

Project Title : **“A FLOOD FORECASTING DEVICE IN QUEZON CITY, PHILIPPINES: A SOUND PRACTICE FOR FLOOD DISASTERS REDUCTION MEASURE”**

Organization : California Riverside and Odelco Compound, Barrio (Bgy.) San Bartolome, Novaliches, Quezon City

Primary Contact : Noel L. Lansang, Ph.D.
Tel. No. 724-96-95 / Fax. No. 921-1042

Geographic Coverage : The Tullahan River having an average width of 20.00 (m) and approximate length of 7.60 (m). Quezon City lies immediately Northeast of Manila. It is bounded on the North by Caloocan City and San Jose del Monte, on the South by Pasig and Mandaluyong, on the West by San Juan and Manila and on the East of San Mateo and Marikina. It is the biggest of the four cities of the Metropolis, the second largest in the country (second only to Davao City) with a total land area of 15,108 hectares or 151.8 square kilometer based on R.A. 1575, Revised Charter of Quezon City dated June 18, 1968.

Time Frame : October 2005 to March 2006

Approximate Funding Needs : Php 33,000.00 (US\$ 600)

Attached Supporting Documents : Written Endorsement

PROJECT BACKGROUND AND MOTIVATION

Every time it rains particularly heavy or continuous rainfall even without a typhoon signal, California Riverside and Odelco Compound both of Barrio (Bgy.) San Bartolome that accumulate 8 – 10 meters of water causing sudden flood for more than 1 hour and aggravated by spilled water from the La Mesa Dam. Seven hundred twenty (720) families and Two hundred forty (240) houses are prone to flooding.

The existing warning procedure hardly meet the “golden hour” in evacuating people to the designated evacuation center. Time and time residents get trapped on the 2nd floor of their house that endanger their lives especially when water level continue to rise.

The putting of a rain gauge will surely produce an on – time reliable information for dissemination to the community level giving them a lead or enough time to move to the evacuation area.

As experienced, rains are sometimes scattered and the volume of water accumulated by a certain area causes floods aggravated by the rainfall. As a result most of the low – lying areas easily got flooded while other places are not affected. In this case students especially, grade school and parents are worried and rely on TV or radio news for any announcements regarding the suspension of classes which media do not have complete information in all areas. But with the installation of the rain gauge combine with an improve warning procedures, barrio (bgy.) local officials will have the needed information on the right time as a basis in suspending classes just in time for a particular place affected by flood.

A panel board to be placed in flood prone areas will help the residents in monitoring the water level that will signal when the evacuation operation should be done.

In the province of Hermosa, Bataan, people living near the Almacen River are prone to flood every time there is a heavy rainfall. The Local Government instituted a project called “taas – bahay” whereby local government provides financial assistance to reconstruct the 1st level of the house and elevate to 2nd level as the word “taas – bahay” means to elevate to 2nd level or to put a 2nd floor of the house. While, others who wants to leave the place are relocated to the chosen relocation area. In Barrio (Bgy.) San Bartolome some residents are doing this with the guidance from the local government.

As an innovation in flood forecasting, Barrio (Bgy.) San Bartolome will serve as a model and is expected that the rest of 141 barrios (bgys.) in Quezon City and other parts of the country to replicate this system.



OBJECTIVES / EXPECTED IMPACT

“Life is precious and priceless” this is our utmost consideration in making the community prepared, thus, the following objectives are expected to be fulfilled, to wit;

- a. to prevent loss of lives and damage to properties,
- b. to instill high level of awareness about disaster risks among local residents and
- c. to enhance and promote proactive mitigation rather than disaster response.

PLANNED ACTIVITIES

ACTIVITIES	OCT.	NOV.	DEC. (2005)	JAN.	FEB.	MAR. (2006)
<ol style="list-style-type: none"> 1. Dialogue with the Barangay Officials. 2. Awareness raising and participatory training of local residents. 3. Identify resources and risks mapping. 4. Involvement of community in emergency response such as the Tricycle Operators and 	▶	▶▶	▶▶▶	▶▶▶▶	▶▶▶▶▶	▶▶▶▶▶▶

Drivers Association.	
5. Implementation of prevention measures like installing a rain gauge equipment and wood panel board for water indicator.	
6. Fine tuning of warning procedures and information dissemination.	

Evaluation of the impact to involve research and interview, actual implementation of the research findings, capacity building and technical assistance activities to support efforts for collaboration action.

IMPLEMENTING AGENCIES AND STRUCTURE

- a. PAGASA
- b. Local Government Unit
- c. Local Residents

MONITORING AND EVACUATION, MEASURABLE INDICATORS

Local officials and trained community volunteers will be the one to monitor considering they are living in the area. When water level reached the identified critical level, a siren will signal the immediate evacuation. Information from the affected area will be relayed to the local communication center by means of a handheld / two - way radio, telephone or mobile phone which in turn announce in a public address system the necessary information or precautionary measures.

Evaluation will be done regularly in the community with the assistance from the City Government and PAGASA representative for improving the system.

SUSTAINABILITY

Appropriations from the City Government that will serve as a counter – part on the Barrio (Bgy.) budget.

Enactment of Resolution by the City Council as the legal basis in installing the system. A Memorandum of Agreement will also be sought to ensure a long – term partnership and support.

BUDGET

Rain Gauge	Php	15,000.00
Wood / Panel Board		5,000.00
Orientation (Snacks & Honorarium for the Lecturers)		<u>13,000.00</u>
	Php	33,000.00 =====



THE LAMESA DAM WATER RESERVOIR



SPILLWAY OF THE LAMESA DAM



TULLAHAN RIVER IS A WATERWAYS WHERE SPILLED WATER FROM LAMESA DAM GOES



FOCUS MEETING WITH BARANGAY OFFICIALS OF SAN BARTOLOME. THE PROPONENT IS EXPLAINING THE BENEFITS THAT COULD BE DELIVERED FROM THE PROJECT



A SIGNBOARD FOR MONITORING THE WATER LEVEL SO THAT RESIDENT MAY KNOW, ALSO SERVE AS A WARNING DEVICE FOR EVACUATION PURPOSES



A SCALE FOR MEASURING THE WATER LEVEL OF THE DAM, BEFORE REACHING THE CRITICAL LEVEL, RESIDENTS OF ODELCO COMPOUND AND CALIFORNIA RIVERSIDE IN SAN BARTOLOME NEED TO BE INFORMED



CONDUCTING AN OCULAR INSPECTION ON THE CONDITION OF THE RIVER



LOOKING FOR AN IDEAL SITE FOR THE INSTALLATION OF THE RAIN GAUGE AND WOOD/PANEL WATER LEVEL INDICATOR



A MULTI PURPOSE HALL SERVE AS EVACUATION CENTER WHEN
LOW LYING AREAS GOT FLOODED



IMPROVING THE DRAINAGE SYSTEM BY PUTTING BIGGER SIZE OF
CULVERT



SERVICE VEHICLE FOR ROVING PURPOSES IN MAKING PUBLIC ANNOUNCEMENT



DIALOGUE WITH RESIDENTS OF CALIFORNIA RIVERSIDE ON HOW TO IMPROVE THEIR SOCIO-ECONOMIC CONDITION



ODELCO COMPOUND IS THE FIRST TO BE AFFECTED BY FLOODS BEFORE CALIFORNIA RIVERSIDE. A PLACE IDENTIFIED TO PUT THE RAIN GAUGE EQUIPMENT AND WOOD/PANELBOARD FOR WATER LEVEL INDICATOR



A PROOF OF PARTNERSHIP BETWEEN THE PROPONENT AND BENEFICIARIES OF THE PROJECT



ALMACEN RIVER OF HERMOSA, BATAAN NOTED FOR ITS REHABILITATION CONCEPT OF “TAAS-BAHAY” OR ELEVATING THE 2ND LEVEL OF THE HOUSES



COMMUNITY PERSONNEL TO UNDERGO TRAINING IN MONITORING OF THE RAIN GAUGE AND INFORMATION DISSIMINATION USING HANDHELD TWO-WAY RADIO