



REPUBLIC OF THE PHILIPPINES  
BULACAN STATE UNIVERSITY  
**COLLEGE OF SCIENCE**



Level III  
Mastery in Quality Management  
2022



Quality Management System  
ISO 9001:2015 Certified



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Certified  
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February 19, 2025

**Hon. Glorime M. Faustino**

Mayor

Municipality of Calumpit, Bulacan

**Dear Mayor Faustino,**

Good day! We are writing to formally request a meeting with the Municipal Social Welfare Development Office (MSWDO) to present a project that aims to enhance disaster preparedness and optimize shelter location-allocation in some areas in Calumpit. We would also like to request your participation in our survey in the evaluation of our system.

As you may be aware, the Philippines was ranked as the most disaster-prone country in the World Risk Index 2024. It faces a wide range of natural disasters annually since it is located within the typhoon belt and the "Pacific Ring of Fire". Some areas in Bulacan are particularly vulnerable to typhoons and floods. Thus, efficient shelter allocation is crucial in such areas, as it directly affects the safety and well-being of the population during disasters.

In extension of this ongoing project, my research team and I developed a system that utilizes genetic algorithm to optimize shelter allocation based on factors such as accessibility, cost-efficiency, and community proximity. This decision-support tool aims to provide the local government units of Bulacan with data-driven solutions to improve their disaster preparedness and response strategies.

The primary objective of the proposed meeting is to present this project and seek the support of the provincial government for its completion. Since the system was completed, we would be grateful for you to participate and provide valuable feedback to assess the system quality by showing the demo of the system and asking you to fill up a survey. We might need to have at least **8 participants** for this system and if possible, we would like to hold the meeting itself either on **February 26 or 27, 2025**.

Your support will be instrumental in the successful implementation of this project, which seeks to benefit not only the local government and its disaster response mechanisms but also the citizens of Calumpit.

We would greatly appreciate your consideration of this request and look forward to discussing how this project can enhance disaster management in Calumpit. Please let us know your availability for the proposed meeting at your earliest convenience.

Thank you for your time and attention. We look forward to your favorable response.

Respectfully yours,

**VALENTINE BLEZ L. LAMPAYAN, Ph.D.**

Chair, Mathematics Department

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