

# Failure Factors Facing Organizations in Post-Disaster Housing Reconstruction Projects in Gaza Strip



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## Abstract

**Purpose:** Post-disaster housing reconstruction projects are considered complex and complicated projects in nature which in turn represents many challenges because it is unlike routine construction. Clarifying failure factors facing organizations in post-disaster housing reconstruction is essential to ensure success in reconstruction projects. The study aimed to identify and rank the main failure factors that organizations experienced in post-disaster housing reconstruction projects.

**Design/methodology/approach:** The quantitative approach was adopted; a structured questionnaire is used to collect the data from a purposive sample. 115 copies questionnaires were distributed to experts' engineers who worked in the previous post-disaster housing reconstruction projects in Gaza Strip and 105 copies were received from the respondents with a response rate = 91.30%. The collected data were analyzed with the Statistical Package for Social Science (SPSS) IBM version 22.

**Findings:** From the literature review, the failure groups were divided into five groups. The findings showed that the lack of resourcing group was the highest rank failure group. The results showed that transportation cost and the obstacles into the official crossing border, government focus on short term planning rather than development and long-term planning, weak government organizations during the immediate post-disaster period are the most important failures factors.

**Originality/ Value:** The identify failure factors facing organizations in post-disaster housing reconstruction projects is considered the first study in this field in Gaza Strip. This research assists the organization to overcome the identified failure factors. This study can provide documentation of reference for the researcher who interested in the field of the study.

**Keywords:** Failure factors; Housing; Post-disaster reconstruction; Gaza strip

## Introduction

Post-disaster reconstruction known for being dynamic, complex and chaotic in nature which in turn represents many failures because it is unlike normal construction. Khalid et al. [1] that said, Post-Disaster Reconstruction process (PDR) is a complicated project which requires special resources, engagement of several sectors, and a broad set of skills enriched with strategies and regulations. PDR is a difficult process which requires good coordination to complete it well. Thus, it is crucial that these complex actions are well scheduled and need to be studied completely [2]. According to Lyons (2009) post-disaster housing reconstruction often is unsuccessful accomplishing its preplanned aims. Silva et al. [3] stated that post-disaster housing

reconstruction is complicated. Furthermore, to the work measure that needs to be done, there are many other problems that affect the time frame for work during post-disaster reconstruction. Natural disasters like bushfires, earthquakes, and flooding caused heavy destruction to buildings. Much is recorded concerning the economic and financial losses of such destruction, such as, in 2011, disasters caused about 366.1\$ billions of economic damage all over the world [4].

PDR action is section of a succession of four post-disaster phases: contingency, restoration, reconstruction, and improved building. Sun and Xu [5] stated that post-disaster housing reconstruction projects frequently deal with uncertainties

and complication. Boano and Garcia [6] considered housing reconstruction as one of the hardest tasks that deal with the reconstruction of disaster-affected areas. Despite the agencies', governments' and Non-Government Organizations (NGOs') aid assistance on the post-disaster development, the rate of successful reconstruction projects has remained low. While the natural disasters accident is a rise, it is vital that NGOs' engaged in reconstruction to learn wide from already accomplished projects; i.e. successes and failures. The government organizations, NGOs and INGOs require to focus on the challenges of PDR working environments and to seek a decisive solution in order to overcome the intricacy and unpredictability of PDR [7]. The study aimed to identify and rank the main failure factors that organizations experienced in post-disaster housing reconstruction projects.

**Literature Review**

Post-disaster housing reconstruction project failure cases are oftentimes interpreted by having issues with a budget [8], lack of resourcing [9], delay in reconstruction projects [10]. In response to delayed programs, occurred in the housing reconstruction followed by the Indonesian tsunami, Silva et al. [3] proves that the provided materials and lack of construction skills were the factors hindering the delivery of reconstruction materials. Fengler et al. [11] stated that in most cases, the available local resources are not sufficient enough to meet the needs whether financial or humanitarian as governments rely on international donors to fund them for reconstruction. PDR is clearly disordered, and resources are limited [12]. After a devastating disaster, housing reconstruction projects can cause lacking in resources in post-disaster circumstances, i.e. resource shortages, which significantly delay the reconstruction process in disaster-impacted countries. Lack of resourcing in conflict-impacted areas is another challenge in reconstructing houses [13]. Chang et al. [14] discovered, in her studies, that post-conflict housing reconstruction is likely to face difficulty with the project's shortages of resources.

