction instead of the traditional technologies.

Minervini (2002) believes in the result of such approach the architecture of the new houses hardly reminded the charm of the previously existing buildings in the area which were built with mud adobe bricks, such a typical feature of the country. The new concrete houses could hardly be changed and individualized by the beneficiaries and are the reminder of the after-war reconstruction. The Kosovo reconstruction programs have not shown the example of the participatory approach in the construction either, have not used the potential of beneficiaries and possibilities of cost saving which people bring. The international organizations were not looking for cooperation with locals choosing to use external resources of all kinds - from human capital to building materials - resulting in rising costs and leading to employment market deterioration (Hasic, 2004).

Beneficiaries' selection is a pivotal topic in the post-war reconstruction. The decision should be based on the complex system of rules and not on the decision of one person or organization. Minervini (2002) considers MHC has secured the effective environment for this task in Kosovo. First, it has created a stable and neutral attitude to this task. Second, it has promoted the enthusiasm of the locals in giving their opinion on the issue, additionally creating the sense of the community so much needed after the civil conflicts. Last but not the least, by creating the above environment MHC has shown the example of democratic decision making of such a vulnerable issue.

The procedure of beneficiaries' selection consisted of the following steps (Minervini, 2002) (HPN, 2003):

1. Compiling the initial list of the beneficiaries proposed by different organizations involved to the process.
2. Making the list of beneficiaries based on the opinion of the locals and the municipal organ.
3. Combining the two previous lists and choosing those people who go to the next round of election. Based on the new united and shortened list, fulfillment of the on-site visit and evaluation of the families and the real property condition.
4. Compiling the final list of the beneficiaries eligible to the reconstruction program.

The above decisions were made based on cumulative data about each family applying for the aid (Minervini, 2002):

1. Number of family members.
2. Number of children under 12 years old.
3. Number of elderly people in the family, handicapped or ill.
4. Male or female-led family.
5. Living in their own house or somebody's house.
6. Number of generations living in one house.
7. People living remotely.
8. People living in temporary shelters.
9. People hosted by other families.
10. Income.

The numerical data was further extended with social information in order to take into account the different aspects of the beneficiaries' situation. Such an attitude was taken positively by all the participants and interested parties.

The representatives of the municipalities and villages who in some way participated in the area management were forced to choose people eligible for reconstruction of their houses. And though at first there were arguments as many suggestions were made due to political, personal, or traditional male-decision preferences, with time under the supervision and guidelines of MCH, the process became quite smooth and respected by all the actors. Kosovo post reconstruction analysis showed that best practice was achieved in those procedures and decisions which were driven by the locally elected candidates from the given community (Minervini, 2002).

Another important benefit was achieved by means of thorough selections of reconstruction beneficiaries articulated earlier by El-Masri (2001) in his study of post-war Lebanon reconstruction. It was the reliable data on the social strata of that time Kosovo and the financial standing of people, what was used further for the allocation of the different types of help and assistance (Minervini, 2002).

Further, simultaneously with beneficiaries' selection, MCH was collecting data on human resources available to contribute to the reconstruction. The questionnaires similar to the one in the Table 3 below were spread among the locals (UNMIK, 2000). Lack of people for building works is the often trait of the post-war reconstruction.

<b>How can you contribute to the reconstruction process?</b>	
<b>How many people can you mobilize?</b> Within the household : ____ Relatives: ____ Neighbors and friends: ____	<b>How many of these can you carry out?</b> Masonry: ____ Carpentry: ____ Plumbing: ____ Electrical works: ____
<b>Can you transport the materials?</b> Yes ____ No ____	

*Table #3 Example of questionnaire for identification of available human resources (UNMIK, 2000)*

## **12. CASES OF AZERBAIJAN, RWANDA, AND NORTHERN IRAQ**

Chantal Laurent studied the Settlement Rehabilitation Programs in three countries. In Azerbaijan around 1 million of people were displaced out of 7,5 million of total population, and 550 houses, 12 schools and 3 health centers were rebuilt. In Rwanda they constructed 200 villages with 96,000 housing units for about 2,250,000 displaced people (total population of the country 8 million people). In Northern Iraq more than 25,000 houses were built under the UN-HABITAT projects together with social and infrastructural objects (Laurent, 2004).

Unfortunately, all the three cases cannot be called successful ones as in all the places there were houses which were never occupied. Reasons for that were wrong selection of beneficiaries, insufficient infrastructure, and social services. The issues related to land and houses ownership played a big role. The settlements were located in the areas where not much agricultural land was available. There were no alternatives for the population employment and occupation either. People felt insecure in terms of their future in those settlements and refused to occupy them. The community was not given any participation options, and it was not able to run and maintain the provided settlements. Additionally, politicians played a negative role too, what will be explained further (Laurent, 2004).

International humanitarian organizations responded fast and in sufficient amount for needs of the refugees and locals in these countries. The main issue about the aid was the programs were created too fast not giving the needed thoughtfulness and sustainability perspective. The actors did their best to create as many shelters as possible, not pondering on the outcomes. There was not sufficient presence of the international humanitarian organizations in the field to be proactive and correct the

process on time. The conclusion is the faster the aiding program is being prepared, the bigger elasticity it requires during the implementation (Laurent, 2004).

Based on these three cases, the criteria of the aid programs were singled out by Laurent (2004) which are intended to create a better environment for the displaced people settlements.

1. **The question of beneficiaries' selection** is the number one task. Consideration of all society strata is necessary to make the right choices. Willingness and readiness to return to the place where the disaster took place is the second important criteria. In the three cases the selection of beneficiaries was given to the local authorities what allowed the latter to manipulate with this important task. The corrections were made in this regard during the implementation stages by means of receiving the information from different sources, including international agencies, and permanent presence in the field.

Another important issue is gender and social diversity of the future settlements. Unlikely to the earlier described countries, in the given cases the strong preference was given to the households run by women what led to creation of unsecure settlements not able to operate by themselves.

