



HUMANITARIAN INNOVATION FUND

Seed Funding Final Report

Lead organisation name	CBCP Caritas Filipinas Foundation, Inc. (NASSA/Caritas Philippines)
Project title	DIGITAL PH (Digitized Community Disaster Risk Mapping and Information for Efficient Humanitarian Response and Development Programming in the Philippines)
Partner 1 name	Archdiocese of Palo – Relief and Rehabilitation Unit / Caritas Palo
Partner 2 name	
Location of activities	Brgy. Catmon, Leyte, Philippines
Start Date	November 1, 2017
End Date	May 15, 2018
Total funding (please specify any other contributions to the project)	10,000 GBP
Total spent	9,346 GBP

ACHIEVEMENTS AND ACTIVITIES

1. Please describe the planned outcomes of this seed funding grant.

As per proposal, the project is expected to:

1. Develop a software that will make digitization of the Participatory Disaster Risk Assessment (PDRA) maps easier and accessible
2. Do a comprehensive e-map of Brgy. Catmon in Leyte based from the PDRA map the community made, to serve as prototype
3. Develop an e-tool for the PDRA survey questionnaire
4. Develop a training manual and user kit/guide on the development and maintenance of the software that will be used for future trainings and capacity building activities

2. Was the project successful in achieving its planned outcomes?

- Completely successful
- Significantly successful**
- Partially successful
- Completely unsuccessful

Please explain further, considering whether your project has succeeded in demonstrating the feasibility or effectiveness of the innovation, and what evidence you have generated (eg results from a proof of concept or pilot).



OpenDataKit was used to geo-tag the households in the PDRA locations and QGIS is used to integrate the locations with the PDRA survey results to create a shareable and GIS-ready files that reflect the hazards, risks, vulnerabilities, and capacities of an area.

A QGIS plugin, Caritas PDRA Analysis Tool

(<https://github.com/benhur07b/caritaspdra>), was developed for easy computation of hazards, risks, vulnerabilities, and capacities on a household and barangay levels based on the existing PDRA dataset. The features of the plugin were developed with the coordination and collaboration of the Archdiocese of Palo – the pilot site for the project - as they needed a tool that went beyond simple digitization but could also be used for analysis. Meaning, a certain set of formula was also derived from the given data to allow for projections of effects when a disaster come. QGIS is also used to create maps from the different PDRA layers and these maps can be saved into several file formats (.png, .jpg, .pdf) for printing and sharing.

In addition, the process of adding the geographical identification of metadata to various media like ODK became successful and effective during the actual tagging and collection of data in 232 households in Brgy. Catmon, Tanauan, Leyte. The developed software involves attaching location-specific information such as geographical coordinates to households. Also communities will no longer exert efforts doing data analysis for their projects and programs, since this software will generate the result based on the data gathered. For convenience and efficiency, the data collectors need a GPS-enabled phone and internet to upload the collected data such as location and household profile, platforms are available to geo-tag at no-cost.

During software development, the following layers have already been done:

1. Leyte provincial admin boundaries (indicative)
2. Leyte municipal admin boundaries (indicative)
3. Leyte barangay admin boundaries (indicative)
4. Consolidated PDRA (barangay-level) database - General
5. Consolidated PDRA (barangay-level) database - Livelihood
6. Consolidated PDRA (barangay-level) database - Natural Environment
7. Flood hazard
8. Landslide hazard
9. Storm surge hazard

Other features/plugin-ins:

1. Computation of Hazards, Vulnerabilities, Risks and Capacities
2. Summarized PDRA Data by Location
3. Statistics on Hazard Vulnerability, Capacity and Risk

The web link for the prototype map is: <https://www.nassa.org.ph/digitalph/>

A request must be sent first to NASSA/Caritas Philippines via:

caritasphilippines@gmail.com before being allowed access to the information



contained in the web-based PDRA Map. The requesting party need to provide full disclosure as to the reasons for the request, including a brief organizational profile. This is to ensure that all information, especially of the households are protected, though during the conduct of the PDRA, it has been explained to the households that such information will be made available for planning and related purposes of the local government units, humanitarian organizations and other relevant agencies.

3. Please describe the activities carried out as part of this seed funding grant, and attach the last approved work plan. Describe any changes or amendments to the planned activities that have not been detailed in an *Agreement Amendment Form*, and explain why the changes were implemented.

Except also from the original platform, NASSA/Caritas Philippines has been exploring and experimenting a variety of complex systems that would allow to effectively supervise, validate and evaluate the programs in the community – from the identification, assessment of different levels of risk, hazard, vulnerability and capacity, and up to the phase of collecting the actual data and evaluation. As it is, NASSA/Caritas Philippines and the diocese finally found a reliable geo-tagging technology through the #DIGITALPH project.

