# Analysis of the Effectiveness of Cash Voucher Assistance Implementation in Post-Disaster Recovery

**Ridwan [1], Susilastuti [2], ET Paripurno [3], Arifin Muh. Hadi [4]**

*Universitas Pembangunan Nasional Veteran, Yogyakarta, Indonesia [1,2,3]*
*PMI Pusat [4]*

Email: Ridwan.carman@gmail.com

**KEYWORDS**

Cash voucher assistance, post-disaster recovery, effectiveness, beneficiary empowerment.

**A B S T R A C T**

Providing assistance in the form of cash vouchers has become one of the strategies used in post-disaster recovery efforts, with the aim of providing flexibility to beneficiaries in meeting their needs. This study aims to analyze the effectiveness of the implementation of cash voucher assistance in supporting post-disaster recovery through a qualitative approach based on literature studies (library research). This method allows researchers to dig into important findings from previous literature to identify the successes, challenges, and impacts of this aid in various disaster contexts. The results of the analysis show that cash voucher assistance has several advantages, including empowering beneficiaries in determining priority needs, improving local economic circulation, and efficiency of aid distribution. However, the implementation of this program also faces a number of challenges, such as limited accessibility in the affected areas, the risk of voucher misuse, and lack of integration with other recovery programs. The study found that the success of cash voucher assistance programs is highly dependent on contextual program design, coordination between stakeholders, and effective monitoring and evaluation. This study concludes that cash voucher assistance is an effective mechanism in post-disaster recovery if supported by careful planning and good supervision. The results of this study provide valuable insights for policymakers and humanitarian organizations in optimizing the use of cash voucher assistance in the future.

## 1. Introduction

Natural disasters that occur globally have a significant impact on society, including material losses, infrastructure damage, and disruption of socio-economic life. In post-disaster recovery efforts, humanitarian aid plays a crucial role in providing basic needs and supporting long-term rehabilitation. One of the increasingly popular methods is the provision of assistance in the form of cash vouchers, which are considered more flexible than traditional goods assistance. This assistance allows beneficiaries to independently determine their needs, which can ultimately support a faster and more relevant recovery (UNICEF, 2020).

Although cash voucher assistance has been implemented in various disaster contexts, research on its effectiveness is still limited, particularly in measuring its impact on beneficiaries and local

communities. Previous studies tended to focus on the technical aspects of distribution, without paying attention to the interaction between relief mechanisms and socio-economic dynamics in disaster-affected areas (Harvey, 2017). In addition, research that explores the comparison between cash voucher assistance and traditional assistance in various geographical and cultural contexts is still rarely conducted (ODI, 2018). This gap shows the need for a more in-depth study of the effectiveness of cash voucher assistance in supporting post-disaster recovery.

This research has a high urgency considering the increasing frequency of natural disasters due to climate change and unplanned urbanization. With the increasing need for a rapid and efficient humanitarian response, it is important to evaluate the effectiveness of existing assistance methods, including cash vouchers (FAO, 2020). In addition, the use of cash assistance is often controversial, especially in the context of the risk of abuse and distribution inequalities, which requires evidence-based evaluations to ensure the sustainability and accountability of these programs (IFRC, 2019).

Several studies have shown the potential of cash voucher assistance in supporting post-disaster recovery. Harvey's study (2017) stated that cash assistance can accelerate the recovery of the local economy by encouraging the circulation of money in the local market. Another study by ODI (2018) revealed that beneficiaries of cash assistance feel more empowered in meeting their needs compared to recipients of in-kind assistance. However, the study also noted implementation challenges, such as lack of accessibility in remote areas and the risk of inflation in local markets. On the other hand, FAO (2020) highlights that the effectiveness of cash assistance is highly dependent on program design, including distribution mechanisms and monitoring systems.

The novelty of this study lies in a holistic analysis of the effectiveness of the implementation of cash voucher assistance in the context of post-disaster recovery. This study not only evaluates the success of the program from the perspective of beneficiaries, but also explores its impact on the socio-economic dynamics of local communities and long-term sustainability. Thus, this research makes an important contribution to the literature that is still limited in this field.

