



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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November 13, 2024

Provincial Social Welfare And Development Council
Province of Bulacan

Dear Sir or Madam,

Good day! I am writing to formally request a meeting with your esteemed office to present a project that aims to enhance disaster preparedness and optimize shelter allocation in some areas in Bulacan.

As you may be aware, the Philippines was ranked as the most disaster-prone country in the World Risk Index 2022. 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 line with this, my research team and I are developing 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. In particular, we would be grateful for your assistance in collecting essential data on the population distribution across barangays and information regarding potential shelter locations within Bulacan. Once the system is completed, you will have the opportunity to participate and provide valuable feedback to assess the system quality.

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 Bulacan.

We would greatly appreciate your consideration of this request and look forward to discussing how this project can enhance disaster management in Bulacan. 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