**Table 1:** Failure groups in post disaster housing reconstruction.

Failure group	References
Lack of resourcing	[3,9,11-14]
Lack of the government support	[15,16]
Budget limitations and donor demands	[8,17-21]
Delay in reconstruction process	[10,13,22-25]
Lack of community participation	[26-31]

Reconstruction of post-disaster housing faces the problem of the limited availability of finance. The shortage of finance and necessity to enhance security in conflict-impacted areas had limited the government finance in post-disaster housing reconstruction in Sri Lanka. Therefore, post-disaster reconstruction of houses basically depends on donor funds [15]. Darabi et al. [16] categorized barriers of the reconstruction projects into four groups: the government regulations, general

problem, problems related to the implementing agencies, and community participation Table 1.

A significant gap in funding, management, and delivery were found between long-termed reconstruction and short-termed humanitarian relief by Lloyd-Jones [17]. Kulatunga [18] mentions several difficulties facing post-disaster reconstruction management which are capacities, funds. Usually, donation agencies clarify certain conditions to their funding agreements, and governments apply processes as a safeguard to assure successful risk management [19]. Hayat and Amaratunga [20] described administrative issues from donors as a challenge in post-disaster reconstruction. According to Hidayat and Egbu [21], funding for reconstruction is the most usual problem found at the start of post-disaster reconstruction. Steinberg [13] stated that delay can result in the time overrun, either before the date specified in the contract or after the delivery date of the project. A survey conducted by Iwai and Tabuchi [22] showed that around 30% of the public houses (28,017 in total) for the evacuees of the Great East Japan Earthquake and tsunami in March 2011 had faced delays in delivery projects. Reconstruction of Aceh had been under slow progression [23,24], and the delays had massively affected the region's economy and recovery [25].

Coffey and Trigunarsyah [26] conducted some case studies concerns failed reconstruction projects around the globe as they mentioned some failure factors including relocation issues, lack of community participation, and ignorance of local needs and cultures. In post-disaster environments, housing reconstruction projects frequently run into difficulties because of various internal and external factors, such as the lack of community participation; fraud; rehousing; corruptions and lack of budget and disregarding local culture [27]. Sopko et al. [28] expressed their fears in their review to the USA Congress about the space between the donor organizations and the affected communities which was increasing and the reconstruction efforts in Afghanistan were ineffective because of the lack of community participation. Case studies of the previous post-disaster reconstruction projects show that the lack of community participation project has a greater chance of failure [29,30]. Housing reconstruction projects and, particularly, those that require relocating impacted communities by NGOs/INGOs or governments are often determined by a fixed top-down approach, which is characterized by a partial or full absence of community consultation and community participation in planning and implementing reconstruction projects [26,31].

**Lack of resourcing**

Furthermore, the infrastructure system, particularly transportation system, was not facilitating delivering resources during the post-tsunami period [32]. Poor roads and telecommunications made materials and labor delivering from parts of Indonesia to other villages, along with the coast of Aceh, so much challenging [33]. Post-disaster housing reconstruction demands that NGOs ought to extend their ability based on

humanitarian relief all the way to physical construction. The reason that made NGOs face difficulties in resourcing was due to the failure in changing their role and getting the impacted communities involved [34]. NGOs' way of coping with post-disaster housing reconstruction is often by arguing with their day-to-day work in progress countries. More often than not, they work with an incompetent crew with new conditions [35,36]. However, difficulties in resourcing are also considered external to the aid agencies in Aceh, and the go against the specific local context. Insufficient reconstruction capability in the local construction industries, transportation cost, and governmental institutions in Aceh have hindered resource provision and supply in the disaster's aftermath and also prevented the donor community's from acquiring the resources available [37]. The resourcing difficulties are attributed to both the internal capability of NGOs and external environments like legislation and policy, infrastructure conditions and coordination with other investors. Still, these internal and external issues have not been taken into consideration by any international aid agencies before reconstruction projects were begun [13,37].

