Reduction of Vulnerability and Disasters: Intervention of Public Budgeting Program 068 and Reactive Management

ABSTRACT
Public Budgeting Program 068 (PP068 by its Spanish initials) is part of the National System for Disaster Risk Management financial strategy and is linked to disaster risk management processes—among them, the processes of Reactive Management (GR by its Spanish initials). It enables articulated interventions between entities from the three government levels to reduce the vulnerability of the population and their means of living. The study determined the relationship between PP068 and GR based on the budget allocation for the products and actions aimed at the preparation, response and rehabilitation processes. This means that the variables have a cause and effect relationship; this is to say, a considerable budget allocation in PP068 helps to put the preparation and response procedures from reactive management into operation, resulting in value creation in municipality interventions as a benefit. A weakness to overcome that has been identified is the lack of articulation between planning and budgeting. There is inadequate budget planning for each PP068 product and activity oriented to GR. Municipality officials lack knowledge of PP068 and GR. Finally, the position of head of the Disaster Risk Management Office in municipalities experiences high turnover.

Keywords: municipalities; public budgeting program 0068; reactive management; public value.

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INTRODUCTION

In Peru, it has been identified that municipalities allocate insufficient resources to the PP068 every year. This prevents the implementation of products and activities that should help put Gestión Reactiva (GR) in disaster risk management into action. As a consequence, the vulnerability of the population is never reduced; in addition, municipalities are not adequately prepared to respond in the event of an emergency or a disaster in their local communities. Budget allocations help plan, organize, direct and control public funds. Its purpose is to manage and plan revenue and expenses for adequate public financing (Mendoza et al., 2018), but several of its factors have not been sufficiently analyzed (De León et al., 2010). Empirical studies have only focused on studying the limitation on indebtedness; in addition, most of the existing references are regulatory in nature as they only focus on the budgeting process.

In general terms, the causes of what is happening in municipalities and PP068 is: (i) there is no articulation between planning and budgeting; (ii) they do not conduct proper planning and budgeting for every product and activity linked to GR; (iii) they do not have the capacity or knowledge required by result-based public budgeting programs and reactive management; (iv) the high turnover rate of the head of the Risk Management Office, which hinders the continuity of the process. The United Nations has evidenced this situation (Misión de Naciones Unidas, 2014) in its report entitled Analysis of the Implementation of Disaster Risk Management. In Peru, it has been ratified by the Defensoría del Pueblo (2017) in its Informe de Adjuntía Nº 006-2017-DP-AAE. In addition, the Encuesta Nacional de Gestión del Riesgo de Desastres (ENAGERD) 2020-2021 prepared by the Centro de Estimación, Prevención y Reducción del Riesgo de Desastres (CENEPRED, 2021) has estimated the tenure length of the heads of the Office for Disaster Risk Management in municipalities, evidencing that 20% have a 1-6 month tenure, 19% remain in the post for 5-12 months, 16% remain for 12-24 months, and 21% remain for 24 months or more.

This situation should lead to reflection and debate regarding the knowledge of PP068 and GR. It also makes it possible to contrast their background theories and the results which have helped validate the objective of this research. It also leads us to the question: Is there a relationship between GR and PP068 in the Tumbes Province Municipality?

PURPOSE

The aim of this research is to determine the relationship between PP068 and GR in the Tumbes Province Municipality. These two variables need to be studied and better known because the budget share allocated to the PP068 products oriented to GR was insufficient (0.00%) when it should be between 1.5% and 2.5% of the Presupuesto Institucional Modificado (PIM) every year, in order to reduce the vulnerability of at-risk populations.

ARGUMENTATIVE REVIEW

Public Budgeting Program 068

According to Decreto Supremo Nº 048-2011-PCM approving the Reglamento del Sistema Nacional de Gestión del Riesgo de Desastres (2011), PP068 is part of the financial strategy of said system, is linked to disaster risk management, and proposes articulated interventions with entities from all three levels of government to protect the population. As a programmatic unit, it implements products and activities that provide goods and services that make it possible to activate the disaster risk management processes and reduce the vulnerability of the population (Sosa, 2020).

As part of the study performed for this article, in relation to PP068, a survey was administered to 28 officers from the Municipalidad Provincial de Tumbes. It included 15 items distributed by each of the three dimensions: budget evaluation, effectiveness, and efficiency.

