

## Proposed DOST Project

### General / Conceptual

1. What specific problem or gap does the proposed project aim to address in science, technology, or society?  
- Many barangays lack a structured, transparent, and accessible system for residents to report issues and to assess the concerns of the community
2. How does the proposed project align with DOST's research priorities and national development goals?  
-The project supports DOST's thrust in ICT for governance, transparency, and citizen empowerment. It contributes to e-Governance and digital transformation at the grassroots level.
3. What are the unique innovations or technologies introduced by this project compared to existing solutions?  
-Unlike traditional feedback systems, Barangay Pulse integrates real-time reporting, sentiment analysis, and service rating features. It uses mobile-first design and can be deployed even in low-connectivity areas.
4. How will the project contribute to advancing local research and development capacity?  
-The project encourages local tech development, data analytics, and civic tech research. It can serve as a model for other LGUs and be expanded into a national platform.
5. What potential economic, environmental, or social impacts can be expected from the project?

**Economic:** Improved service delivery may reduce costs and boost local productivity.

**Social:** Increased civic engagement and trust in governance.

**Environmental:** Enables faster reporting of environmental issues

### Technical / Development

6. What methodologies and tools will be used to implement the proposed project?  
-Agile development, user-centered design, mobile app development (Flutter or React Native), cloud-based backend (Firebase or AWS), and data visualization tools.
7. How will the project ensure reliability, efficiency, and scalability of the developed system or technology?  
- Modular architecture, offline data caching, and cloud scalability ensure the system can grow with user demand.
8. What is the proposed project's scope, timeline, and key deliverables?  
Scope: Target ( 1 barangay )  
Timeline: 4 months  
Deliverables : Month 1- Research and Design  
Month 2- Development and Testing  
Month 3- Deployment

## Month 4- Evaluation

9. How will the project integrate emerging technologies (e.g., AI, IoT, cloud computing, renewable energy)?
  - AI for sentiment analysis
  - Cloud for data storage
10. What risks or challenges are anticipated in the project, and what mitigation strategies will be applied?

**Low adoption:** Conduct barangay orientations

**Tech literacy gaps:** Include training modules

**Data privacy concerns:** Implement strong encryption and privacy policies

### **Beneficiaries / Societal Impact**

11. Who are the target beneficiaries of the project (e.g., farmers, students, businesses, local government)?
  - Local residents, barangay officials, LGUs, and community organizations.
12. How will the project improve productivity, accessibility, or quality of life for its beneficiaries?

Faster issue resolution

Transparent feedback loop

Data-driven governance

13. What is the potential for technology transfer and commercialization of the project outputs?
  - Can be adopted by other LGUs and scaled to city/provincial level.
14. How can the project support the United Nations' Sustainable Development Goals (SDGs)?
  - SDG 16: Peace, Justice & Strong Institutions

SDG 11: Sustainable Cities & Communities

SDG 9: Industry, Innovation & Infrastructure

15. How will the project ensure inclusivity, especially for marginalized communities?

Multi-language support

Offline reporting options

Accessibility features for PWDs

### **Sustainability & Future Research**

16. What strategies will be employed to ensure sustainability of the project after initial funding?

- LGU budget allocation for maintenance
- Community tech volunteers
- Open-source development model

17. How will the project outputs be maintained, upgraded, or scaled up in the future?

Regular updates

Expansion to other barangays

Integration with national platforms

18. What partnerships or collaborations (academe, industry, LGUs) can strengthen the project implementation?

Academe (for research and development)

LGUs (for deployment and feedback)

NGOs (for community engagement)

19. How will the project measure and evaluate its success and impact?

Number of reports submitted

Response time to issues

User satisfaction ratings

20. What possible future research directions can stem from this project?

Predictive analytics for barangay issues

Integration with disaster response systems

AI-driven policy recommendations

**Instructions:**

1. This is an individual projects
2. Identify the proposed project
  - a. Farmers
  - b. Business
  - c. LGU
  - d. Schools (Students)
3. Proposal is based on the sample
4. The proposal have a PLIB (Project Line Item Budget)
5. The presentation Starts at September 30, 2025
6. No Duplications
7. The draw lots for the presentation will be next week
8. Failed of presentation on your schedule, no more schedule again