The next misalignment consisted in providing some refugees with houses of much higher quality than those already available in the area, what led to social tension and unsafety in the area.

The last two signs stress the balance to be sought in any critical point of the reconstruction process.

2. **Integration into the area.** One of the sustainability tasks of the settlement rehabilitation program is to connect rural and urban areas of the given region. The issue of the physical disconnection of cities and villages has been valid for the huge part of the world up to present. Therefore, the resettlement programs should concentrate on improvement of the situation in the places where they are meant to. In the discussed examples, the new settlements were isolated and disconnected with the nearby urban areas. The necessary transport infrastructure was not built, and that was the disadvantage of the settlements in terms of its sustainability and growth.

3. **The construction standards should be of an adequate level, while the pressure from the donors should be constrained.** It was pointed out already that the quality of the houses should correspond to the needs of the beneficiaries, the established

standards and capacities of the local population to secure the feeling of safety and welfare. In case the construction technology is not transferred to locals or too complicated for them, the maintenance and further real estate development can be impossible to realize. In Rwanda though, the aiding agency prepared the book on the construction requirements, but the pressure from the actors in terms of budget and time was so hard that the contractors were not able to implement the prepared materials for the benefit of the locals.

4. **Community involvement.** In Iraq community was not involved into the rehabilitation programs, as actors believed the speed of the housing delivery and construction process were the most important tasks. In Azerbaijan the community was requested to intervene in the beneficiaries' selection once it was obvious the work done by the local authorities did not reflect the real situation in regard to those who needed the help. In both cases the earlier involvement of the community into the rehabilitation program design would save time and deliver better final results.

5. **Gender issue.** The question of women's involvement in the post-war decision making should be put as the priority. It should be reached by means of the relevant local legislation clauses and rehabilitation programs' rules. Women should be hired by the international agencies on any level showing the example to others. The balanced list of the beneficiaries includes the proportion of households led by females, observing the balance stated in the p.1 of this chapter.

6. **Further institutional development.** Any rehabilitation program carried out by an international agency should be presented to the local community as a good start for the prosperous future. The community should understand its further development is in their hands. Therefore, the program should educate the local participants on further settlement management. This includes maintenance of proper governmental institutions, promotion of education, social programs, and initiative on any level of governance (Laurent, 2004).

### **13. ERITREA CASE: FACTORS FOSTERING RETURN HOME**

When considering the main reasons grounding the decision of displaced people to return home, the case of Eritrean returnees could serve as a good example.

The Eritrean–Ethiopian War took place within 1998 to 2000 due to the territorial issue of the two countries. In total more than 250,000 people returned to their homeland Eritrea



from Sudan within 1991-2002 on their own. Though there were all political conditions for people to return to their original homes, most of them have chosen another place of permanent residence. About 90% went to Gash Setit area. People who left Gash Setit, in turn, have not returned to Gash Setit either but have chosen more urbanistic places. Even though local culture and traditions had strong relation to the places of origin valuing the meaning of person's roots and place of belonging, the returnees have chosen other place for their future. In personal interviews people explained that they were looking for better conditions of living than those they were expected to find in their pre-war locations (Kibreab, 2004).

Assumingly, the thirty-year long war was a long period that had influenced refugees' values and their social situation. On the one hand, the meaning of home as the place of the family roots had lost its major implication. On the other hand, the war had added its interpretation to "home" too – home is where the house is. As the result of such a move, any place in the country where free land was available and where the house could be erected and legally secured could become a home. When being asked about the main factors influencing the choice of new settlement location, the answers were:

- employment and occupation possibilities;
- the distance to the place of the temporal displacement, which might be explained by the already built connections and social environment there. Physical ability to reach both places;
- possibility to maintain the gained connections at the place of displacement;
- loss of interest to agricultural areas because of new occupations during the displacement;
- social conditions and available infrastructure, possibilities of education and healthcare, transportation, water, energy supply. Sufficient water resources were important in many cases, always being a vital condition of survival in Africa (Kibreab, 2004).

#### **14. LEBANON: CASE STUDY OF AL-BURJAIN**

The war in Lebanon which took place within 1975 – 1991 had the form of the civil conflict and led to a long-term decay and displacement of thousands of people. According to the available data, in the country with the population of 3,5 million people, about 170,000 people were killed, 800,000 were forced into displacement. The evaluation of the demolished property was about 12 billion USD (El-Masri & Kellet, 2001).

The case study carried out by S. El-Masri and P.Kellett was conducted in two villages of al-Burjan and ad-Debbieh in Mount Lebanon. The district as-Shuf, where both villages were located, was the epicenter of the armed conflict within the whole 16 years of the disaster. The authors conducted the fieldwork in the villages in 1990. They returned there later in 2001 to evaluate the reconstruction results how the program on reconstruction of rural area was implemented and which the final outcomes were. The research was made by means of interviews of the affected people and officials, detailed learning of the stories of about forty families of victims concentrating on displacement and reconstruction issues. The research was performed on different levels and in such a way that allowed to cross check the received data to make the final results reliable (El-Masri & Kellet, 2001).

The Lebanese village al-Burjain was inhabited by Muslim and Christian community. The housing design and preferences were quite similar independently of the family religion. This can be explained that the geographical factor, and namely the mountain environment, had caused other factors being more decisive for the architecture.

The information received was related to four main categories: socio-economic factors, real estate development prior the conflict and after it, vision of locals about the forthcoming reconstruction programs and the aspired future of the rehabilitated villages (El-Masri & Kellet, 2001).

The target which the scholars put for the research, was to get familiar with the peculiarities of the given society, to find out the main trends and difficulties in it, to discover possible issues, benefits, wishes and needs of the community. This data should be taken into consideration while elaborating the reconstruction projects. Such approach will enable people's initiative in the process and make the best possible use of their own resources.