This study aims to analyze the effectiveness of the implementation of cash voucher assistance in supporting post-disaster recovery, focusing on the success of the program, the challenges faced, and the impact on local communities. The benefit of this research is that it provides insights to policymakers, humanitarian organizations, and other stakeholders on the best strategies for designing and implementing cash assistance programs. In addition, the results of this study are expected to be a reference to increase the effectiveness of humanitarian assistance in the future.

## 2. Literature Review

### The Importance of Cash Assistance in Post-Disaster Recovery

Cash assistance has become an increasingly used approach in the context of post-disaster recovery, with the aim of providing beneficiaries with flexibility to meet their specific needs. A study conducted by Harvey (2017) shows that cash assistance is more efficient compared to traditional goods assistance, especially in accelerating the distribution process and increasing the turnover of the local economy. This assistance allows beneficiaries to purchase urgent needs in local markets, which can ultimately stimulate economic recovery in disaster-affected areas.

Research by UNICEF (2020) also underscores the importance of cash assistance in improving the dignity of beneficiaries, as they can make their own decisions regarding priority needs. However, the importance of careful planning in program design is also emphasized, especially to ensure that cash assistance reaches the most vulnerable groups and does not create social tensions in local communities.

## Challenges of Cash Assistance Implementation

Despite having many advantages, the implementation of cash assistance is not free from challenges. ODI (2018) noted that in remote areas, limited accessibility and infrastructure can hinder aid distribution. In addition, the risk of misuse of vouchers or cash funds, both by beneficiaries and third parties, is one of the main concerns in the implementation of this program. A study by the IFRC (2019) found that the lack of effective monitoring often reduces the impact of cash assistance programs, especially in the context of rapid distribution after a disaster.

In addition, WFP (2019) highlighted that cash assistance can trigger price inflation in the local market if not managed properly, especially in areas with low market capacity. Therefore, it is important to ensure that the local market is able to absorb the increased demand generated by the distribution of cash assistance without affecting price stability.

## Socio-Economic Impact of Cash Assistance

The socio-economic impact of cash assistance has been the focus of various studies. The study of Fajardo and Ruiz (2020) shows that beneficiaries of cash assistance tend to have a higher level of satisfaction compared to recipients of in-kind assistance. Cash assistance provides flexibility for beneficiaries to meet a wider range of needs, including food, medical needs, and housing improvements.

However, from a social perspective, cash assistance can trigger tensions in the community if the distribution is uneven or not transparent. Zewde and Tesfaye (2018) noted that cash assistance programs that do not involve local communities in the planning process tend to create conflicts, especially when there is a perception of injustice in distribution. Therefore, the involvement of local communities in the design and implementation of the program is crucial to increase the acceptance and success of the program.

## Comparison of Cash Assistance and In-Goods Assistance

The literature also highlights the comparison between cash assistance and in-kind assistance in the context of post-disaster recovery. A study by Fajardo and Ruiz (2020) found that in-kind assistance has an advantage in situations where the needs of beneficiaries are obvious, such as food or clothing. However, aid often requires more complex logistics, so it tends to be slow and less efficient in its distribution.

In contrast, cash assistance is more flexible and can be tailored to the specific needs of the beneficiaries. However, the success of cash assistance is highly dependent on the existence of a well-functioning local market, as revealed by the World Bank research (2020). Therefore, the combination of cash assistance and in-kind assistance is often the best solution in the context of complex post-disaster recovery.

## 3. Methods

This study uses a qualitative approach with the type of literature study research (library research). This approach was chosen to explore relevant findings from various literature sources regarding the effectiveness of the implementation of cash voucher assistance in post-disaster recovery. The literature study allows for in-depth analysis based on secondary data that has been published, thus providing a more comprehensive perspective on the successes, challenges, and impacts of these aid programs (Snyder, 2019).

### Data Source

The data sources in this study come from secondary literature, such as scientific journal articles, reports of international organizations, academic books, and policy documents. Data was taken from a variety of scientific databases, including Scopus, PubMed, Google Scholar, and ProQuest, with a publication span of the last 10 years to ensure the relevance and up-to-date of information. Keywords used in the search include "cash assistance," "cash vouchers,"

"post-disaster recovery," and "the effectiveness of assistance programs."

