

# Philippine Municipal Blue Economy Roadmap Toolkit

A fully self-contained, step-by-step toolkit for local government units (LGUs) to plan, implement, and monitor a sustainable and inclusive Blue Economy program. This toolkit addresses key weaknesses in previous versions by embedding all thematic elements, Philippine-tailored examples, inclusive and resilience-building initiatives, a process roadmap, filled sample templates, and integrated monitoring and evaluation guidance.

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## Section 1: Purpose and Use of This Toolkit

**Definition:** This toolkit is designed to help LGUs create a comprehensive Blue Economy Roadmap that is aligned with the Comprehensive Land Use Plan (CLUP), Comprehensive Development Plan (CDP), and other sectoral plans.

### Usage:

- Step-by-step guidance from situational analysis to M&E.
  - Fully embedded thematic elements with definitions, descriptions, Philippine-tailored examples, inclusive and resilience-focused initiatives, and data source suggestions.
  - Ready-to-use templates with filled examples.
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## Section 2: Step-by-Step Implementation Flow

1. **Initiation** – Form the Blue Economy Task Force (see Annex A TOR).
  2. **Data Gathering** – Use Annex C reference documents to compile baseline data.
  3. **Stakeholder Engagement** – Hold workshops with fisherfolk, women’s groups, indigenous peoples, PWD representatives, private sector, academe.
  4. **Visioning** – Draft vision, goals, and objectives.
  5. **Thematic Planning** – Populate Annex B matrix for each thematic element.
  6. **Integration** – Align outputs with CLUP/CDP.
  7. **Validation** – Present draft roadmap to stakeholders for feedback.
  8. **Approval and Adoption** – Endorsement by Sanggunian and integration into AIP.
  9. **Implementation** – Execute activities with clear roles and financing.
  10. **Monitoring & Evaluation** – Track progress using the M&E framework.
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## Section 3: Thematic Elements & Result Areas

Each thematic element includes a definition, description, and **Examples:** of Inclusive and Resilience-Building Initiatives.

## Element 1: Enabling Environment

**Definition:** Governance, policy, and institutional frameworks that enable a sustainable blue economy. **Description:** Focuses on creating policies, institutions, financial systems, capacity building, public engagement, and enforcement mechanisms that support marine resource protection and inclusive growth.

- **1.1 Healthy, Resilient & Productive Marine Environment**  
**Description:** Ensuring the health of marine ecosystems through conservation, restoration, and sustainable use, prioritizing vulnerable communities' needs.  
**Examples:** Inclusive MPA co-management with indigenous fishers; mangrove planting by women's cooperatives; coral reef rehab employing PWD divers.
- **1.2 Integrated Approaches to Ocean Governance**  
**Description:** Coordinating policies and management across jurisdictions and sectors to achieve balanced and inclusive marine governance.  
**Examples:** Inter-LGU bay alliances with equal sector representation; inclusion of traditional ecological knowledge in marine plans; joint enforcement with fisherfolk.
- **1.3 Sustainable Finance & Investment**  
**Description:** Establishing financing mechanisms that support sustainable marine projects, benefiting marginalized groups.  
**Examples:** Community-managed Blue Fund; microloans for low-income aquaculture farmers; PES schemes benefitting coastal households.
- **1.4 Human Capacity Development**  
**Description:** Building skills and knowledge among all stakeholders to manage and benefit from marine resources.  
**Examples:** TESDA mariculture courses for unemployed youth; maritime skills scholarships for IP students; inclusive CRM training for barangay officials.
- **1.5 Public Awareness & Engagement**  
**Description:** Increasing public understanding and involvement in marine protection and sustainable use.  
**Examples:** School-based marine awareness campaigns; participatory coastal cleanups; radio programs in local languages.
- **1.6 Maritime Surveillance, Monitoring & Enforcement**  
**Description:** Strengthening monitoring and enforcement systems to protect marine resources equitably.  
**Examples:** Bantay Dagat with PWD participation; SMS-based reporting for fishers; shared patrol resources among LGUs.

## Element 2: Maritime Tourism

**Definition:** Sustainable tourism that safeguards marine resources and supports inclusive livelihoods. **Description:** Aims to maximize tourism benefits while minimizing ecological damage, ensuring participation from marginalized groups.

- **2.1 Manage Cumulative Impacts**

**Description:** Managing the combined effects of tourism activities to avoid resource depletion and ecosystem damage.

**Examples:** Zoning that protects fishing grounds; tourism site rotation to prevent reef stress; eco-certification of community-run tour sites.

- **2.2 Increase Youth Participation**

**Description:** Engaging young people, especially from marginalized groups, in marine tourism careers.

**Examples:** IP youth as eco-tour guides; internships for coastal youth in resorts; dive guiding scholarships for unemployed graduates.