Socio-economic background was studied by means of obtaining the detailed information about the family – number of family members, gender, education, occupation, displacement rout of each member, income, and other means of survival. Authors believed the socio-economic factor played the crucial role in the reconstruction success. It determined the main wishes and needs to the family housing which were difficult to argue and alter as they were often personalized.

When researching the displacement routs of families, a high mobility of society was obvious. To escape the war people relocated 3,5 times within every three years on average. At the same time, the data showed a high level of self-help – the victims were

not expecting help outside, they were fully and solely in charge of their relocation and survival. The main determinatives in the actions of people were either they had savings, or they had relatives or friends ready to help, or they got the information on the free dwellings offered for occupancy. Another major factor in the relocation was the proximity to the original place of living. The majority preferred to choose the place close to their home even though the house may be not existing anymore. Thus, the sense of attachment played a big role in their life. Such sense of attachment is the embodiment of social, cultural, economic, and psychological ties of the people in the given community, and one needs years to gain the same feelings about the new place of living (El-Masri & Kellet, 2001). This very feeling makes people return home after the most horror events that took place there. On the other hand, in case the return is not possible, creating conditions for acquiring the feeling of attachment in the new place is the main task of all the social programs, elaborated for the displaced people in their new place of residence (Brun, 2005).

During the years of the war the socio-economic environment was influenced greatly by external factors in the result of which the former had changed sufficiently from a very traditional to a more modern one. It resulted in the smaller family size, big percentage of educated people, priority of the work for third party with fixed salary, the entrepreneurship was not searched for. A big percentage of younger generation looked for sufficient educational opportunities with the inclination to vocational professions which can be utilized in the post war reconstruction period. The employment of the population was a crucial factor for the settlement reconstruction and family's income was the condition for the decision to stay in the settlements and invest into the real estate (El-Masri & Kellet, 2001).

It was discovered that before the war the construction of houses was performed mainly by people themselves. The local government was involved in adopting construction requirements and issuance construction permits, what was often omitted by the residents though. The same was the process after the war – the task of the house reconstruction was fully on the shoulders of the beneficiaries, who were going through the same difficulties and obstacles, and the issues were not taken over by officials or any reconstruction actors. Another important finding was the house was considered as the place of living and not as material object that can be sold later and bring profit. Houses were seldom sold or exchanged there – it was a permanent family nest and not a good for trading. Therefore, all the housing planning and investments were made from the standpoint of every-day living needs satisfaction limited by the family financial resources and not by the costs and future benefit's view (El-Masri & Kellet, 2001).

When discussing the details of future houses, most people preferred to use the local materials and techniques, accepting the new or better technical solutions on the condition people could afford them. As for the future of the community in general, people were pointing out the pre-war issues of the villages and were hoping the new reconstruction tasks would solve them. Among the main issues were absence of roads or transportation means to reach different parts of the villages, absence of the desired educational and healthcare infrastructure, insufficient water resources, lack of agricultural possibilities and absence of the governmental support (El-Masri & Kellet, 2001).

While thinking over different approaches of construction and desired reconstruction process, people were not flattered by offering new homes constructed by means of rehabilitation programs without the participation of the beneficiaries. They all wanted to be part of these programs, controlling the design, planning, and construction process within their ability both financially and physically. Beneficiaries were requesting technical and financial assistance and were ready to participate in the financing on the condition the politicians guaranteed security and peace in the intended place of living.

The participants of the survey were supporting the idea of community committees as the connection point between the beneficiaries, community and higher officials and bodies. They were also handing over the role of the village management to the communities in terms of the communal facilities reconstruction, planning of public buildings and infrastructure. The role of the justice organ in any disputes was prescribed to the community committee too. The positive discovery was people recognized the role of each individual in the reconstruction of the village in general not passing the responsibility to the committee. They believed the social destruction of the village was of bigger danger and bore worse consequences than the physical demolition of the buildings. They fully recognized the task of building a new and even better society that laid ahead of them, what could be reached by cooperation on the basic level of society – every household. The economic side of the task was observed too, as community was determined to utilize local resources at maximum to facilitate the economic rehabilitation (El-Masri & Kellet, 2001). Such findings prove the idea developed by Minervini (2002) that a community executive body should be created to lead the construction process and the community development within it.

The government had to carry out the reconstruction of major transportation lines, other infrastructure facilities including the supply of natural resources. Fairness and justice were the important security features that should be watched during the process. Any

threat to them could provoke conflict. For the same reason, direct financial loans were not suggested, as they could have a negative effect on the relationship between different strata of society and civil groups. Therefore, complete clarity of the process and consent of the community to it were the obligatory conditions of the reconstruction process (El-Masri & Kellet, 2001).

People believed the stabilization of the economy and increase of employment possibilities were the priority task of the government. Soft loans and different in-kind help including construction materials to the affected families were welcomed. Thus, the role of the government was seen in three directions: reconstruction of the infrastructure, material support of inhabitants and improvement of the country economy as the basis of the future (El-Masri & Kellet, 2001). These statements are fully in line with the conclusions made by Minervini (2002) as for the preconditions of the minorities' return and integration.

El-Masri and Kellet (2001) performed the initial field work in 1990, which was analyzed up to 1992, and in 2001 the researchers re-visited the villages to follow up the reconstruction progress.

The final outcomes revealed the rehabilitation programs were limited to cash payments to the affected people, building of the infrastructure and administrative buildings, foundation of reconciliation committees which purpose was to stimulate the return of people to the prewar residences. Generally, the process was not going smoothly. There were many difficulties and namely lack of funds, political turbulence, coordination between the participants and logistic impediments. It was obvious those who led the reconstruction programs have chosen the top-down approach for the area reconstruction, and this led to the ignoring of the community needs and difficulties in rural rehabilitation (El-Masri & Kellet, 2001).