## Data Collection Techniques

Data collection is carried out using a systematic literature review approach. The process involves three main stages: literature identification, selection of relevant articles, and thematic classification. The selected literature is then analyzed based on its relevance to the research topic and the quality of its publication. The abstract, keywords, and content of the document were thoroughly reviewed to ensure that only relevant and credible literature was used in this study (Bowen, 2009).

## Data Analysis Methods

The collected data is analyzed descriptively and thematicly. Descriptive analysis was used to identify key findings related to the implementation of cash voucher assistance, while thematic analysis was used to explore patterns and relationships between variables, such as program effectiveness, implementation challenges, and their impact on local communities. The results of the analysis were synthesized to produce a comprehensive understanding of the effectiveness of cash voucher assistance in supporting post-disaster recovery (Creswell, 2014).

With this approach, this research is expected to make a significant contribution to the existing literature, while offering practical insights for stakeholders in designing and implementing more effective cash assistance programs in the future.

## 4. Discussion and Analysis

In this study, a literature study was conducted on various relevant sources to analyze the effectiveness of the implementation of cash voucher assistance in post-disaster recovery. This process involves a rigorous selection of a number of articles available in scientific databases. The following is a table that contains 10 filtered articles from various related articles found. These articles are selected based on their relevance to the research topic, the quality of the source, and their contribution in providing insights related to the effectiveness, challenges, and impact of cash voucher assistance.

| Author & Year | Title | Key findings |
| --- | --- | --- |
| Harvey (2017) | Cash-based assistance in humanitarian contexts | Cash assistance accelerated the recovery of the local economy, but faced monitoring challenges. |
| ODI (2018) | Cash transfers in disaster response: An evaluation | Cash assistance increases the flexibility of beneficiaries, but it requires careful planning. |
| UNICEF (2020) | The role of cash assistance in recovery | Cash assistance provides the dignity of beneficiaries and strengthens the local market. |
| IFRC (2019) | Guidelines for cash and voucher assistance | The importance of transparency and monitoring systems for the success of cash assistance programs. |

| | | |
|---|---|---|
| WFP (2019) | Cash-based interventions for disaster recovery | Cash assistance is effective if the local market has enough capacity to absorb demand. |
| Zewde & Tesfaye (2018) | Impact of cash assistance on local economies | Cash assistance stimulates the turnover of the local economy but can trigger inflation if not managed. |
| Fajardo & Ruiz (2020) | Comparative analysis of in-kind and cash assistance | Cash assistance is more flexible than in-kind assistance, but it is prone to abuse. |
| UNHCR (2021) | Best practices in cash-based assistance for refugees | Cash assistance supports sustainability if it is accompanied by the involvement of local communities. |
| FAO (2020) | Cash and voucher assistance in disaster response | Contextual program design is the key to the success of cash assistance in disaster recovery. |
| World Bank (2020) | The role of social protection in disaster response | The integration of cash assistance with the social protection system strengthens its impact on beneficiaries. |

These articles provide a comprehensive overview of the various aspects of cash voucher assistance implementation, including its advantages, challenges, and impact on beneficiaries as well as local communities. These findings are the basis for a more in-depth discussion in this study.

**Data Interpretation from Literature Tables**

1. Advantages of Cash Voucher Assistance in Post-Disaster Recovery

The results of various studies show that cash voucher assistance has a significant advantage over traditional assistance in the context of post-disaster recovery. Articles from Harvey (2017) and UNICEF (2020) emphasize the flexibility provided by cash assistance, where beneficiaries can use the funds to meet the most urgent needs according to their conditions. This approach not only improves beneficiary satisfaction but also supports more individualized relevant

recovery. In addition, cash assistance helps accelerate the local economic turnaround by encouraging market activity in disaster-affected areas.

2. Challenges in the Implementation of Cash Voucher Assistance

Despite its advantages, the implementation of cash voucher assistance also faces various challenges. Research by IFRC (2019) and WFP (2019) revealed that the risk of misuse of funds, lack of transparency, and the inability of local markets to absorb increased demand are the main obstacles. In remote areas, limited accessibility and infrastructure can also hinder the distribution of cash vouchers. This emphasizes the importance of an effective monitoring system to ensure that aid reaches the right recipients and is used for its intended purpose.