### Lack of government support

Darabi et al. [16] stated that the government is the direct and main agency that should face the conflict's implications and consequence. There are some obstacles related to the government and its proxies including the decision-making process and non-related policies [38], focusing on short term problems rather than long term problems, challenges related to the involvement of the community in the project's design and management [39]. Sadiqi et al. [40] endorsed that the government's weak policies and the lack of supervision during the reconstruction projects may hold back reconstruction projects.

Darabi et al. [16] stated many factors related to the role of the government, which may have an adverse impact on post-disaster reconstruction projects, in Iran: the complexity of decision-making process, fragile government policies towards disaster recovery, the lack of strategic and long term planning, and the integration between the governments filed management and other organizations. The lack of the longterm recovery plans, lack of interaction between the agencies and institutions which work in the reconstruction filed, lack of government staff capacity building for the conflict impact mitigating, may all hinder and delay the housing reconstruction projects [7,41]. Pribadi et al. [42] listed four government-related obstacles in housing reconstruction projects: the lack of coordination between agencies, no experience among the government staff about the housing reconstruction projects, government's inability in managing many reconstruction projects simultaneously, and government's inability to meet the achieve the community's desires.

### Budget limitations and donor demands

Barakat [43] mentioned that in most cases, the government is extremely weak during the immediate post-disaster period,

the NGOs and INGOs must not only interface with donors and control aid traffic but also help set the reconstruction program. Nissanka et al. [44] claimed that corruption has seen in directing these funds which eventually affected delivering the actual amounts allocated for reconstruction. The real amount of funds received by house owners were reduced just the same way due to the absence of governmental supervision. Classifying Gaza local government as an unwanted organization, however, by many main donors means that providing assistance to the government in Gaza will be difficult for traditional bilateral and multilateral donors; this situation is complicated, for those donors who tend to work with and through the local government [43]. [45,46] found out while studying the factors affecting the disaster reconstruction that the: corruption, which is common in developing countries; spend excessive money in emergency relief to build shelters and it might lead to hindering funding permanent reconstruction; lack coordination and communication among agencies involved in reconstruction. [11,43] study the impacts of monitoring funds and the post-disaster projects and their management as corruption in managing the funds which eventually hindered delivering the amounts allocated for reconstruction; lack of communication and coordination among agencies; donors do not respond quickly to reconstruction. Barakat and Zyck [47] mentioned that the donors allocate budgets to support the affected government to enable the governments to execute the reconstruction projects. The donor agency supports the local governments technically and financially, but they still have full supervision of the reconstruction projects; hence, the monitoring from the local authorities is not considered [7].

### Delay in reconstruction process

Changes to the schedule, lack of expert workers, work and project conditions may have their impact on both budgets and time needed for accomplishing the project. Consequently, the contractor has to be aware of the causes of any delays of the project's schedule and frequency, and how bad could this affect the project's delivery [48,49]. Fluctuation price happens when demanding is increased after any disaster and/or prices rise; there is a link between the shortage or lack of construction material and their costs in the post-disaster period. If demands are high but stocks are low, prices will be high [50]. Plus, they also need to wait for material manufacturing. When the prices get higher than before, constructors will face a lack of construction materials and will have to wait for the materials which will, in turn, slow the project's progress [48]. When Malaysia was hit by a flood, the reconstruction process was delayed due to the lack of construction materials, as most of the houses washed out. The project was postponed since there was scarce reconstruction material because of the huge number of houses needed to be rebuilt [48]. Near the end of 2014, the disaster that took place in Malaysia caused massive damage; not only for buildings but also roads were destroyed by the flood. And the worst case was the bridge that was the connection point was brought

down by the tornado which, in turn, made the delivery process of the reconstruction material so hard [15]. Consequently, the constructor needs to have an alternative access way to the construction location, which leads to other problems such as the urgent to repair the current damaged road and/or make another access road adding to the projects budget [48].

One of the main factors that influence the delayed issue in post-disaster housing reconstruction, East of Malaysia most is the acquisition and availability of the land. The issues, related to land acquisition, was also witnessed in Sri [7]. A study stated that the land acquisition issue caused the housing reconstruction process to take much longer time, which made decision making to take time. Also, the land is one of the essential assets needs to be taken into consideration in post-disaster tenure since the housing and reconstruction programs both need to provide a safe construction site and securing the tenure. Therefore, this is particularly crucial when resettlement plays a part in the housing agenda [51]. Poor databases lead to project delay, and it needs to be considered within the housing reconstruction process [2,48].

### Lack of community participation

Lack of community capacity is deemed to be a crucial hindrance in community participation for housing reconstruction. Lack of community capacity is resulted from at least one of the following measures: lack of job opportunities and skills, the culture of enslavement, loss of community cohesion and the low level of education [27]. Concerning government policies and practices, land issues and weak governance are considered to be two major subthemes. Each is considered a challenge to hinder community participation. Weak governance along with the lack of capability of some governments was a big problem facing the NGOs and impacted their beneficiaries. Complex government policies and practices often come up with strategies that do not fulfill the need for affected people [27].

Dikmen [52] found that political and social pressure was a major barrier to community participation, as governments tend to refuse it in housing reconstruction projects and this may slow down the effect that reconstruction is moving forward fast where, in fact, it may lead to maximum effectiveness if people were involved in the process. Respondents listed another factor of many reconstruction projects failure, and that it the lack of professional competence in NGOs [53]. Taufika et al. [54] stated that the idea of women's participation in reconstruction processes, and the associated gender issues were considered of grand concern, differing, of course, significantly from one country to another. Throughout the history of disasters and their aftermaths, losses were much greater in the female population, shelter and job opportunities than the male population which created gender imbalance in community participation, and this may continue in the future as well [55]. A study done by Pardasani [56] found out that reconstruction work in the Maldives faced many hinders in the 2004 Indian Ocean tsunami aftermath. One

such hinder was that there was no communication between INGOs, like the World Bank and the impacted communities. Community's needs were mainly assessed by INGOs, which had no idea of the local culture, and, therefore, adversely influenced any effective participation of the community in the process of post-disaster reconstruction.

### Research Methodology

The paper topic was identified from the crucial situation of the Gaza Strip, which has suffered from recurrent conflicts since 2000 [57]. The quantitative method is used to explore the failures factors facing organizations during post-disaster housing reconstruction projects. The survey is considered the popular tool of the quantitative approach [58], which is adopted in this research to achieve the thesis objectives.

### Questionnaire's design

A huge effort was carried out to get the most updated literature to fully understand the aspects of the research topics and aim. The literature has contributed to making a brainstorming to the researcher which facilitates developing the first draft of the questionnaire. The draft questionnaire includes the main failures factors facing organizations in post-disaster housing reconstruction projects which extracted from the previous studies. The questionnaire has two sections; the first for personal information about the respondents, the second for the failure factors facing organizations in post-disaster housing reconstruction projects. The questionnaire questions are divided into groups under the same topic. The questionnaire cover page includes an introduction to the thesis aims, objectives, and target group. It is also confirmed that the respondent's answers will be confidential and it will be used for academic research purposes only. The first section of the survey contains five general questions about the population sample. The second section contains five failures groups in each group, there are several questions in total 29 expected sub failures which may affect negatively in the organizations in post-disaster housing reconstruction projects.

Descriptive statistics namely proportional weight method used to decide the ranks of performance factors and to highlight the Proportional weight of attributes as supposed by the respondents. Several researches [59-69] used the proportional weight in their analysis.

$$\bar{X}_w = \frac{\sum W}{AN} = \frac{5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{5N}$$

Where:

W = the weighting of each factor (ranging from 1 to 5)

A = the top weight.

N = the entire number.

The range of proportional weight is between (0 - 1), the higher of the proportional weight, the more impact. However,



proportional weight did not illustrate the relationship between the attributes.

### Research Population and Sample Size

The purposive sample is the most appropriate for this study. Palinkas et al. [70] stated that there is no bias in the purposive sample since the selected sample will serve the research scope. A purposive sampling strategy was used to ensure meaningful statistical analysis [71]. The target sample includes expert engineers who work in the governmental organizations, local and international NGOs and UN agency and consultation offices. 115 respondents were targeted with personal delivery and 105 were completed. The total of 105 questionnaires was satisfactory completed, making the total response rate  $(\frac{105}{115}) * (100) = 91.30\%$ .

### Results and Discussion

This part consists of results and discussion of failure factors facing organizations in post-disaster housing reconstruction projects, these factors were grouped into five categories: lack of resourcing, lack of government support, budget limitations and donor demands, delay in the reconstruction process, lack of

community participation. Each group has several statements in a total of 29 statements. The data analysis was conducted

using a statistical package for sciences (SPSS) 22.0 including descriptive statistics test and t-test with 95% significant level with a test value of zero.

### Lack of resourcing

Table 2 reports that the respondents ranked “Transportation cost and the obstacles into the official crossing border” as the most important factor for lack of resourcing with relative important index equals (78.67%). This result illustrates clearly the influence of transportation cost and the obstacles into the official crossing border in post-disaster housing reconstruction projects. This may be related to the unstable situation in the Gaza Strip and the continued closure of crossings have affected the cost of transporting materials and their unavailability. This disagreed with [37] study that outcomes indicated that the transportation cost was ranked in the ninth position by the respondents because of the stable situation in crossings boarder in China.

Table 2: RII's and test values of lack of resourcing group.

#	Failure factors	Mean	Std. Dev.	RII (%)	T value	P value Sig.	Rank
A1	Transportation cost and the obstacles into the official crossing border	3.93	1.02	78.67	9.36	0.000	1
A2	Lack of infrastructure and telecommunications	3.63	0.93	72.57	6.90	0.000	2
A3	Lack of communicating and coordinating with the local affected communities	3.39	1.03	67.81	3.87	0.000	3
A4	Lack of internal coordination among organizations which involved in reconstruction projects	3.33	1.15	66.67	2.97	0.004	4
A5	Lack of staff experience in dealing with resources and unfamiliar condition	3.01	1.11	60.19	0.09	0.93	5
All statements		3.46	0.76	69.20	6.19	0.000	

“Lack of infrastructure and telecommunications” was ranked in the second position with relative important index equals (72.57%). This result shows the influence of lack of infrastructure and telecommunications in post-disaster housing reconstruction projects. This may be related to the destruction of most roads leading to damaged housings after the wars and

disrupted the communication network because of the bombing of the transmission towers resulting in poor communication between organizations which work in the reconstruction field. Matsumaru et al. [25], Zuo et al. [32], and Chang et al. [37] reported that poor infrastructure and communications are an obstacle to success in housing reconstruction projects.

Table 3: RII's and test values of lack of government support group.

#	Failure factors	Mean	Std. Dev.	RII (%)	T value	P value Sig.	Rank
B1	Focus on short term planning rather than development and long-term planning	3.97	0.9	79.43	11.02	0.000	1
B2	Weak in governmental policies to integrate Beneficiaries into the project life cycle	3.53	0.96	70.67	5.68	0.000	2
B3	Lack of information in the decision-making process	3.44	0.96	68.76	4.68	0.000	3
B4	Lack of coordination between the government institutions and the other organizations	3.27	1.18	65.33	2.32	0.022	4
B5	Absence of government monitoring and controlling during the reconstruction projects	3.18	1.17	63.62	1.58	0.118	5
B6	Lack of government staff experience to face disaster implications	3.15	1.11	63.05	1.41	0.162	6
All statements		3.42	0.78	68.40	5.54	0.000	

### Lack of government support

Table 3 reports that the respondents ranked “Focus on short term planning rather than development and longterm planning” as the most important factor for lack of government support with relative important index equals (79.43%). This result indicates the influence of focus on short term planning rather than development and longterm planning in post-disaster housing reconstruction projects. This means that in post-war governments do not have the budget to make long-term planning and development for damaged housing and infrastructure, and donors do not respond quickly to reconstruction. In addition, the highest priority is to bring displaced people back to their homes by housing reconstruction as soon as possible and development takes a long time to make planning. The result obtained is similar to the study conducted by Lizarralde and Massyn [39] and Darabi et al. [16].