Mendoza et al. (2018), state that:

Budget allocation is an instrument that helps plan, organize, direct and control government resources, and must be complied with in order to manage and plan income and expenses for adequate public financing. (p. 313)
Reactive Management (GR)

The Política Nacional for Gestión del Riesgo de Desastres for 2050, approved by Decreto Supremo Nº 038-2021-PCM (2021) defines GR as “the set of actions and measures aimed at facing disasters caused by an imminent danger or due to risk materialization. Its processes are preparation, response, and rehabilitation” (p. 3).

As part of the study performed for this article, in relation to GR, a survey was administered to 376 residents of Tumbes district. The survey contained 15 items distributed by each of the three dimensions: services received, trust, and results.

A limiting factor for GR is the lack of budget planning (Cerrón, 2021), which prevents local authorities from strengthening their response and rehabilitation capacities, and acquiring humanitarian aid goods that every individual has a right to; according to Ciancio (2018), this means receiving food, clothes, accommodation, medicines and other items from the institutions in charge.

Relationship between PP068 and GR

To reply to the question “Is there a relationship between GR and PP068 in the Municipalidad Provincial de Tumbes?”; the basic study performed by Mateo (2022) showed that 43% of the municipality officials believed that the two variables are never related; however, the hypothesis test concludes otherwise. In addition, when the author performed a similar study, but of an applicative type, it was possible to confirm—through the hypothesis test—that there is a relationship between PP068 and GR (Kendall’s Tau-b = 0.325, bilateral asymptotic significance 0.000 < 0.05).

Relationship PP068 and GR processes

- **Preparation process.** PP068 is related to the process of GR preparation through the following products and activities (see Figure 1).

- **Response and rehabilitation processes.** To execute the interventions in the response and rehabilitation processes, PP068 and the Fondo para intervenciones ante la ocurrencia de Desastres Naturales (FONDES) approved by Decreto Supremo Nº 132-2017-EF (2017) participate based on budget amendments and types of emergency activity, after a state of emergency has been declared.

![Figure 1](image)

**PP068 products and activities oriented to the preparation of GR process**

Note: Prepared by the author, 2023.
Public Value PP068 and GR

Moore (2008) revela en un enfoque práctico que, para lograr la dinámica de valor público, los gerentes del sector público deben integrar: (i) una mirada hacia arriba: diagnóstico del apoyo político de los decisores; (ii) una mirada hacia afuera: lo que es valioso y efectivo al crear valor público; y (iii) una mirada hacia abajo: un análisis detallado de lo que es factible según las capacidades operacionales (véase la Figura 2).

- **Public value chain and PP068. In each intervention, PP068 should achieve the following as a final result:** “reduced the population’s vulnerability and their means of survival when faced with the risk of disasters”. Figure 3 muestra la cadena de valor público para PP068, que considera los siete productos, sus resultados específicos y finales.

- **Public Value Chain and GR.** A través de la intervención en la preparación, respuesta y rehabilitación, GR ayuda a reducir la vulnerabilidad del pueblo y sus medios de supervivencia cuando se enfrenta al riesgo de desastres (Figura 4).

Municipalities, PP068 and GR

**Municipalities and PP068**

Municipalidades son responsables de implementar PP068. Para ello, deben hacer lo siguiente:

- **Open PP068 products and activities.**
- **Prioritizes budget planning in each fiscal year. Budget allocation should be enough to implement the PP068 products and activities, and put GR in action.**
- **Including PP068 products and activities oriented to GR processes in the Institutional Operations Plan (POI by its Spanish initials). This will help evaluate compliance with physical and financial goals.**

**Municipalities and GR**

Municipalidades deben realizar intervenciones orientadas a GR, que incluyen lo siguiente:

- **Carrying out training sessions on disaster risk management.**
- **Organizing and implementing community brigades.**

**Figure 2**

*Public Value Dynamics - Strategic Triangle*

_Note. Prepared by the author, 2023._
Figure 3
Public value chain of PP068

Figure 4
GR’s public value chain

• Implementing early warning systems.
• Organizing and implementing centers for emergency operations.
• Acquiring humanitarian aid goods, and food items.
• Preparing and/or updating response, contingency and operational continuity plans.
• Organizing drills and simulations.

