

Research Paper: Identification of Practical Solutions in the Development of Physical Re-Creation of Informal Settlements in the Rural Areas of the Outskirts of Zahedan City in Southeast Iran with an Emphasis on Urban Management

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Citation: Brahui Salari, M., Miri, Gh., & Anvari, M. (2024). Identification of Practical Solutions in the Development of Physical Re-Creation of Informal Settlements in the Rural Areas of the Outskirts of Zahedan City in Southeast Iran with an Emphasis on Urban Management. *Journal of Sustainable Rural Development*, 8(2), 231-240. <https://doi.org/10.22034/jsrd.2024.432610.1175>

doi: <https://doi.org/10.22034/jsrd.2024.432610.1175>

Article info:

Received: 24 Apr. 2024

Accepted: 19 Oct. 2024

ABSTRACT

Purpose: Nowadays, the big cities of the country are facing the phenomenon of informal settlements in the outskirts of the cities due to unplanned physical development, so most of the villages on the outskirts of the cities, which have been added to this fabric due to urban sprawl, are included in the settlements. They become informal. Therefore, all the institutions, organizations, and departments involved in managing cities are trying to improve the condition of these settlements with a series of policies, laws, and regulations such as re-creation. In this regard, the current research aims to identify practical solutions for developing the physical re-creation of informal settlements in the rural areas on the outskirts of Zahedan City, emphasizing urban management.

Methods: This research is part of applied research. According to its purpose and nature, it is a combination of methods (quantitative and qualitative) and analytical-descriptive. The techniques (DEMATEL and Grounded theory) were used to analyze the data. The statistical population, managers, and specialists were selected as the sample population based on the purposeful sampling of 26 people.

Results: From the results of identifying effective strategies for the development of physical re-creation of informal rural settlements on the outskirts of Zahedan city with an emphasis on urban management, 8 strategies (opportunity-oriented approach, education and awareness about the importance of re-creation, realization of integrated management, creation of support and productive institutions to promote rural re-creation, use of decentralized development in re-creation, realization of re-creation goals with the participation of residents, private and public sector, spatial justice, compatibility of laws with the local system of re-creation management) According to the results of DEMATEL model (use of decentralized development in re-creation, realization of re-creation goals with the participation of residents, private and public sector, realization of integrated management, creation of support and production institutions to promote rural re-creation) with positive EI value were determined as effective solutions.

Conclusion: The final results showed that it is possible to achieve the proposed solutions in the rural areas on the outskirts of Zahedan city with decentralization and facilitation. The integration between the institutions to formulate the principles of integrated management and create joint efforts between them, as well as bringing the people to the stage and the development of local institutions, requires decentralization and changing the development approach from top to bottom, bottom to top so that inter-institutional interactions are developed and capacity There is a requirement for interaction.

Keywords:

Physical re-creation,
Informal settlements, Urban
management, Urban marginal
rural areas, Zahedan

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1. Introduction

Industrialization over time has increased economic and social concentration in cities (Korkmaz & Balaban, 2020: 1). So in the last few decades, urbanization has increased significantly in many countries of the world (Xuili & Maliene, 2021: 615). The uneven expansion of the city that happened in the second half of the 20th century in most of the countries of the world has caused the urban areas to grow with pressure within the rural areas and to integrate the rural settlements and this issue, in economic, social, cultural, spatial and The physicality of Village around the city rural centers had a significant impact; In many cases, due to the wave nature of these currents, those villages that are located in the shortest distance from cities receive the most types of impacts (Karimzadeh & Saadi, 2020: 141).