The positive result of the reconstruction programs was most of the displaced people were able to return to their pre-war villages and claim back their property. The efforts of the relevant governmental bodies and the reconciliation committees should be praised for the achieved goal. People were able to live together peacefully again after the long-term civil clashes, what was a rare case in the history of such wars (El-Masri & Kellet, 2001).

Yet, much bigger damage was caused by other measures offered by the reconstruction actors. The compensation provided as material help or for rebuilding of the house, or due to the loss of the family member sharpened the individualism in the community prioritizing self-interests on the account of common interest. These were not programs

elaborated together with the community representatives which would be fair for all its members and accepted by them. As such, the reconstruction of the village had not improved the connection between its residents but, on the contrary, created new disagreements between them. Each family decided itself on the building concept which, for instance, had worsened the accessibility of certain places and brought the issues with the village planning. A very vivid sign of wrong planning was the new architecture turned far more to urban than rural, furthermore, inappropriate materials were used (El-Masri & Kellet, 2001).

While researching the rural redevelopment, the current world tendencies should be taken into account some of which were singled out by Murr (1987):

1. rural areas are more and more integrated into the urban structures, what dilutes villages social identity;
2. younger generation massively migrates to urban areas bringing the rural culture and activity there, what also brings the similar urban effect to the village life;
3. recent education tendency does not take into account the needs of rural industries, young people prefer not to choose such due to higher general literacy. Vocational education system needs the upgrade urgently taken into account rural needs too;
4. for rural areas to be in demand as the place of residence, they should go in line with the recent communication technologies, available and affordable transportation;
5. to be profitable the agricultural sector should be supported by the government. Otherwise, people abandon agriculture and look for employment with the fixed salary in other industries.

The outcome of the after-war reconstruction programs in Lebanon in as-Shuf district were the new buildings constructed. But the availability of buildings did not secure their occupation. El-Masri and Kellet (2001) predicted the following events in the area:

1. the new houses would not be the main place of residents, but would be used as secondary accommodation for certain occasions or summer houses;
2. the houses could be sold to other people not within the community, what would not lead to the strengthening of the community but more to its disunity;
3. the displaced people received compensation or benefit in other way from the international rehabilitation programs but would never return to the original place. People would not invest in housing construction further either.

Such conclusions were drawn on the consideration that within the sixteen years of conflict people had settled in other places. In order to take decision to go back to the place of the family roots, they should find the strong arguments to do so to balance the new difficulties of moving to another place again. In the case of al-Burjain, the construction actors have not invested sufficient attention, financing, and resources to the socio-economic development of the area, and people realized the probable consequences of that. It proved those who elaborated the rehabilitation programs had not understood that reconstruction of the real estate was not equal to the rehabilitation of the village in the given case. El-Masri and Kellet (2001) suggested the success in these reconstruction projects was more likely to be achieved if the actors considered the following areas of the rehabilitation before finalizing the program plan:

- what should be done to secure the physical and social reconstruction;
- which influence the program would have on the village culture, traditions and general development as the rural area;
- which compensation package should be provided to awaken the economic potential of the place;
- what could be done to prevent the urban migration.

El-Masri and Kellet (2001) concluded that the reconstruction projects would succeed if they were related to the local culture and drawn by the community initiative. They did not diminish the role of central institutions though, but their task was to guide the programs, accumulate knowledge and foster the reconstruction project.

The following important discoveries revealed in the study of al-Burjain case by El-Masri and Kellet (2001) can contribute to a rural reconstruction aftermath an armed conflict.

1. People affected by the armed conflict still possess the considerable ability in solving the issue of homelessness. Instead of the “victims” role, they should at least participate in the reconstruction project and in some cases even lead it.
2. Life changes with very high speed now. The new socio – economic condition of the to be reconstructed community should correspond to the new current level of the desired life and not be the same as at the pre-war time. Yet, this upgrade should be tied to the local traditions and customs.
3. Beneficiaries are always willing to take control over the reconstruction project rather than to be passive observers in the process of their new home creation.
4. The reconstruction should always be considered in a broad way, physical reconstruction is useless in case it is not paired with social and economic rehabilitation.

5. When the provided financial support is not tied to a clear purpose, it should be clearly understood it would help the war victims but it may not be directed to the reconstruction of the certain area.

6. Founding local committees should be always supported, as they help to unite the fallen apart settlements and elaborate the mutually accepted programs and strategy of the community integrated rehabilitation.

Summarizing the case, the precondition of the reconstruction project is to study carefully the pre-war and post-war situation of the given place to single out the main socio-economic features of the settlement, people's needs and aspiration, weaknesses, and strength of the locality. It can be fulfilled through close communication with the community only and promoting their initiative in the project offering cooperation with the main actors. The obligations of all the parties should be clearly differentiated, people should decide what they want, while government and international organizations should be implementing the projected reconstruction plans, facilitate community rehabilitation and secure economic growth by means of utilizing the available resources and the development of new industries, appropriate for the region.

Once the above fieldwork is carried out, the main findings should be fixed in the normative acts, which will secure the elaboration of the proper reconstruction programs. Such an approach should be a priority on every level of the actors involved – local, national, and international. This is a complicated task. Yet, only on the condition of its implementation the after-war reconstruction can bring the life of the displaced people to the better future they all strive for (El-Masri & Kellet, 2001).

## **15. ECONOMIC FACTORS FOR EFFECTIVE COUNTRY REBUILDING**

As it was stated many times earlier, one of the most important indicators of the real estate rebuilding success is return of the refugees to their homes and occupation of the houses rebuilt for them. But the availability of houses is not the only condition for people to return, unfortunately. There are other factors influencing this process where external aid is also crucial.

The proper development of the country after any devastation depends on the institutions present in the country in a big extend or the way they are being established after the armed conflict. Therefore, external agencies should keep a close eye on the available institutions and the way they function providing all possible help and advice on their development in the right direction (Leroux-Martin, 2014). If we talk about the post-war



country in Europe, the development should be close to best practice and fruitful policies of European countries (Gligorov et al., 1999).