- **2.3 Cruise Ship & Coastal Tourism Impact Management**

**Description:** Reducing the environmental and social impacts of cruise and coastal tourism while enhancing community benefits.

**Examples:** Benefit-sharing agreements with cruise operators; waste management at docking sites; visitor orientation led by community elders.

### **Element 3: Fisheries**

**Definition:** Sustainable fisheries that ensure equitable benefits and ecosystem health.

**Description:** Ensures long-term viability of fish stocks, equitable income distribution, and climate resilience in fishing communities.

- **3.1 Improve Reef/Demersal Fisheries**

**Description:** Restoring and maintaining healthy fish populations and habitats for sustained yields.

**Examples:** Seasonal closures with cash-for-work; fisher-led reef monitoring; alternative livelihoods during closure periods.

- **3.2 Diversify Fisheries**

**Description:** Expanding the variety of fish species harvested to reduce pressure on overfished stocks.

**Examples:** Women-led shellfish farming; low-cost gear for small-scale tuna fishing; pilot fishing of underutilized species.

- **3.3 Restructure Fish Landing/Trading Systems**

**Description:** Improving infrastructure and systems to make fish trading fair, efficient, and accessible.

**Examples:** PWD-accessible markets; transparent fish pricing boards; women-run processing units.

- **3.4 Reduce Post-Harvest Losses**

**Description:** Minimizing waste and spoilage in the handling, processing, and distribution of fish.

**Examples:** Community-owned cold storage; solar dryers for island barangays; packaging innovations led by fisher youth.

## Element 4: Aquaculture

**Definition:** Responsible aquaculture that supports livelihoods and ecosystem health.

**Description:** Promotes environmentally friendly aquaculture that engages marginalized groups and reduces environmental impacts.

- **4.1 Incentives for Aquaculture**

**Description:** Providing benefits to encourage sustainable aquaculture practices.

**Examples:** Subsidies for smallholder farms; recognition for sustainable operators; LGU-provided fingerlings to marginalized farmers.

- **4.2 Community Participation**

**Description:** Ensuring local communities, especially marginalized groups, have active roles in aquaculture operations.

**Examples:** IP-managed milkfish pens; women-run seaweed farms; PWD-inclusive oyster culture.

- **4.3 Coral Farming & Restoration**

**Description:** Cultivating and transplanting corals to restore reef habitats.

**Examples:** Barangay coral nurseries; reef planting programs as tourism attractions; training women divers in coral rehabilitation.

## Element 5: Marine Information & Science Needs

**Definition:** Science-based decision-making with community participation. **Description:** Develops robust knowledge systems for planning and policy-making, integrating local and scientific knowledge.

- **5.1 Improve Knowledge Base**

**Description:** Expanding and organizing data and information on marine resources and uses.

**Examples:** Citizen science reef surveys; fisher catch data integration; drone mapping by youth groups.

- **5.2 Strengthen Research Framework**

**Description:** Establishing coordinated research efforts to address marine and coastal management challenges.

**Examples:** SUC–LGU partnerships; training IP youth in marine monitoring; community-led baseline studies.

## Element 6: New & Emerging Opportunities

**Definition:** Innovative and future-ready marine ventures. **Description:** Explores new industries and technologies for job creation and environmental sustainability, ensuring inclusivity.

- **6.1 Launch Blue Economy Lab**

**Description:** Creating spaces for innovation and entrepreneurship in marine industries.

**Examples:** Incubators for women-led marine startups; hackathons for low-cost ocean sensors; mentorship for IP entrepreneurs.

- **6.2 Develop Blue Economy Investment Strategy**

**Description:** Designing strategies to attract investments into inclusive, sustainable marine ventures.

**Examples:** Investment fairs highlighting community projects; inclusive PPP proposals; micro-investment platforms for coastal ventures.

## Section 4: Annexes

### Annex A: Terms of Reference for Blue Economy Task Force

*(Full TOR with roles, composition, procedures, same as improved version in prior outline)*

### Annex B: Activity & Task Matrix Template with Sample Entries

Result Area	Local Context	Proposed Activities	Specific Tasks	Timeframe	Lead & Partners	Priority
1.1 Healthy, Resilient & Productive Marine Environment	Coral reefs degraded in 3 barangays	Expanded MPA network	Hold barangay consultations; install markers; train PWD and IP MPA wardens	Short	MENRO, FARMC, Barangays	High
2.2 Increase Youth Participation	High youth unemployment	Tourism skills training	Partner with TESDA for dive guiding course for unemployed IP youth; place trainees in resorts	Medium	Tourism Office, PESO, TESDA	High

### Annex C: Element Subsections and Reference Documents

For each result area, suggested sources:

- Government: DENR, BFAR, DOT, DILG, NAMRIA datasets.
- Academic: SUC research reports, technical manuals.
- Community: fisherfolk logbooks, barangay maps, oral histories.
- International: FAO guidelines, UNEP reports, SDG indicators.