“Weak in governmental policies to integrate beneficiaries into the project life cycle” was ranked in the second position with relative important index equals (70.67%). This result indicates the influence of weak in governmental policies to integrate beneficiaries into the project life cycle in post-disaster housing reconstruction projects. This may be related to the organizations working in the reconstruction field that be demanding speedy housing reconstruction completion and delivery to beneficiaries. If they want to integrate the community in the project life cycle, the reconstruction process will take longer than planned. This was in line with [39] study outcomes that indicated affected communities were not allowed to participate in the decision-making process.

### Budget limitations and donor demands

Table 4 reports that the respondents ranked “Weak government organizations during the immediate post-disaster period” as the most important factor for budget limitations and donor demands with relative important index equals (75.24%). This result shows the influence of weak government organizations during the immediate post-disaster period in post-disaster housing reconstruction projects. This may be related to the huge destruction of facilities and government

organizations that serve citizens during the war and the absence of a clear plan for the management of crises and disasters by the government. Weak coordination with donors for rapid response to reconstruction. In addition to not supporting Palestinian businessmen and encouraging them to participate in housing reconstruction projects. The result obtained is similar to the study conducted by Barakat [43] which supported this factor as a failure factor facing organizations in housing reconstruction projects. “Donors have classified Gaza de facto as an undesirable government” was ranked in the second position with relative important index equals (74.29%). This result illustrates the influence of donors categorize Gaza de facto as an undesirable government in post-disaster housing reconstruction projects. This may be related to the siege imposed on the Gaza Strip 12 years ago, some donors require approval and supervision by the Palestinian National Authority in Ramallah to transfer the funds of housing reconstruction projects to the Gaza Strip, which impedes the process of reconstruction. Also, the funds are not diverted directly to banks in the Gaza Strip, which delays reconstruction projects. This agreed with [43] study that outcomes indicated that donors did not trust in the government in the Gaza Strip.

### Delay in the reconstruction process

Table 5 reports that the respondents ranked “Lack of some construction materials” as the most important factor for delay in the reconstruction process with relative important index equals (73.33%). This result indicates the influence of lack of some construction materials in post-disaster housing reconstruction projects. This may be related to the quantities of raw materials entering the Gaza Strip are very few compared to the needs, also due to the frequent closure of commercial crossings with the Gaza Strip. In addition to the absence of warehouses to store sufficient quantities of materials for use in emergencies. As well as in Gaza Strip, there are no factories for the production of basic materials for reconstruction, such as iron and cement, which require the need to import from foreign countries. This was in line with [48] study outcomes indicated that when the flood struck up eastern Malaysia at the end of 2014, the reconstruction was delayed due to a lack of construction materials.

Table 4: RII's and test values of budget limitations and donor demands group.

#	Failure factors	Mean	Std. Dev.	RII (%)	T value	P value Sig.	Rank
C1	Weak government organizations during the immediate post-disaster period	3.76	1.04	75.24	7.49	0.000	1
C2	Donors have classified Gaza de facto as an undesirable government	3.71	0.87	74.29	8.38	0.000	2
C3	Donors do not respond quickly to reconstruction	3.65	1.08	72.95	6.13	0.000	3
C4	Lack of coordination and communication among agencies involved in reconstruction	3.31	1.14	66.29	2.83	0.006	4
C5	Corruption in managing the funds which eventually hindered delivering the amounts allocated for reconstruction	3.3	0.99	66.1	3.15	0.002	5
C6	Donor's agency has full supervision of the reconstruction projects without cooperation from the local authority	2.65	1.01	52.95	-3.58	0.001	6
All statements	3.4	0.67	68	6.1	0		

**Table 5:** RII's and test values of delay in the reconstruction process group.

#	Failure factors	Mean	Std. Dev.	RII (%)	T value	P value Sig.	Rank
D1	Lack of some construction materials	3.67	1.12	73.33	6.13	0.000	1
D2	Material price fluctuation during reconstruction	3.55	1.15	71.05	4.91	0.000	2
D3	Mistakes in damages assessment	3.4	1.03	68	3.96	0.000	3
D4	Poor infrastructure	3.29	1.04	65.71	2.8	0.000	4
D5	Disputes on lands acquisition	3.26	1.04	65.14	2.54	0.013	5
D6	Unavailability of skilled labors	2.16	1.11	43.24	-7.73	0.000	6
All statements	3.22	0.71	64.4	3.17	0.002		

“Material price fluctuation during reconstruction” was ranked in the second position as a factor contributing to the delay of the reconstruction process with relative important index equals (71.05%). This result illustrates the influence of material price fluctuation during reconstruction in a post-disaster housing reconstruction process. This means that due to the massive destruction caused by wars, the demand for

construction materials in reconstruction projects increased, also the change in the local currency value against the dollar. In addition to the absence of government control over prices, which led to the monopoly of some traders of construction materials and sell them at a higher price than the market. The result obtained is agreed with the studies conducted by [48,50].

**Table 6:** RII's and test values of lack of community participation group.

#	Failure factors	Mean	Std. Dev.	RII (%)	T value	P value Sig.	Rank
E1	Political and social pressure	3.7	0.94	73.9	7.56	0.000	1
E2	Complex government policies and practices	3.45	1.01	68.95	4.54	0.000	2
E3	Lack of efficient communication and knowledge of the local culture	2.97	0.99	59.43	-0.29	0.769	3
E4	Lack of community capacity (lack of skills and low education)	2.9	1.07	58.1	-0.91	0.364	4
E5	Lack of professional competence in NGOs	2.88	1.01	57.52	-1.26	0.21	5
E6	Absence of gender balance in community participation	2.74	1.03	54.86	-2.56	0.012	6
All statements	3.11	0.7	62.2	1.56	0.122		

### Lack of community participation

Table 6 reports that the respondents ranked “Political and social pressure” as the most important factor for lack of community participation with relative important index equals (73.90%). This result illustrates the influence of political and social pressure in post-disaster housing reconstruction projects. This may be related to the unstable situation in the Gaza Strip and repeated attacks on the area by the Israeli occupation which leads to pressure on the organizations working in reconstruction field to carry out the main tasks assigned to them and the resettlement of displaced people with temporary housing until the construction of permanent housing for them. Dikmen [52] reported that political and social pressures are one of the most major challenges faced by organizations during the reconstruction process.

“Complex government policies and practices” was ranked in the second position with relative important index equals (68.95%). This result shows the influence of complex government policies and practices in a post-disaster housing reconstruction process. This may be related to the weak coordination between government and affected people in reconstruction projects and

the lack of a clear mechanism in government organizations in how to integrate the community in the decision-making process. In addition to staff not receiving training for community participation during reconstruction and how to deal with their problems. This outcome agreed with [27] study that indicated the government has often been a hindrance to reconstruction projects rather than helping.

### Conclusion and Recommendations

To achieve the aim of this study, the objective has been outlined, which is achieved through the finding of the analyzed collected questionnaire. Organizations in post-disaster housing reconstruction faced many failure factors during their implementation of the housing reconstruction program. The findings showed that a lack of resourcing group was the highest failure group. The results showed that transportation cost and the obstacles into the official crossing border, government focus on short term planning rather than development and long term planning, weak government organizations during the immediate post-disaster period, lack of some construction materials, and political and social pressure are the most failures factors that organizations faced in post-disaster housing reconstruction in

Gaza Strip. Based on these findings, some recommendations were suggested for avoiding the highest effect failure factors. The recommendations were as follows: The organizations which working in reconstruction should set a specific price for transportation cost for construction material and the local government should work out agreements with the Egyptian government to create a system that will allow the entry of reconstruction materials on continuous and unhindered conditions. The employees in the organizations who are working in the reconstruction projects should have sufficient experience to make a strategic plan for the reconstruction program that benefits the affected community in the long term. The local government should have a clear plan to convince donors to accept the housing reconstruction project proposals. The local government and implementing organizations should have warehouses in Gaza Strip to store the necessary quantities of construction materials to suffice them during the housing reconstruction projects. Conduct periodic meetings with the affected communities to determine their needs and measure their satisfaction with the progress of housing reconstruction projects.

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