One of the first targets during an armed conflict is infrastructure, its reconstruction is one of the first priorities for the government in terms of country reconstruction. The absence of roads and transportation systems will definitely impede the process of the country's recovery, and they cost vast amounts of money. A postwar country is in big need of grants or loans in this direction (Chang et al., 2011).

Another helpful gesture for the economic recovery is empowering of trade with the postwar country, what means increasing of quotas for import from the country, decreasing the duties or abolishing them totally where it is possible. The cooperation with other countries and different cross-border projects usually opens new long-term possibilities for the country in need, and, therefore, such initiatives should be comprehensively supported (Gligorov et al., 1999).

A military conflict always affects the macroeconomic situation in the world as we are too deep in a globalization process already, and the stabilization of the macroeconomy after or in the middle of a big armed conflict is one of the crucial tasks of the international community (Gligorov et al., 1999). For the country at the epicenter of the war the task of improving its microeconomy indicators is of huge importance. It can be reached through attracting of investments which are possible under the guarantees of international organizations, reconstruction of infrastructure, special attention to small and middle-sized enterprises, crediting the latter on the affordable conditions. This is also the right time for the reform of governance on any level – from the local municipality to management of big private and public companies (Leroux-Martin, 2014).

Nowadays, due to ecological deterioration, cooperation and not competition targeted to natural resources distribution is extremely important too. These are supply of gas, electricity, water, telecommunication, and food. For the country after an armed conflict with destroyed infrastructure and collapsing economy, the risk of crisis in power and heating supply is very high. These are the areas where governments of all the countries helping the victim country should look for cooperation as the high priority (Gligorov et al., 1999). The vivid proof of the before stated is the developments in Ukraine within the first year of the armed conflict. The country went through water insufficiency, petrol, and diesel absence at the prime time of agricultural sowing and finally had to apply blackouts throughout the whole country due to severe damage of electricity infrastructure.

The employment situation in the post-war country is one of the biggest concerns for those who left the country due to war and plan to return home. Special programs on social security and aid, development of the projects which influence the labour market improvement should be one of the targets of donor organizations. That is why all the projects on real estate reconstruction should be directed on attracting local companies and labour force first of all (Harris, 2006).

Gligorov et al. (1999) pointed out the importance of the development of a democratic society in the aftermath of a war. These include a strong civil society, effective private sector, and NGOs. These forces in case they are well established in the country balance and direct the policy of the central government not letting it to go to wrong extremes. These are the constituents of society which vastly contribute to the country's economic and social development and make strong foundation of the democracy and welfare. A society with many strong individuals and democratic foundations will block the possibility of creation of corruptive groups in any field of the country governance – by politician circle, in military forces and business activity. The instruments to facilitate building of strong society and its democratic grouping are creation of networks based on different interests on the level of municipality, in middle and higher educational institutions. Support fair media coverage, creation of professional networks and NGOs should be highly promoted.

The policies on migration of people should be kept on the certain level of freedom, on the one hand facilitating people to go back to their native country, on the other hand making it clear people are welcomed to other places as the compensation of the armed terror they might have faced, or in the worst case scenario if the situation in the home country is not improved in the long run (Danemark, 1993). The issues of people trafficking, and other organized crimes should be given special attention in the instable times of war and post-war period (Gligorov et al., 1999).

The above-described factors lead to the conclusion once again that the physical reconstruction of the country will not be successful without institutional, economic and social recovery. Furthermore, the institutional and social basis of the country will determine its economic and physical reconstruction. The former will guarantee the development and improvement of the latter. Gligorov et al. (1999) believe the traumatized population of the post-war country will not be able to return the feeling of physical security and belief in the country future without the clear rule of law, respect of their rights, not feeling the care of the government in their primary needs, guaranteed by

the country primary laws. These are the right to home, healthcare, education, and respect.

Country is not able to exist in a vacuum, integration into regional and world processes are especially important during the time of the post-war rebirth. This rule refers to the security situation in the country too. In case the security system is destroyed during the war years, the international community should replace it with its own forces till the new security system is established in the country (HPN, 2003). This is not the issue of the given country's internal security but the general stability of the region as well, as conflicts have the tendencies to cross the borders. Additional attention requires the control of weapons trade and military budgets in the region, military cooperation of the countries, regulation of activity of different non-orthodox and extremists' groups (Gligorov et al., 1999).

Location of Ukraine in Europe vectors its development in the direction of the EU. The cooperation on the institutional level between the two sides shall be the part of the general country recovery plan. The interrelation may manifest itself by means of mutual agreements on the country level in different fields, regular meetings of ministries' heads aiming at exchange of the experience and working out new effective policies for Ukraine. Such cooperation will enhance the involvement of Ukraine into different EU projects opening new opportunities to both sides. On the other side, the EU, being a strong financial institution, is expected to support the rebuilding of Ukraine after the war in various dimensions. These are facilitating effective institutional governance, liberalization of trade with the EU, financial support through grants and loans, aimed at infrastructure reconstruction and upgrading, recovery of financial sector, development of new technologies necessary for the faster recovery, and physical rebuilding of the real estate. Such aid is not meant to be one-sided. The EU will get a strong partner in return, able to support its values and priorities in the region, helping to gain its initial force and meaning.

## **16. DISCUSSION AND CONCLUSIONS**

### **16.1. General framework of post-war reconstruction projects**

Summarizing the above written research we may assume, the reconstruction of real estate in Ukraine will be fulfilled under similar procedures based on the previously carried out practice of post-war reconstruction.

The post-disaster construction project shall have three phases that have their own specifics depending on the reconstruction goal, level of devastation, and the scope of works to be done, and namely:

- the preparatory phase is the first step during which the relevant institutions should be founded, the budget is to be prepared, local legislation shall be updated accordingly, or new legal acts are to be adopted;
- the planning phase consists of preparation of the detailed planning of the construction objects, adapted to the specifics of the locality and the project requirements;
- the building phase is carrying out the construction works based on the documents and procedures, elaborated during the first two phases.