Results of the ENAGERG Survey

The ENAGERD 2019 survey, prepared by CENEPRED (2020), evidences—in regard to the PP068 products oriented to GR—that, from a universe of 1,874 municipalities, 14% have allocated resources to product Individuals with training and knowledge of disaster risk management (GRD) and climate change adaptation (ACC); 12% have allocated resources to product Population with safe practices for resilience; and 32% have allocated resources to product Installed capacity for preparation and response to emergencies and disasters. All of these are oriented to GR.

On the other hand, the ENAGERD 2020-2021 survey prepared by CENEPRED (2021) evidences—that, from a universe of 1,874 universities, according to the Instituto Nacional de Estadística e Informática (INEI, 2018), 5% have allocated resources to product Individuals with training and knowledge GRD and ACC; 4% have allocated resources to product Safe practices for resilience; and 23% have allocated resources to product Installed capacity for preparation and response to emergencies and disasters. Comparing results from these two surveys, it can be evidenced that resource allocations of municipalities for PP068 continue to be insufficient. As a consequence, vulnerability has not been reduced, and GR has not become operational.

Results of Resource Allocation according to the Ministry of Economy and Finance

Municipalities across Peru

In Peru there are 1,874 municipalities (196 provinces and 1,678 districts). According to information from website Consulta Amigable (MEF, n.d.), the Presupuesto Institucional Modificado (PIM) from 2018 was 3.82% in PP068 products and 0.31% in GR. In 2019, it was 2.21% in PP068 products and 0.34% in GR. In 2020, it was 2.69% in PP068 products and 1.44% in GR. Finally, in 2021, it was 1.25% in PP068 products and 0.34% in GR.

Municipalities in Tumbes Department

Tumbes has 13 province municipalities. According to information from website Consulta Amigable (MEF, n.d.), the municipality PIM from 2018 was 2.40% in PP068 products and 0.34% in GR. In 2019, it was 4.73% in PP068 products and 0.02% in GR. In 2020, it was 1.87% in PP068 products and 0.03% in GR. Finally, in 2021, it was 1.16% in PP068 products and 0.04% in GR.

Tumbes Province Municipality

According to information from website Consulta Amigable (MEF, n.d.), Municipalidad Provincial de Tumbes PIM (Tumbes district only) from 2018 was 2.92% in PP068 products and 0.09% in GR. In 2019, it was 2.38% in PP068 products and 0.06% in GR. In 2020, it was 2.39% in PP068 products and 0.06% in GR. Finally, in 2021, it was 2.08% in PP068 products and 0.00% in GR. In the 2018-2021 period, resource allocation in the Municipalidad Provincial de Tumbes did not go over an average of 0.05% of the PIM for PP068 products oriented to GR, which reflects insufficient resource allocation. Through Resolución Directoral N° 0005-2022-EF/50.01 (2022), the Peruvian MEF has established multi-annual budget planning and preparation as an instrument that orientates the decisions of public entities in order to achieve their expected objectives and goals according to government priorities, strategic plans, development plans, and institutional plans.

According to Solórzano (2022):

The budget constitutes an instrument for public management and performance control; and it should be highlighted that the aim of a result-oriented budget is to use public funds from the budget and achieve the best performance per monetary unit. (p. 3)
CONCLUSIONS

- PP068 is a unit for budget resource planning that helps implement products and activities oriented to activate estimation, prevention, reduction, preparation, response and rehabilitation processes in disaster risk management.

- PP068 and GR interventions are aimed at reducing the vulnerability of populations and their means of living when faced with disaster risks. GR helps perform interventions oriented to preparation for response and rehabilitation in the event of emergencies or disasters.

- This research found that there is a relationship between PP068 and GR in the Municipalidad Provincial de Tumbes, identifying the importance of allocating sufficient funds to all PP068 products and activities that help activate GR processes.

- Regarding public value, municipalities are faced with the challenge of improving their interventions in PP068 and GR because, by improving the budget allocation to every PP068 product and activity, their effectiveness and efficiency will improve, as will do the service, the trust from the population, and GR results.

REFERENCES


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**Competing interests**
The author declares that there is no conflict of interest.

**Authors’ Contribution**
José Luis Mateo Medina (lead author): Conceptualization, research, supervision, writing (original draft, review and editing).