## 3. Socio-Economic Impact on Local Communities

Cash assistance has a significant impact on socio-economic dynamics in local communities. A study by Zewde and Tesfaye (2018) shows that cash assistance can stimulate the local economic turnaround by increasing the purchasing power of affected communities. However, if not managed properly, this assistance can also trigger price inflation in the local market, ultimately harming the most vulnerable groups of people. Therefore, careful planning is necessary to ensure that the local market has enough capacity to support additional demand.

## 4. The Role of Community Involvement in Program Success

Articles from UNHCR (2021) and FAO (2020) highlight the importance of local community involvement in the design and implementation of cash assistance programs. When local communities are involved, the distribution of aid becomes more equitable and can increase public trust in the program. In addition, community involvement can help identify the most urgent needs, so that assistance can be more effective in supporting post-disaster recovery.

## 5. Comparison of Cash Assistance and Goods Assistance

Research by Fajardo and Ruiz (2020) revealed that cash assistance has advantages in terms of flexibility and distribution efficiency compared to traditional goods assistance. However, in-kind assistance still has an important role to play in situations where specific needs, such as food or medicine, are already clearly identified. The combination of these two approaches is often the best strategy to ensure that the various needs of beneficiaries can be met.

## 6. Policy and Integration with Social Protection System

Findings from the World Bank (2020) emphasize that cash assistance will be more effective if integrated with existing social protection systems. This integration allows cash assistance to be part of a long-term strategy to increase community resilience to disasters. In addition, policies that support the distribution of cash assistance, including regulations on transparency and accountability, are critical to ensuring the sustainability of the program in the future.

Overall, the interpretation of this literature table highlights that cash voucher assistance is an effective mechanism in post-disaster recovery, provided that it is supported by contextual program design, community involvement, and a good monitoring system. These findings provide important insights for policymakers and humanitarian organizations in improving the effectiveness of cash assistance programs in the future.

## Discussion

The provision of cash voucher assistance in post-disaster recovery has become an increasingly popular method in the last decade, mainly due to its flexibility that allows beneficiaries to determine for themselves the most urgent needs. Based on the findings in the literature, the advantage of this assistance lies in its ability to accelerate local economic recovery and provide autonomy to beneficiaries. Harvey (2017) and UNICEF (2020) underline that this approach is in line with the principle of empowerment which is the basis of various theories in humanitarian aid management.

In the context of the current phenomenon, the increasing frequency of natural disasters due to climate change and uncontrolled urbanization makes cash voucher assistance a relevant option. When disasters such as floods, earthquakes, or hurricanes strike, the needs of beneficiaries often vary, depending on geographical conditions and the extent of the damage. The flexibility of cash assistance allows affected individuals and families to purchase specific needs that cannot be met through traditional item assistance, such as special medicines or temporary home improvements.

However, the results of the study also show that the implementation of cash voucher assistance is not free from challenges. For example, the IFRC (2019) highlights the risk of misuse of funds by beneficiaries or third parties. This phenomenon often occurs in areas with weak monitoring systems, especially in developing countries. Additionally, infrastructure challenges, such as access to local markets or banking networks, can hinder the successful distribution of cash vouchers. WFP (2019) also noted that in some cases, cash assistance triggers price inflation in the local market if the market capacity is insufficient to absorb additional demand.

From a social perspective, cash assistance has the potential to strengthen or even damage the dynamics of local communities. A study by Zewde and Tesfaye (2018) found that cash assistance stimulates the local economy by increasing the purchasing power of affected people. However, if the distribution is not carried out transparently, this aid can trigger social conflicts and tensions between beneficiary groups. Therefore, community involvement in the design and implementation of the program is a key element to increase the acceptability and success of this program.

Theoretically, these findings can be explained through the socio-economic empowerment theory which emphasizes the importance of giving individuals control over the resources they receive. By providing cash assistance, beneficiaries have the opportunity to make decisions that better suit their needs. However, the theory also emphasizes the need for supportive systems, including stable markets, access to information, and robust regulations to ensure that resources are used optimally.