NASSA/Caritas Philippines is leading efforts to train more staff and later on share these initiatives to other partners within the agency and other institutions on the use of this software for project monitoring, evaluation and gathering of accurate and real-time data from its communities. Training modules, templates, documentation, and other files necessary for implementing the digitization process in the other PDRA locations were provided to NASSA/Caritas by the 3rd party technical consultant (attached to this report).

Training on OpenDataKit and QGIS was also conducted for NASAA/Caritas Philippines staff and the Archdiocese of Palo. On the trips to Leyte, the accompanying staff from NASSA/Caritas Philippines and the members of the Archdiocese of Palo were introduced, trained, and taught not just how to implement the digitization process but also how to perform analysis of the PDRA dataset.

The project will be publicly presented during the following events:

1. DRRNet Anniversary Celebration (July 22, 2018)
DRRNet Phils (Disaster Risk Reduction Network – Philippines) is a network of more than 50 international and national non-government and civil society organizations working for the enhancement of disaster risk reduction systems, platforms, protocols and policies.
2. 39th National Social Action General Assembly (August 8, 2018)
The national assembly of the 85 Diocesan Social Action Centers in the Philippines is done every two years. This is the main venue where NASSA/Caritas Philippines presents the general direction (humanitarian,



development and advocacy) of the network, including the innovations it proposes the network to collaborate with or implement.

It must be noted in the financial report that the remaining amount of 1,112.44 GBP is being proposed to be used for the above activities, including the printing of media materials. The presentation beyond the project period is deemed as the events are seen to be the best opportunities to raise awareness, instill support and collaboration, and generate learnings from those implementing the same prototypes. NASSA/Caritas Philippines sees this also as more cost-effective way to publicly present the project, than to personally organize one.

4. Please describe how the activities carried out led to the outcomes achieved.

After the selection process for the technical consultant, which ensured greater appreciation and understanding of the project, NASSA/Caritas Philippines also provided its staff with relevant opportunities to learn and be mentored by the 3rd party consultant. As such, clarification on the technical requirements and methodologies, security protocols, sharing mechanisms and issues on confidentiality and information protection, and web uploading systems and policies were taken into consideration, discussed at length and decided unanimously.

The following files are attached to this report for reference and verification:

- Templates for the consolidated and household level PDRA results
- QGIS documents
- ODK documents

5. All projects should have the needs of affected people at the forefront of their planning and development. Please describe how your project has engaged affected people to date, and/or how you have ensured that the needs of affected people are fed into your project.

NASSA/Caritas Philippines has been doing humanitarian, development and advocacy works for more than 5 decades already. In most cases especially during humanitarian responses, the national Caritas with its diocesan counterparts, still need to conduct rapid needs assessments time and again to fully comprehend the extent of damages and needs before it can actually decide or design a response proposal.

During the 3-year Typhoon Haiyan recovery and rehabilitation program of the Philippine Catholic Church, it started to conduct and update the results of the Participatory Disaster Risk Assessment (PDRA), becoming a very rich source of updated baseline information (community and household level demographics, and levels/types of hazards, capacities, risks and vulnerabilities) which for the first time was at the disposal of the communities, the diocesan social action centers and NASSA/Caritas Philippines.



It must be understood and appreciated however, that the conduct of the PDRA has solely been community-led through the facilitation of the local social action centers. Thus, from the very start, the community has been in the forefront not only of determining their levels and types of hazards, risks, vulnerabilities, and capacities, but also of deciding how best to provide solutions to their present predicaments.

However, this vast database can be shared to other relevant organizations. Thus the decision and commitment of NASSA/Caritas Philippines to digitize the PDRA maps, and eventually the conception of the #DIGITALPH project.

Once completed, the communities will be able to annually update their PDRA maps using the ODK file shareable to designated mobile phones. On the later part of the initiative, this can be shared to the local government units (LGUs) to be able to access the web-based mapping results may even contribute to its revalidation and therefore be able to integrate community results to its various local projects. In the future, the web-based PDRA maps can likewise be one of the LGUs' main references to fully access its local disaster fund.

6. On reflection, was your approach, project design or methodology appropriate? What would you do differently if you were starting again?

As mentioned during the previous report, digitization is one of the way forward strategies, as the information contained in the PDRA maps needed to be shared in a wider audience and be utilized in more ways other than program development, and contingency planning.