The main factors influencing the success or failure of the reconstruction project shall be distinguished in the project phases to follow them in time and diminish the project failure risks (Bilau et al., 2015). Bilau et al. believe, only the first and the second phases have specifics of the post disaster reconstruction, while the third one – building – is typical for any construction project. It can be argued though, as the building phase may be restricted by such obstacles as materials procurement, political and social turbulence, beneficiaries' intervention. Each phase is specified in detail in Table #4 below.

Phases of Construction Project	Tasks to Be Delivered
<b>Phase 1</b> <b>“Preparation”</b> <b>includes:</b>	<ul style="list-style-type: none"> <li>• Create recovery program on national or regional level.</li> <li>• Secure the availability of the proper legislation enabling the whole process.</li> <li>• Found the relevant institutions, including hiring the required personnel to them.</li> <li>• Draw budget and collect financial resources, evaluating the needed and the available budget.</li> </ul>
<b>Phase 2</b> <b>“Planning”</b> <b>includes:</b>	<ul style="list-style-type: none"> <li>• Clarify the issues related to the land: proper land zoning, land use and ownership.</li> <li>• Take decisions regarding the construction size and approach. These are repair of houses, demolition of houses and constructing new ones instead, or full relocation is needed.</li> <li>• Prepare construction plans on regional and local levels (if project is carried out via smaller projects).</li> </ul>

	<ul style="list-style-type: none"> <li>• Elaborate planning based on the local regulations and standards, obtain building permits.</li> <li>• Select construction approach: contractor-build, self-build, mixed.</li> </ul>
<b>Phase 3</b> <b>“Building”</b> <b>includes:</b>	<ul style="list-style-type: none"> <li>• Align work and communication of the project participants.</li> <li>• Manage the supply chain and logistics issues.</li> <li>• Secure availability of the staff.</li> <li>• Control construction process.</li> <li>• Quality control.</li> <li>• Reduce possible risks.</li> <li>• Control health and safety measures.</li> <li>• Observe the coherence to the budget and timely financial reporting to the donors.</li> </ul>

*Table 4. Overall framework for management of housing reconstruction project, based on Bilau et al. (2015)*

## 16.2. Critical factors of post-war reconstruction

The objective of this research was to reveal **critical success and failure factors** of the post-disaster reconstruction projects which should be observed during Ukraine’s reconstruction. These are the issues which should be traced with special attention before the launch of the reconstruction project and watched closely during its implementation. Otherwise, the completed project may require sufficient modification of houses by their beneficiaries or lead to a rejection of the dwelling. Reconstruction actors should keep in mind that there were cases when people dismantled the newly constructed houses and sold the materials that could be used in other construction projects.

A post-disaster reconstruction project is always carried out within different dimensions of uncertainty. Therefore, the project is challenged from many sides and its actors often face unpredictable issues. In order to minimize the risks of failure, the main tasks which arise during the reconstruction process are (Dzulkarnaen et al., 2014):

- integrate the project in terms of local culture and needs;
- finance the project sufficiently;
- assess the project stages delivery timely and accurately;
- secure proper communication between project participants and coordination of their work;

- procure resources on time and in sufficient quantity;
- agree on design;
- be aware of logistic issues;
- rule out corruption and non-transparency, waste of the resources and fraud;
- avoid delay in timing.

The study has revealed the generally accepted **success factors** which in most cases ensure the proper execution of the real estate construction (Dzulkarnaen et al., 2014), (Ophiyandri, 2013), (El-Masri & Kellet, 2001). These are:

- community-based method of housing reconstruction and bottom-up approach during the elaboration of the reconstruction programs;
- transparency of the processes in the project, clear assessment and reporting of the progress;
- communication with the community and building relationship with it;
- proper coordination within the project participants and information exchange;
- on-time financing of the project;
- sufficient level of skills of the involved professionals;
- strong partnership with the community in the project assessment and delivery;
- even participation of the community strata in the project;
- correct choice of the housing beneficiaries;
- support of the project on the country level and by the local authorities;
- size of the project – the smaller is the project, the bigger is the chance to complete it successfully;
- support of politicians;
- detailed knowledge of the local situation – from cultural perspective to the factual condition of the locality;
- financial transparency and targeted use of funds, materials, and other resources.

**Monitoring of the work progress and its quality** is a significant mission during the reconstruction. Every reconstruction project should be secured with detailed time schedules and volume of work to be done at every stage. The sufficient number of technical staff and project managers should be able to follow the well-prepared schedules. Otherwise, the project can end with low quality construction. Issuance of construction approvals can turn out to be problematic, which can lead to extra costs of the projects and delayed timing. Additionally, the qualified technical staff shall provide advice and expertise in self-build projects.

Ukraine has already faced **logistics and supply chain** issues due to the destroyed physical infrastructure, ruined markets of resources and materials, and loss of connections between the enterprises. Clearing the logistics and supply chain is a crucial task for the management of the future post-disaster reconstruction projects. The difficulty in this task is the unclear picture of the logistics situation and materials supply in the post-disaster country, absence of the exact account of materials and resources available. This data is vital for the reconstruction project, and it influences the project execution a lot. In this regard, the contractor-build approach in construction can be significantly justified. Big construction companies, using supply chains on international level, have higher expertise and better possibilities to perform the task successfully in the complicated afterwar logistic and supply chain environment (Bilau et al., 2015).