The rampant development of urbanization has left adverse effects and consequences on cities and surrounding rural areas. It has caused social and environmental balances to be disturbed, and as a result, informal settlements have become ineffective and ineffective (Rezaei et al., 2022: 127). Informal settlements have created special issues and needs; in such a way that it affects urban decisions and an essential part of their activities is dedicated to improving the conditions and suitable solutions to improve the living conditions in these areas (Hekmatnia, 2018: 3). They face many physical issues and challenges (wear and tear, smallness, lack or lack of infrastructure facilities and proper urban equipment), social (high population density, lack of tendency to renew and participate in residents and lack of public spaces), economic (low value of land and high coefficient unemployment), environment (sound and visual pollution and lack of green space), management (legal issues of ownership and lack of up-to-date development plans) and functionality that make these structures inefficient for a quality life (Haghpanah et al., 2022: 24). Therefore, urban management has many challenges and problems in the way of all-round development of cities and securing the environment of informal settlements facing the countryside. Re-creation as an interventionist approach to restoration or paying attention to its nature and strategies can be suitable for protecting physical rural landscapes (Tahmasbi & Haghghatbin, 2022: 5).

Reinvention is often complicated by the multiplicity of stakeholders involved in the decision-making process, such as central and local governments, private sector developers, residents, and the connections between them

(Zhou & Zhou, 2015: 2661; Wang et al., 2021:2). The ideas of each stakeholder differ in terms of strategies and how to execute projects (Amin & Adu-Ampong, 2016: 24; Zhou et al., 2017: 370). In this regard, planning is necessary to purposefully shape the role of management in sustainable re-creation in the areas of executive policy, executive management, executive development, and facilitation and institutional interaction in the field of re-creation (Firoozi et al., 2019: 19). Sustainable re-creation in rural-urban fabrics is one of the socio-economic problems and problems of residents (Mohammadi Mazraeh & Akbari, 2021: 24).

Today, in cities in different countries, especially third-world countries, many residents live in informal settlements in villages around the city's rural areas. One of the cities heavily involved in this problem is Zahedan, which is in Sistan and Baluchistan provinces. As the largest city in southeastern Iran, this city has grown rapidly and significantly in recent decades. In such a way, its population has increased from 17,495 people in 1956 to 587,730 people by 2015; it means that the city's population has increased approximately 33 times during this period. The service-commercial feature, location, and crossroads of this city for access to neighboring provinces and cities within the province, as well as its proximity to the countries of Afghanistan and Pakistan, which have religious, ethnic, and racial commonalities with the tribes living in these countries, cause this city to accept many immigrants from It has entered the province, neighboring provinces and neighboring countries. A large population of immigrants cannot be absorbed in the context of the city due to the scarcity and high cost of land and housing and the low level of literacy and skills. For this reason, on the one hand, they have been absorbed into the informal sector of the economy. On the other hand, due to cheap land and housing rent, they have settled in the city's outskirts in the rural areas around the cities. Finally, they have caused the formation of informal settlements until now. Currently, one-third of the city's fabric comprises informal settlements. It houses 43% of the population of Zahedan. Unfavorable economic conditions and the low monthly income of the head of the household, poverty, employment in informal and fake jobs, the high rate of all kinds of social crimes, including economic and social characteristics, as well as things such as high age, smallness of parts, building density and lower population density, shack-dwelling, low quality of buildings, inadequate system of urban sewage disposal and garbage collection, lack of urban furniture, lack of urban services, low width of roads and reasonable price of land, etc., among the characteristics They are physically in these areas. Upgrading and improving the

quality of life in rural areas on the city's outskirts is the primary goal of implementing development programs. These contexts are outdated due to the economic, social, cultural, and technological conditions. It is evident that due to the evolution of the living conditions in the villages over time and in different fields, the old fabric does not have the necessary harmony with modern life, for; for this reason, reforms must be made by implementing re-creation plans to provide suitable living conditions, so policies such as re-creation can be considered as one of the practical and sensitive intervention programs in these areas, which can be examined in different social, cultural, political, economic, environmental and physical dimensions. In these plans, paying attention to the structure of the communication network, public transportation, natural elements, and ecological values, defining the functional center of gravity in the physical structure and skeleton to increase the traffic performance and strengthen the collective open spaces in the vicinity of the building with importance from the principles It is effective in these projects in Zahedan. In this regard, the current research aims to identify practical solutions for the physical regeneration of informal settlements in rural areas on the outskirts of Zahedan, with an emphasis on urban management.

2. Literature Review

Today, physical urban growth in most cities in the world has caused the reflection of informal settlement in marginal areas of cities, especially rural areas, which cannot be abandoned with its hope and cannot be answered by a cross-sectional, selective, and sporadic approach. The emergence of informal housing indicates the existence of structural barriers and the inefficiency of current policies in providing housing and necessary services for low-income classes at the macro level. Also, at the micro level, the weakness of urban management, illegitimate resources of local interest and stakeholder groups, and illegal actions in accepting or rejecting these settlements have exacerbated the problem. To solve the problems of such settlements, accurate and correct planning to organize and empower them is a disadvantage (Meshkini et al., 2011: 126). Rural areas on the outskirts of cities are among the most important informal settlement spaces. As continuous cultural landscapes, rural landscapes are an objective representation of the evolution of human society and their settlement over time, landscapes that change and evolve under the influence of cultural or natural currents. Man's interaction with nature and the continuity of these landscapes have created many outstanding values in rural landscapes,

which express tangible and intangible values, or in other words, their semantic importance. In international documents, the necessity of developing a conceptual framework and identifying these values as a key component in the process of protecting these landscapes has been especially emphasized so that every effort to protect and recreate rural landscapes is a contribution to the survival of culture and the sustainability of the nature of a land (Tahmasabi & Haghghatbin, 2022: 1). In this connection, one of the important documents that has been published is the document that was prepared and approved by the International Scientific Committee of ICOMOS and IFLA in the symposium related to the 19th General Meeting of ICOMOS in New Delhi in 2017. This document has tangible and intangible values. It summarizes the characteristics of rural cultural landscapes. It emphasizes the universality of rural landscapes (Scazzosi, 2018: 40). The principles presented in this document try to resolve the adverse changes in rural landscapes and communities related to them by identifying, protecting, and promoting the heritage values of villages and its purpose is to create a proper balance between economic, social, cultural and biological aspects. The environment is rural landscapes (ICOMOS, 2017). The definition of rural cultural landscapes presented in this document considers these landscapes as living and dynamic systems that include places that are transformed through traditional methods and techniques, accumulated knowledge, and approaches. They have been created and managed culturally and in other places where traditional production approaches have changed. Rural landscape systems include rural elements and productive, spatial, visual, symbolic, and environmental functional relationships between these elements with a larger context. Rural landscapes include well-managed, destroyed, or abandoned areas that can be reused or restored and recreated (Tahmasabi & Haghghatbin, 2022: 6). Urban re-creation as an approach to renovating old structures and reflecting on the idea of neighborhoods, with a comprehensive look at issues and avoiding a one-dimensional view and moving towards creating sustainable neighborhoods can solve the problems of inefficient structures in cities and villages. The urban re-creation policy aims to provide living conditions for the residents, but its implementation faces some challenges that need to be explained and analyzed. Today, the effective views in the field of re-creation are divided into several categories, which include culturalism, humanism, and interdisciplinary or realist In of culturalism, there are three principles: a) attention to cultural heritage and preventing the destruction of history, b) attention to national culture and old traditions in development, improvement, and resto-

ration and c) completion of buildings in the style of the past and the use of museums and Restoration of texture and buildings. The humanist includes principles (attention to nature and culture, attention to human movement in spaces, inspiration from hidden foundations and highlighting them in improvement and renovation, improving residents' environment and living conditions with participation, and proposing restoration plans. It is based on the planning and understanding of the geographical environment, improvement and renovation based on the organic texture and the functional hierarchy of the old texture, and the adaptation of space and time in buildings or urban complexes with the presence of planners' studies. Finally, the intermediate or realist point of view believes that the whole, referred to as the old context, is not a homogenous collection of the same value but a wide range of the most valuable areas and historical collections to the most worn-out part of the context. Urban or rural, sometimes with no maintenance value (Moayedfar et al., 2014: 303).