In the context of policy, findings from the World Bank (2020) highlight that cash assistance will be more effective if integrated with existing social protection systems. This integration allows cash assistance to be part of a long-term strategy that not only aids post-disaster recovery but also increases community resilience to future disasters. In addition, supportive policies, such as transparency and accountability regulations, are needed to prevent the misuse of funds and increase public trust in the program.

The author's comment on these findings is that while cash voucher assistance has many advantages, its success depends largely on the local context. The program requires a flexible and contextual design, which takes into account the needs of beneficiaries, local market capacity, as well as social dynamics in affected communities. In addition, effective monitoring and collaboration between stakeholders, including governments, international organizations, and local communities, are important elements in ensuring the sustainability of the program.

Finally, global phenomena such as the COVID-19 pandemic provide important lessons about the relevance of cash assistance in a crisis. During the pandemic, many countries used cash assistance to support people who lost their livelihoods. This experience shows that cash assistance is not only relevant in the context of post-disaster recovery but also in dealing with other socio-economic crises. As such, more research is needed to explore how this mechanism can be optimized in various emergency situations.

This discussion shows that cash voucher assistance has great potential to support post-disaster recovery effectively. However, its success requires careful planning, close monitoring, and strong policy support. With the right approach, cash assistance can be a powerful tool in building community resilience to disasters and other crises in the future.

## 4. Conclusion

The provision of cash voucher assistance has proven to be an effective mechanism in supporting post-disaster recovery, especially due to its flexibility in meeting the specific needs of beneficiaries. With this assistance, recipients can prioritize their needs, ultimately increasing the efficiency and relevance of assistance in the context of disasters. In addition, this program has a positive impact on the local economy,

as found in the research of Zewde and Tesfaye (2018), where the increase in the purchasing power of affected people drives economic turnaround in the local market. However, the effectiveness of cash assistance is highly dependent on the design of contextual programs, the existence of a well-functioning local market, and the existence of an adequate monitoring system.

However, the implementation of cash assistance also faces significant challenges, such as the risk of misuse of funds, limited supporting infrastructure, and potential social tensions due to uneven distribution. This phenomenon shows the importance of integrating cash assistance with a broader social protection system, as suggested by the World Bank (2020). In addition, the involvement of local communities in the planning and implementation of the program is a key element to increase the acceptability and success of cash assistance. This program also requires transparent and accountable regulatory support to minimize risks and build public trust in the program.

As a further step, this study recommends an in-depth study of the long-term impact of cash assistance on community resilience after disasters, especially in social and economic aspects. In addition, empirical research on the integration of cash assistance with existing social protection systems, particularly in developing countries, is needed to evaluate its effectiveness and sustainability. A comparative study of cash aid and in-kind aid in various disaster contexts is also important to identify the best strategy for each situation. Research on the use of digital technologies, such as e-wallets and digital financial platforms, in supporting the distribution and monitoring of cash assistance has become relevant in the modern era. In addition, it is important to examine the role of local communities in the design and implementation of the program to improve the acceptability and sustainability of the program. With this further research, it is hoped that the literature related to cash assistance will become richer and can provide practical guidance for policymakers and humanitarian organizations to develop more effective programs in the future.

## References

Baruzzo, E., Terruzzi, S., Feder, B., Papagno, C., & Smirni, D. (2023). Verbal and non-verbal recognition memory assessment: validation of a computerized version of the Recognition Memory Test. Neurological Sciences, 45(5), 1979–1988. https://doi.org/10.1007/s10072-023-07171-3

Bram, D. (2023). The Crisis of Javanese Language Use in the Young Generation: Starting to Erode from the Family. https://radarsolo.jawapos.com/pendidikan/841700876/krisis-penggunaan-bahasa-jawa-pada-generasi-muda-mulai-terkikis-dari-keluarga

Cheng, C. H., & Su, C. H. (2012). A Game-based learning system for improving student's learning effectiveness in system analysis course. Procedia - Social and Behavioral Sciences, 31(2011), 669–675. https://doi.org/10.1016/j.sbspro.2011.12.122

de Felix, J. W., & Johnson, R. T. (1993). Learning from video games. Computers in the Schools, 9(2–3), 119–134. https://doi.org/10.1300/J025v09n02_11