**Availability of human resources** is the next point that should be evaluated thoroughly before the beginning of the reconstruction process. Experience of humanitarian organizations shows that the project can be carried out exclusively by the local human resources in case it is small or medium size reconstruction. For a project of a big size, the external work force is always needed (Bilau et al., 2015). Meanwhile, it is not easy to attract the employees to such projects as post-war countries can hardly offer good living and working conditions as well as higher remuneration for such work. That is why it is rather inevitable to involve the community as the work force to the reconstruction project organizing the required training, further control and expertise during the construction stage (Dzulkarnaen et al., 2014).

The post-disaster reconstruction brings additional danger to the generally dangerous work in the construction industry. Armed conflicts always lead to mining of territories, leaving explosive devices and materials scattered around, drinking water can be contaminated, building structures can have the threat of falling apart unexpectedly. As of November 2022, according to the statement of the head of the State Emergency Service of Ukraine, it had 30% of its territory mined which was equal to double size of Austria (Lipchanskyi, 2022). People working in rebuilding projects are exposed to the mentioned dangers. That means the additional **health and safety measures should be taken during the reconstruction** to minimize the risk of injury or death, which can be carried out through training and control (Grosskopf, 2010).

**Coordination of work between all the actors** during the reconstruction process is a very important task, though it seems not so difficult at first sight. As it was mentioned earlier, construction is a complicated industry, and the post-conflict situation aggravates it tremendously. Post-disaster projects are characterized by the increased number of the

project's participants, and communication between them should be well organized. The clearly determined ways of communication and feedback including their timing should be established before the project onset. To make communication efficient, it is advisable to split the responsibilities of the actors in such a way that their scope of work does not overlap or repeat each other. This will also help to avoid many arguments and discrepancies in views (Patel & Hastak, 2013).

**Managing the finances and reporting** is the next point that should be singled out. Usually, the reconstruction projects have more than one or rather many sources of financing. These could be local government funding, installments of the beneficiaries, grants of international donors, and others. All the giving parties would require the monitoring of how money is spent. To decrease the pressure during the projects implementation, it is important to establish the financial reporting system before the project starts, which must be sufficient and informative to the project actors (Ranghieri & Ishiwatari, 2014).

Choice of the **building works execution model** plays an important role. Before 1980s the projects led by donors were mainly contractor-build. Later the model was modified to a mixture of external contractor's employment which provided materials, and participation of local communities in the construction works. Such a tendency prevailed in recent decades as the self-build approach facilitates the development of local communities after the disasters they faced. It returns self-confidence to people and promotes their participation in community life. These are the main goals of humanitarian NGOs, which explains their support of participatory approach in the post-conflict construction (Chang et al., 2011).

**Local government** plays an important role in the rebuilding process, and it can be the key beneficiary of the rebuilt real-estate. The donor agencies should insist on the proper work of the governmental institutions participating in the project. The cooperativeness of such institutions should be evaluated at the earliest stages of the project, and relevant conclusions and actions should be made. The project execution may require the adoption of new laws and normative acts defining the detailed objectives of the project and responsibility of each actor. Regular contact of the government with the beneficiaries, effective information exchange and cooperation between all the participants are the keys to the project success (Moe & Pathranarakul, 2006). As it was stated earlier, procurement of the resources, their distribution and accountability are the important factors influencing the project completion, and they can be facilitated by governments too.



**Community involvement in the reconstruction process** is emphasized as the important and beneficial trait of post-war rebuilding. Communities' role is seen in any stage of the project. The project should have clear phases and timing which should be public. In case of considerable deviation from the planned schedule, the representatives of the community should be aware of where to address the emerging issues. Naturally, all the actors in the project should have rights and obligations, and community is not an exception. Beneficiaries' involvement as part of the community is praised, but they should be liable for any violations during the construction too. There should be a party carrying out technical and financial control, and the community can be part of it. These could be both the representatives of the donor agencies and the beneficiaries themselves, that would bring the four eyes principle to the project monitoring. Beneficiaries are interested in the quality houses built on time and according to the planned budget. They usually willingly participate in the training in this regard and gain knowledge themselves from the technical and other project specialists. Beneficiaries are able to participate in all the stages of the real estate construction project – in its design and planning stage, cost estimation and construction. Even when finances and materials are provided by third parties and not spent from their pocket, people are watching over their targeted and thoughtful distribution and proper use. Overall, the participation of the beneficiaries in the housing reconstruction shows higher productivity of all the projects participants, better quality of houses and even shorter times than planned for the construction. The shorter the time of the construction, the less it costs.

It can be assumed that beneficiaries can play the role of the project coordinator and being personally interested in the project result perform it very well. Additionally, their involvement into the reconstruction process brings positive psychological effect and acceptance of the project, giving the feeling of security and satisfaction. Aligning together minority groups and different society strata strengthen community. Helping the community to practice democratic decision-making process in the issues related to construction, improve the general self-management of the place. Furthermore, some of the beneficiaries can get jobs in the projects, thus decreasing the unemployment rate and being able to pursue their further career in this field. Yet, it is to be remembered that in terms of beneficial community participation only the level of the locals' empowerment, real collaboration and consultation would lead to the efficient use of the community abilities.

The scheme of aid provided by SRSA in Tuzla, which consisted of technical advice and high involvement of the community together with the work of the local returnees' agency, resulted in the creation of the active and perspective social environment so much needed

for the community recovery after the armed conflict. Such experience is highly recommended for blueprinting in Ukraine.

To sum it up, the role of community participation is beneficial on such levels:

- control and coordination of the construction project execution;
- financial contribution;
- control of the project budget and materials use;
- participation as the labour force;
- support in the project procurement;
- facilitating the project sustainability in terms of its location, design and future development;
- improvement of the community governance and communication;
- healing beneficiaries after the trauma of war.

**The overall success** of the post-war rebuilding project shall be evaluated based on such factors:

- execution of the construction on time;
- execution of the construction within planned budget;
- high occupancy rates.

**The practice that should be avoided** is the assessment of the reconstruction project based on the number of units built and the timing of the construction. In the cases of rush for speedy building works and their result, there is a risk of constructing houses of poor quality, without proper planning of the surrounding territory, lack of safety measures during the construction, improper security of the buildings. Such drawbacks are usually discovered later and require additional funding to mitigate the risks. In such cases the created physical structures do not obtain the desired social meaning of the house for the returnees either. Having a large number of post-Soviet era buildings in Ukraine, which are standard concrete constructions, such practice should be avoided in order to create more personalized and nice-looking architecture in the after-war grieved environment.

### **16.3. Reconstruction project management**

Bilau et al. (2015), Minervini (2002) stress the importance **of special institutions to lead reconstruction projects**. Creation or use of the existent governmental organization or agency on national level with their representatives in different country regions and municipalities is strongly encouraged. The organization should be

responsible for promoting the national program on reconstruction to lower administrative levels ensuring its understanding and fulfilment. It should offer ways to communicate the issues revealed locally back to the national level with the aim to find a solution to them. It might be necessary to issue the reconstruction programs on the national level by means of relevant national legislative acts, which are, in turn, must be specified and detailed on the regional and local levels, where such executive body should take the lead too.

The nationally established institutions play the main role in the assessment of damage, framing the actors' cooperation, clearing the issues of land and property use, and elaborating the general policy regarding real estate reconstruction after the conflict. Without the central body responsible for giving general guidelines within their jurisdiction there is a risk of chaotic work of the participants, which may easily result in project abandoning (Uyangoda, 2005), (Grewal, 2006).

The example of MHC in Kosovo can be replicated in the post-war reconstruction in Ukraine. MHC carried out successfully the difficult task of beneficiaries' selection, which appeared possible due to creating democratic and amicable preconditions to this process. Further effectiveness was conditioned by clear procedures based on clear algorithm and not on somebody's opinion. Such an approach could have been hardly argued and, thus, accepted by a vulnerable Kosovo post-conflict society. The proper attitude to the allocation of the assistance, practiced by MHC, conditioned usage of the modern technologies, application of the participatory approach in the construction, and generally led to helping those who were dramatically in need (Minervini, 2002).

The practice that should be avoided is applying different approaches to one task, that can cause the ambiguity of the received data. The sad experience of damage assessment brought extra difficulties at the very beginning of Kosovo reconstruction program.

**The governmental institution, responsible for the construction permissions, quality assessment and buildings commissioning,** requires special attention. This field of state regulation has been always criticized for bureaucracy and corruption in Ukraine. Thus, it should be followed that it does not impede the post-war construction. Ideally this should be a transparent central executive institution with subsidiaries on local levels, which works under general guidelines of construction industry, possessing authority powers and obligations. On the other hand, when so much and so decisive power is concentrated in one institution and between few people, the risk of bureaucracy and corruption increases vastly. Therefore, the work of such construction authority

should be organized bearing in mind it should not be able to block the progress of the project due to personal interests. In the countries with the established rule of law which Ukraine believes to belong to such issues should be resolved by law enforcement institutions within the defined period of time.

#### **16.4. Sustainability of reconstruction projects**

At the times of environmental crisis, sustainability must be taken into account to assess the success of reconstruction projects. Based on the factors described by Barakat (2003), the construction project should embrace the following criteria of sustainability:

- environmental sustainability requires careful treatment of local natural resources, preserving them in the course of construction and future use;
- technical sustainability foresees the local availability of construction materials, techniques and skilled people to utilize them during the planning and construction stages, as well as their further maintenance;
- financial sustainability requires availability of finances during the whole process of housing rebuilding;
- organizational sustainability is not always considered carefully, being a very important issue. There should be an organization (a single body or a union) which has the decision-making right on behalf of different project actors and for the cases of arguments between such actors. It collects the information, systematize and optimize it, mediates disputes among the participants;
- social sustainability requires that the construction project corresponds to the needs of the community and its inhabitants. It is the project condition which is difficult to overestimate.

Sustainability of the real estate is relevant to its quality. The proper quality of the buildings can be reached through the complex measures planned and executed during the construction. These are availability of skilled professionals and technical staff, proper construction materials, relevant construction site properties, control of the project on all its stages, well organized communication of the project participants, ability to react to any issue on time and prevention of the similar repetitive mistakes (Gharaati & Davidson, 2008). Undoubtedly, if these topics are addressed properly in the post-conflict reconstruction, the new houses will be accepted by the beneficiaries, and they will become their new home.

## **17. LIMITATIONS AND FUTURE RESEARCH**

### **17.1. Limitations of the research**

The carried-out research is limited to the cases studied by the author and partially covered in this paper. Due to remoteness in time and confidential nature of some data, the international organizations and private donors do not display primary sources to public, making the vast layer of information related to the theme of the thesis unavailable.

The time factor plays a crucial role in the correlation of the previous experience in the post-war reconstruction and the future reconstruction of Ukraine. Technologies developing with enormous speed recently tend to change the practice of any project governance with similar speed. Hopefully, it will bring the beneficial effect to the reconstruction of Ukraine in practice.

All conflicts have different political nature bringing diverse context to the post-conflict era and influencing any activity there. It can be assumed currently that the absence of civil conflict inside Ukraine would ease the reconstruction process.

The studied conflicts took place in different cultural and geographic conditions, which would affect the received outcomes if applied in Ukraine. Construction has different costs around the globe, and it requires variable techniques and know-how to be applicable locally. Yet, the provided information may diminish the probability of negative results in the reconstruction projects.

### **17.2. Future research suggestions**

The aim of this research was to study and systematize the experience of the post-war countries in the real property reconstruction, as well as to get specific information on flaws and difficulties which the actors of rebuilding projects are likely to face.

For further research specific topics could be appropriate, like sources of the financing of the reconstruction projects, split of responsibilities between the community, donor agencies and the local government. It should be mentioned that despite a number of research done on this big theme it is rather scattered and incomplete. This gives good grounds for further investigations and delivery of important findings.

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