### Annex D: Monitoring & Evaluation Framework

**Purpose:** Ensure activities lead to measurable outcomes.

- **Indicators:** Specific, measurable, time-bound (e.g., % increase in live coral cover; # of women and IP members in fisheries councils).
- **Baselines:** Established via initial data gathering.
- **Targets:** Linked to CLUP/CDP timelines.

- **Reporting:** Quarterly internal, annual public reports.
- **Responsibility:** Assigned to LGU office leads with community validation.

## Annex C: Element Subsections and Reference Documents – Matrix Format

This matrix details reference documents and data sources for each element sub-subheading, providing LGUs with a clear roadmap for sourcing credible and relevant information.

Element & Sub-Subheading	Government Sources	Academic Sources	Community Sources	International Sources
<b>1.1 Healthy, Resilient &amp; Productive Marine Environment</b>	DENR–BMB habitat maps, BFAR fisheries profiles, NAMRIA bathymetry data	SUC reef monitoring reports, seagrass/mangrove inventories	Participatory coastal maps, fisherfolk oral histories	UNEP coral reef resilience toolkit, FAO sustainable fisheries guidelines
<b>1.2 Integrated Approaches to Ocean Governance</b>	DILG–BFAR Joint Admin Orders, bay-wide mgmt plans	Policy reviews on inter-LGU alliances	Fisheries council records, IP customary laws	IOC-UNESCO marine spatial planning guides
<b>1.3 Sustainable Finance &amp; Investment</b>	DBM budget circulars, LGU investment templates	PES scheme case studies	Coop financial records	World Bank Blue Finance framework, UNDP financing guide
<b>1.4 Human Capacity Development</b>	TESDA training standards, DILG capacity tools	Training evaluation reports	Barangay CRM training logs	FAO gender in fisheries training manual
<b>1.5 Public Awareness &amp; Engagement</b>	DENR IEC materials, LGU comms plans	Behavior change comm studies	Barangay campaign logs	UNEP marine awareness toolkits
<b>1.6 Maritime Surveillance, Monitoring &amp; Enforcement</b>	BFAR vessel monitoring data, PCG patrol reports	Enforcement effectiveness studies	Bantay Dagat patrol logs	FAO MCS guidelines

Element & Sub-Subheading	Government Sources	Academic Sources	Community Sources	International Sources
<b>2.1 Manage Cumulative Impacts</b>	DOT carrying capacity studies, DENR-ECC docs	Marine tourism impact studies	Tourism operator logs	GSTC sustainability criteria
<b>2.2 Increase Youth Participation</b>	TESDA enrollment data	Youth employment in tourism studies	Youth org membership lists	ILO youth employment toolkits
<b>2.3 Cruise Ship &amp; Coastal Tourism Impact Mgmt</b>	DOT cruise tourism policies, LGU port records	Port impact studies	Coastal resident surveys	IMO port waste mgmt guidelines
<b>3.1 Improve Reef/Demersal Fisheries</b>	BFAR stock assessments, MPA monitoring data	Reef fish pop studies	Fisher catch diaries	FAO EAFM guidelines
<b>3.2 Diversify Fisheries</b>	BFAR diversification programs	Alt species feasibility studies	Coop production logs	FAO diversification case studies
<b>3.3 Restructure Fish Landing/Trading Systems</b>	LGU market infra plans	Value chain analyses	Trader price logs	WorldFish value chain resources
<b>3.4 Reduce Post-Harvest Losses</b>	DOST post-harvest manuals	Preservation research	Storage facility logs	FAO post-harvest loss toolkit
<b>4.1 Incentives for Aquaculture</b>	BFAR incentive programs	Economic impact studies	Coop records	FAO aquaculture investment guides
<b>4.2 Community Participation</b>	DILG participatory guides	Community aquaculture research	Barangay project reports	UNDP aquaculture manuals
<b>4.3 Coral Farming &amp; Restoration</b>	DENR coral rehab protocols	Coral propagation studies	Local nursery logs	NOAA coral restoration toolkit
<b>5.1 Improve Knowledge Base</b>	NAMRIA coastal maps	Oceanographic survey data	Fisherfolk logbooks	UNEP marine data portals
<b>5.2 Strengthen Research Framework</b>	DOST research calls	Peer-reviewed marine studies	Citizen science datasets	IOC-UNESCO research guides

Element & Sub-Subheading	Government Sources	Academic Sources	Community Sources	International Sources
<b>6.1 Launch Blue Economy Lab</b>	DOST innovation hub programs	Incubation program reports	Startup pitch event records	UNDP Accelerator Lab resources
<b>6.2 Develop Blue Economy Investment Strategy</b>	NEDA investment plans	Impact investment studies	Business registry data	OECD Blue Economy finance guides