

EcoBlock micro-facility: community hollow block production from recycled plastics and glass in Bagatabao

PHILIPPINES · Catanduanes · Bagatabao

CATEGORY **SOCIAL SYSTEMS** **PUBLIC AWARENESS**

RICD RISK TIER

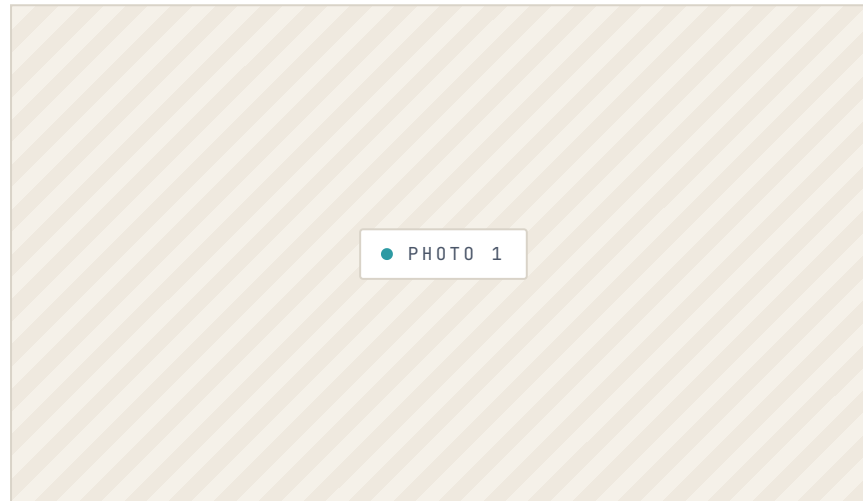
High

PRIMARY HAZARDS

Water stress · Flood damage · Storm damage · Changes to marine conditions

MOBILITY DIMENSION

Avoided displacement



GRANT RECIPIENT

KATROPA-Bagatabao

PARTNERS

BLGU Bagatabao · Provincial ENRO · DOST testing partners

TOTAL PROJECT VALUE

41,022 USD 12 months**50%** CCF GRANT **20,511 USD****50%** MATCHING FUNDS **20,511 USD**

Matching partner being sought

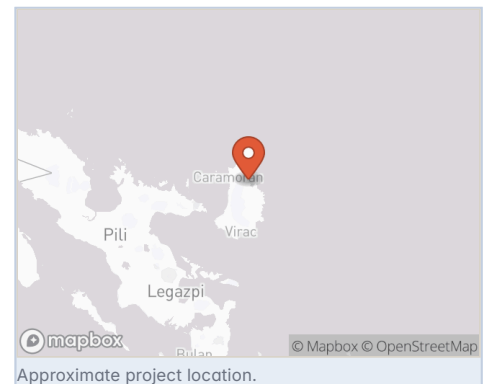
Context and approach

In Bagatabao, plastics and glass clog waterways and worsen flooding while typhoons repeatedly damage homes built of light materials. Families, especially women and youth, lack stable livelihoods, and affordable durable building materials are scarce.

KATROPA-Bagatabao, with the barangay government, will run a micro-facility turning shredded plastics and pulverised glass into quality-tested concrete hollow blocks, creating green jobs, cheaper safer home upgrades and steady waste diversion.

Project outputs

- Procure a block-maker, mixer and shredder and prepare the barangay site
- Train 20 residents in production, quality assurance and safety
- Secure waste supply and offtake agreements with junkshops and contractors
- Scale to 8,000 blocks per month with accredited strength testing
- 1.2 to 1.5 tonnes of plastics and glass are diverted from waterways monthly
- Six to ten green jobs and cheaper materials strengthen local shelter resilience
- A barangay-scale enterprise keeps delivering adaptation dividends



Approximate project location.

Reach & deliverables

1,020	8,000	1.5 t
ESTIMATED POPULATION IMPACTED	BLOCKS A MONTH quality-tested	WASTE DIVERTED MONTHLY
Bagatabao and adjacent barangays		plastics and glass

Milestones

12 MONTHS TOTAL

M.01

2 months

Site preparation and major equipment procurement

M.02

4 months

Installation, crew training and pilot production with QA

M.03

6 months

Scale-up, monitoring dashboards and final reporting