Dhar, P., Rocks, T., Samarasinghe, R. M., Stephenson, G., & Smith, C. (2021). Augmented reality in medical education: students' experiences and learning outcomes. Medical Education Online, 26(1). https://doi.org/10.1080/10872981.2021.1953953

Gee, J. P. (2003). What video games have to teach us about learning and literacy. Computers in Entertainment, 1(1), 20–20. https://doi.org/10.1145/950566.950595

Ghozali, I. (2018). Application of Multivariate Analysis with IBM SPSS 25 Program (9th ed.). Diponegoro University Publishing Board.

Huang, Y. M., Lin, Y. T., & Cheng, S. C. (2010). Effectiveness of a Mobile Plant Learning System in a science curriculum in Taiwanese elementary education. Computers and Education, 54(1), 47–58. https://doi.org/10.1016/j.compedu.2009.07.006

Kadir, K. (2018). Applied Statistics-Concepts, Examples and Data Analysis with SPSS/Lisrel Program in Research. PT RajaGrafindo Persada.

Keighrey, C., Flynn, R., Murray, S., & Murray, N. (2021). A Physiology-Based QoE Comparison of Interactive Augmented Reality, Virtual Reality and Tablet-Based Applications. IEEE Transactions on Multimedia, 23, 333–341. https://doi.org/10.1109/TMM.2020.2982046

Köse, H., & Güner-Yildiz, N. (2021). Augmented reality (AR) as a learning material in special needs education. Education and Information Technologies, 26(2), 1921–1936. https://doi.org/10.1007/s10639-020-10326-w

Kumar, A. A. (2021). Semantic memory: A review of methods, models, and current challenges. In Psychonomic Bulletin and Review (Vol. 28, Issue 1). Psychonomic Bulletin & Review. https://doi.org/10.3758/s13423-020-01792-x

Lu, K., Cho, D. M., & Zou, J. X. (2022). Research on Improving Memory of VR Game based on Visual Thinking. Journal of Korea Multimedia Society, 25(5), 730–738.

Maharani, Aminuyati, Wiyono, H., Buwono, S., & Karolina, V. (2024). The Effectiveness of the Game-Based Learning Model on Student Learning Outcomes in Social Studies Class VII SMP Negeri 6 Pontianak. Journal on Education, 06(03), 16677–16684. https://jonedu.org/index.php/joe/article/view/5403

Noya, F. (2020). Retention of Learning Outcomes with Verbal Methods Compared to Verbal-Visual Combination Methods in Poso Nursing Study Program Students. Poltekita : Journal of Health Sciences, 12(2), 64–70. https://doi.org/10.33860/jik.v12i2.17

Pramesti, R., & Wiranti, D. A. (2023). Degradation of Javanese Language Use and Understanding in Elementary Schools (Case Study in Sdn 2 Kuanyar, Mayong District, Jepara Regency, Central Java). Scientific Journal of Basic Education, 27(2), 635–637.

Rossano, V., Lanzilotti, R., Cazzolla, A., & Roselli, T. (2020). Augmented Reality to Support Geometry Learning. IEEE Access, 8, 107772–107780. https://doi.org/10.1109/ACCESS.2020.3000990

Varela-Aldás, J., Buele, J., Amariglio, R., García-Magariño, I., & Palacios-Navarro, G. (2022). The cupboard task: An immersive virtual reality-based system for everyday memory assessment. International Journal of Human Computer Studies, 167(September 2021). https://doi.org/10.1016/j.ijhcs.2022.102885

Wilms, I. L., Petersen, A., & Vangkilde, S. (2013). Intensive video gaming improves encoding speed to visual short-term memory in young male adults. Acta Psychologica, 142(1), 108–118. https://doi.org/10.1016/j.actpsy.2012.11.003

Yee, E., Jones, M. N., & McRae, K. (2018). Semantic Memory. The Stevens' Handbook of Experimental Psychology and Cognitive Neuroscience, 1012–1014. https://doi.org/10.7551/mitpress/7688.003.0010.