In the field of research so far, research has been carried out inside and outside the country, which will be mentioned below: Tahmasabi & Haghghatbin (2022), in research, they studied the recognition and protection of rural landscape values. In this research, the values in rural landscapes were categorized into two groups: natural and tangible values and cultural and intangible values; natural and tangible values include environmental, physical, economic, and educational values, and cultural and intangible values include cultural, spiritual, social, and recreational values. However, in some cases, the values combine both categories and are very difficult to verify. In a research study, Rezaei et al. (2022) analyzed the driving indicators of the re-creation of informal settlements in Zahedan. The results showed that among the factors affecting the re-creation of informal settlements in Zahedan City, the managerial-institutional index needs more attention, which will significantly impact the status of other sociocultural and demographic, economic, and environmental factors. Mohammadi Mazraeh & Akbari's (2021) research focused on sustainable re-creation, emphasizing coastal native restoration in coastal urban village contexts in the Soro Bandar Abbas neighborhood. The findings show that local tourism in the urban contexts of Banyan village is faced with the high participation of residents and can improve these areas in social, economic, and environmental terms. In research, Karimzadeh & Saadi (2019) analyzed the process of urban creep and its effect on rural villages around Marivan. The findings of the research show that in the studied area, urban sprawl has had the most significant impact on the annexed village areas in terms of

the economic dimension, the social-cultural dimension in the second order, the physical dimension in the third order, and the managerial-administrative dimension in the fourth order. In research, Razi & Nematimehr (2019) applied the ecotourism village model to recreate ecological tourism target villages in Verdij village, Tehran province. This research shows that sustainability dimensions (governance and culture) play a severe role in creating a responsible and protective local community of these tourist destinations. In a research, Rajabi et al. (2010) studied the improvement, renovation, and reconstruction of worn-out rural structures in the Dar Abad neighborhood. The results of this research show that the existing structure of the Dar Abad neighborhood cannot provide relief when natural disasters or unexpected urban incidents occur, and especially in the field of road network urban infrastructure, it has created problems that need to be organized and in The most suitable solutions for correct planning for the organization of the worn-out fabric of Dar Abad neighborhood have been presented. Miśkowiec et al. (2022), in the research "Factors and levels of community participation in small-scale recreations in selected neighborhood spaces in Polish cities," the effect of participatory processes according to three criteria groups: participatory mechanisms, diversity, and activity of participants (key partners) and they evaluated the participation capacity. They found that the use of advanced participation mechanisms is not enough. Some background factors related to the neighborhood's character and identity and the residents' individual characteristics are also important. In research, Liu et al. (2021) investigated the collaborative management of re-creation in Chongqing, China. The results show that the level of cooperation of the government system, the level of public participation, and the normality of public involvement are key factors in urban re-creation.

3. Methodology

The current research is practical and exploratory in terms of its purpose and method; it is in the qualitative and quantitative research group. The research tools are interviews and questionnaires; based on this, informed people (council members and villagers, housing and urban development, construction jihad, and governorship) formed the participating experts. The required information is extracted from the opinion of experts' opinions. A purposeful sampling method was used to select the sample population, and 26 people were chosen as the sample population. Grounded theory and DEMATEL models were also used for data analysis. In this research, at first, using the grounded theory model, effective strat-

egies were identified in the development of physical re-creation of informal settlements in the rural areas on the outskirts of Zahedan city, with an emphasis on urban management, the results of data analysis using the theory model A background was obtained through three stages of open, central and selective coding, then using DEMATEL model, the cause and effect relationships of each solution were examined.

Zahedan is the city and capital of Sistan and Baluchestan province, southeastern Iran, near the borders of Afghanistan and Pakistan. It is about 225 miles (360 km) southeast of Kerman in an arid zone at 4,435 feet. Strategically located along routes linking Central Asia and Persian Gulf ports to the south, the city has benefited from regional trade. According to the 2016 census, it has a population of 592968 people. This research has been done with emphasis on Haji Abad and Dayi Abad villages in the northern part of Zahedan city.

4. Findings

Identification of practical solutions in the development of physical re-creation of informal settlements in the rural areas of the outskirts of Zahedan city with an emphasis on urban management.

In this part of the research, effective solutions were identified through the study of interview texts with experts in developing the physical re-creation of informal settlements in rural areas on the outskirts of Zahedan City, emphasizing urban management. Solutions are

specific actions or interactions that result from the central phenomenon. According to Table 1, eight core codes were extracted from the interviews. Each of the open codes is extracted from the heart of the concepts. It is worth mentioning that the concept table was omitted due to the large number of tables.

According to Table 1, solutions such as an opportunity-based approach, education and awareness about the importance of re-creation, realization of integrated management, creation of support and production institutions to promote rural re-creation, use of decentralized development in re-creation, realization of re-creation goals with the participation of residents, sector Private and public, spatial justice, compatibility of laws with the local system of re-creation management, were extracted from the heart of semantic units. Then, using the DEMATEL model, each solution's cause-and-effect relationships were investigated. The results are described in Table 2 and Figure 2.

In the end, the final output of DEMATEL is a matrix that expresses all the direct and indirect relationships between the solutions. After determining the relationships between the solutions, the degree of effectiveness and effectiveness were drawn in Figure 2. The output of each arrow from the corresponding index shows the solution's effectiveness, and the input of each arrow shows the solution's effectiveness.

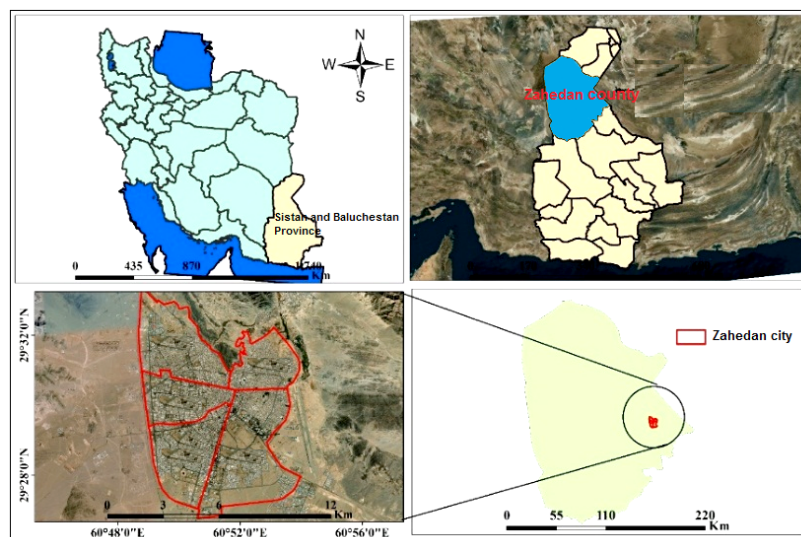


Figure 1. Study area. Reference: Authors, 2023

Table 1. Axial coding of solutions

| Row | Open source | Axial coding | Row | Open source | Axial coding |
|-----|--|---|-----|--|---|
| 1 | Encouraging and mobilizing development capacities of rural areas | opportunity-based approach | 6 | Creating people’s organizations and forming institutions and companies that provide re-creation services | Achieving re-creation goals with the participation of residents, the private sector, and the government |
| | Identifying the existing potential and actual sources and motivations | | | Creating decentralized and non-governmental organizations for local institutions through participation in re-creation projects | |
| 2 | Applying the basics of urban plans toward popularization and adapting to the demands of the local community | Applying decentralized development in re-creation | 7 | Trying to build mutual trust between the residents and the trustees of rural planning | Spatial justice |
| | Applying reformist thinking | | | Informing the residents about the positive effects of the positive plans for the re-creation of inefficient tissues | |
| 3 | Applying bottom-up development thinking in management for housing improvement and renovation | Creating support and production institutions to promote rural re-creation | 8 | Approval of laws for the participation of as many banks and private institutions as possible to grant loans to residents | Conformity of laws with the local system of re-creation management |
| | Developing joint programs to achieve the details of inter-departmental, inter-departmental, and trans-departmental cooperation between organizations | | | Justice in the spatial distribution of services, including welfare services | |
| 4 | Support and plan for creating institutions and social associations related to re-creation issues in all groups and social classes. | Realizing integrated management | 9 | Development of specialized committees to identify the weaknesses of existing laws | Education and awareness about the importance of re-creation |
| | Planning based on internal and external conditions in functional and physical dimensions | | | Formulating rules for the integrity of the management of inefficient tissues | |
| 5 | Planning based on the economic and social conditions of the villages and the involvement of activists at different levels of decision-making | Realizing integrated management | 9 | Holding training courses and informing residents about the importance of re-creation | Education and awareness about the importance of re-creation |
| | A systemic view in decision-making about worn-out rural structures | | | Conducting training courses for related organizations | |

Reference: Research results, 2023



Table 2. Matrix of general relations of effective solutions

| EI (R-D) | Pi (R+D) | Ri | h | j | f | e | d | c | b | a | Solutions |
|----------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| -0.128 | 3.113 | 2.985 | 0.411 | 0.433 | 0.410 | 0.422 | 0.411 | 0.453 | 0.445 | 0 | a |
| -0.514 | 3.890 | 3.376 | 0.445 | 0.456 | 0.500 | 0.467 | 0.511 | 0.543 | 0 | 0.554 | b |
| 0.222 | 4.345 | 4.567 | 0.559 | 0.690 | 0.655 | 0.633 | 0.654 | 0 | 0.677 | 0.699 | c |
| 0.116 | 3.755 | 3.891 | 0.556 | 0.657 | 0.511 | 0.544 | 0 | 0.546 | 0.611 | 0.556 | d |
| 0.386 | 4.345 | 4.731 | 0.666 | 0.654 | 0.633 | 0 | 0.690 | 0.688 | 0.678 | 0.722 | e |
| 0.319 | 3.445 | 3.126 | 0.419 | 0.432 | 0 | 0.411 | 0.433 | 0.432 | 0.556 | 0.443 | f |
| -0.063 | 2.433 | 2.370 | 0.421 | 0 | 0.422 | 0.411 | 0.388 | 0.405 | 0.400 | 0.345 | j |
| -0.147 | 3.090 | 2.943 | 0 | 0.409 | 0.411 | 0.456 | 0.411 | 0.400 | 0.440 | 0.416 | h |

(a) Opportunity-based approach, (b) decentralized development in re-creation. (c) Creating support and production institutions to promote rural re-creation, (d) Realizing integrated management, (e) Achieving re-creation goals with the participation of residents, the private sector, and the government, (f) Spatial justice, (j) Conformity of laws with the local system of re-creation management, (h) Education and awareness about the importance of re-creation

Reference: Research results, 2023



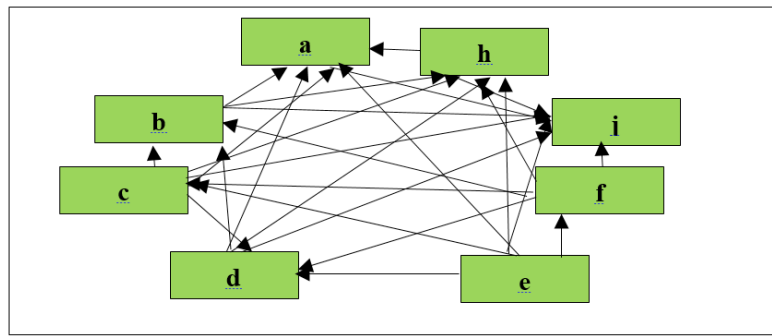


Figure 2. Cause and effect relationship of practical solutions. Reference: Research results, 2023



According to Table 2 and Figure 2, solutions (use of decentralized development in re-creation, realization of re-creation goals with the participation of residents, private and public sector, realization of integrated management, creation of support and production institutions to promote rural re-creation) with positive EI value were determined as effective solutions. In this regard, after ranking each solution, each was examined using the storytelling approach.

- Applying decentralized development in re-creation

One of the most critical solutions in re-creation development, emphasizing urban management in rural areas on the outskirts of cities, is the use of decentralized development in re-creation. Based on this, solutions include:

Applying the basics of plans towards popularization and adapting to the demands of the local community;

Applying reformist thinking;

They pointed out the application of bottom-up development thinking in management for improving and renovating houses.

- Realization of re-creation goals with the participation of residents, private and government sectors

Achieving re-creation goals with participation is the second most effective solution in this field. In this regard, the experts acknowledged as follows:

It is necessary to organize people's organizations, institutions, and companies that provide them with re-creation services in the villages. Of course, this point is required; the proposed organizations should be decentralized and non-governmental.

On the other hand, to improve residents' participation, it is necessary to adopt the interaction between the villagers and the custodians of the projects by providing clear accountability for the implemented projects and informing the residents of the positive effects of recreation projects.

Financial and economic problems and budget instability in this field are among the critical obstacles in the re-creation and participation of residents in this project. In this regard, it is necessary to apply laws to involve as many banks and private institutions as possible to grant loans to residents.

- Implementation of integrated management

Integrated urban management is a decentralization solution based on the multilateral and integrated power of management elements by the model of good governance. Re-creation with such an approach will be associated with high performance and a high percentage of success. In this regard, realizing integrated management is one of the effective solutions for developing re-creation. In the meantime, the experts said that not every management can be successful, and the type of management has an impact on the performance of the custodian organizations impacts the custodian organizations' performance. It is an efficient management system that develops all components and elements of re-creation projects in an integrated manner.

The integrity of management, public participation, and public agreement are the essential preconditions for realizing the urban development strategy approach. It represents a kind of good governance that emphasizes the efficiency of the system and the role of participation and their preparation to play a fundamental role in the way and implementation of projects and to create organizational coordination and centralization of affairs in the form of local government.

- Creation of support and production institutions to promote rural re-creation

The solution is to create support and production institutions to promote rural re-creation with items such as:

Developing joint programs to achieve the details of inter-departmental, inter-departmental, and trans-departmental cooperation between organizations;

It should be determined that support and planning should be provided for the establishment of institutions and social associations related to rural recreation in all groups and social classes.

- Education and awareness about the importance of re-creation

In many cases, education and awareness about the importance of re-creation and its positive effects in economic, social, physical, and environmental dimensions are very little among the residents, and this is together with other factors such as lack of economic support and lack of trust. Reduction of participation leads to unfavorable implementation of re-creation plans in this neighborhood. Therefore, increasing the importance of such projects by holding training courses and providing information to the residents is necessary.

On the other hand, ignorance about the importance of recreation projects is not exclusive to residents. Sometimes, it has been observed that many managers of various organizations, while implementing and making decisions, still lack comprehensive and solid information in this field, and they do not know how to give solid explanations about this to people.

- Matching the laws with the local re-creation management system

One of the critical solutions in the direction of the development of re-creation is the alignment of laws with the local recreation management system. In this regard, the experts suggested as follows:

Specialized committees to identify the existing laws and factors affecting the weakness of such laws in such topics as illegal and unprincipled constructions, etc.; take shape

It is also necessary to adopt strong laws that align with the integrity of managing inefficient rural structures.

- Opportunity oriented approach

The opportunity-oriented approach is one of the other effective strategies in the development of re-creation. In this regard, several experts mentioned the following:

Encouraging and mobilizing the development capabilities of rural areas;

Identifying the existing potential and actual sources and motivations.

- Spatial justice

The rural areas on the outskirts of Zahedan city have created an environment of inequality for the residents due to the confusion in the distribution of service uses. This issue has led to the creation of spatial disparities and disorder in settling the population and the activity and unfair distribution of services. Due to the rapid physical and population growth in these areas, city management has not been able to provide public facilities for residents due to the lack of financial resources and the low institutional capacity of the municipality. Therefore, to prevent instability and spatial inequalities, the spatial structure of this neighborhood should be moved towards spatial balance in different dimensions. In this regard, the urban management system is responsible for the distribution of services and should achieve the satisfaction of the residents of these areas with better service delivery. In the meantime, the most crucial way to accomplish this goal is to be aware of the state of service distribution and the state of spatial justice so that in this way, urban management, with its conscious action, can reduce the existing inequities in the distribution of services and provide the basis for balanced growth.

5. Discussion

Today, the correct implementation of physical re-creation in rural areas requires coherent and systematic management, which makes it seem that the existing management systems in this field are ineffective. Therefore, the necessity of attention and emphasis on the management system in rural areas on the city's outskirts and its physical re-creation can be seen. Thus, the current research aims to identify practical solutions for developing the physical re-creation of informal settlements in rural areas on the outskirts of Zahedan City, emphasizing urban management.

The solutions proposed in this research include opportunity-based approach, education and awareness about the importance of re-creation, realization of integrated management, creation of support and production institu-

tions to promote rural re-creation, use of decentralized development in re-creation, realization of re-creation goals with the participation of residents, private sector and government, spatial justice, matching the laws with the local re-creation management system, can be an efficient framework for physical re-creation of the rural areas on the outskirts of Zahedan city. These solutions, both at the policy-making level and at the executive level, can be developed in other areas of management and planning, which are very effective and fruitful in carrying out research in line with the development of re-creation in different areas. - Be In the physical re-creation of the rural areas on the outskirts of Zahedan city, considering that the approach has changed in the theoretical and operational fields, and the scientific approach of this field has developed significantly in the last few years. However, there is still complete agreement and consensus in re-creation. The title of the charter and action plan does not exist among academic groups, elites, managers, and residents.

Therefore, it is possible to achieve the proposed solutions in the rural areas on the outskirts of Zahedan city with the lever of decentralization and facilitation. The integration between the institutions to formulate the principles of integrated management and create joint efforts between them, as well as bringing the people to the stage and the development of local institutions, requires decentralization and changing the development approach from top to bottom, bottom to top so that inter-institutional interactions are developed and capacity There is a requirement for interaction. Due to the use of qualitative and quantitative methods and innovation in the research topic, the results of the research have the least amount of overlap with the studies in the meantime, only with the studies of Rezaei et al. (2020), It is consistent with the fact that management index is critical in re-creation. Also, in foreign studies, it is consistent with the study of Liu et al. (2021), in line with the degree of cooperation and cohesion, which are essential factors in re-creation.

Finally, according to the results of the research, the following suggestions are made to improve the condition of rural areas on the outskirts of Zahedan:

- Due to the lack of adequate and integrated communication between the central institutions affecting the development of the worn-out fabric (municipality, housing urban development, etc.), there should be a review of the laws and regulations and management organizations and move towards transformation in the current management system. To realize integrated management in Zahedan.

- It is also recommended that the uses of the rural areas on the outskirts of Zahedan City and the functions appropriate to the nature and location of these areas be investigated to cause economic mobility and increase the participation of residents.

- The low income of the residents and the unemployment of the rural areas on the outskirts of Zahedan City have caused economic challenges, creating employment and entrepreneurship for them, especially in the production sectors. It will reduce unemployment and prevent employment in the informal economy and fake jobs. Still, it will also increase income, reduce poverty, improve their quality of life, and spread social and economic justice for all social groups in these areas.

Acknowledgements

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict of Interest

The authors declared no conflicts of interest.

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