The project would be better implemented however had the community-level data were already encoded before the implementation period to provide more time for geo-tagging and triangulation of data. Thus for the next conduct of the PDRA even in other areas, and of similar mapping activities, tools will be encoded in the PDK already to fully maximize the potentials of the #DIGITALPH project.

OBSTACLES AND CHALLENGES

7. Please list up to three significant obstacles or challenges faced during the project, describe how they impacted the project plans and activities, what steps were taken to address them, and whether the solutions were effective.

Obstacle/challenge	Impact/solution/result
1. Geographical reference of the PDRA maps	Consider using standard basemaps like topographic maps from NAMRIA/Local Government Units or OpenStreetMap basemaps (https://wiki.openstreetmap.org/wiki/Mapping_projects) when performing the Participatory Disaster Risk



	Assessment so that the physical maps created will have scale and geographic reference and can be easily digitized.
2. Use of e-survey tool for PDRA instead of paper survey	Alternatively, OpenDataKit can be used as a survey tool that contains all the necessary information for the PDRA. The resulting survey results from ODK should contain geographic information (latitude and longitude coordinates), and photos so that they may be easily referenced, mapped and digitized. However, it must be ensured that the process of community participation still be an essential part of the activities.
3. Familiarization of the #DIGITALPH platform	It takes time to familiarize and understand the system. It is recommended that the designated team be provided with continuing exposure and mentoring

PARTNERSHIPS AND COLLABORATION

8. Please describe the value that different members of your partnership brought to the project, and the ways in which your combined skillset has helped to address the problem.

NASSA/Caritas Philippines, valuing the impact of the digitization process to its humanitarian and development programs, have been taking all opportunities to advocate for the promotion and use of the #DIGITALPH platform. During the Asian Regional Workshop in April 2018 on Disaster Risk Reduction convened by the Asian Center for Disaster Preparedness, NASSA/Caritas Philippines stressed the importance of the having the digitized and web-based PDRA maps. In the same event, it was suggested by ACDP to link-up with the online disaster mapping project by the City Government of Legazpi in Albay province which in many ways are similar to #DIGITALPH but with several items like capacities, vulnerabilities and risks lacking.

After piloting this prototype, as part of its sustainability strategy, various partners like the local government units, government agencies and other stakeholders will be consulted and presented with the web-based mapping results to eventually come up with formal partnerships to fully maximize the project outputs.

9. Did any members leave or join the partnership during the course of the project? If so, why?

All partners – Caritas Palo, the barangay council of Catmon in Leyte, UN-OCHA Community of Practice in Community Engagement, HIF, and the technical consultant - during the course of the implementation maintained collaboration mainly believing that the project will provide better opportunities for disaster response and development programming.



DISSEMINATION AND NEXT STEPS

10. Please provide links to any articles, blog posts or reports about this project that you have published.

<https://www.nassa.org.ph/986-2/>

<https://www.nassa.org.ph/digitalph-aid-to-local-planning-and-development/>

<https://www.nassa.org.ph/990-2/>

11. Do you have current plans to take the project forward?

Yes

No

Maybe

Please describe further:

NASSA/Caritas Philippines has submitted a proposal to the Grand Humanitarian Challenges to fully fund the digitization process, and to implement the project within the context of conflict and emergencies, aside from its present disaster framework.

The project is also being planned to be piloted in Negros Occidental for in the context of climate change (rapid sea level rise) for one of the islands also considered to be geographically isolated areas during typhoons and storm surges.

12. For the project to move forward, please list the three most important issues that will need to be addressed, in order of importance.

1 Encoding of community-level PDRA results affects the timeliness of GPS-tagging of all households

2 Continuing training of key staff from NASSA/Caritas Philippines and the dioceses on the whole cycle of the digitization process

3 Support from the local government units and other partners for the full implementation of the digitization process

YOUR FEEDBACK

We are always thinking about ways that we might improve our processes and extend the support that we offer to innovation teams. We would welcome your thoughts in responding to the following questions.

13. Please describe your experiences of the HIF's seed funding process from the initial workshop application to date, including our processes and general accessibility, what we have done well, and what we might improve.



NASSA/Caritas Philippines fully appreciates the timely responses of HIF team to its queries and emails regarding the project implementation, especially during the period when it submitted the Project Amendment proposal.

14. What further forms of support might you have found helpful? Please select up to three in order of importance, including your own suggestions if applicable.

- 3.** PDF toolkit or guidance for managing innovation projects
- Video explainers for managing innovation projects
- Webinars on seed funding application process
- 1.** Online community for peer-to-peer support
- 2.** Mentoring by previous HIF grantees
- Other

If you have selected "other", please specify: