Lab Activity on Sustainable planning and management

 Environmental planning is an important tool particularly in improving the use of resources. It incorporates the context within which it requires us to assess, evaluate and monitor the possible outcomes and processes that may bring about impacts affecting our present and future generations. Planning is based on certain principles that promote its effectiveness, responsiveness and acceptability to its key stakeholders and which guide the preparation of any sustainable management plan.

 The management aspect of developing sustainable plans for the community must always be based on the decisions that people make for the environment is always for the best interest of the present and the future generations. We need to remember that the activities we plan for our particular ecosystem may have an effect on another ecosystem as everything in this world is interconnected with each other. We also need to remember that as most communities recognize the problems in their areas, it is essential that we allow communities to actively participate in the management of their environment. It is also important that we allow the stakeholders to have that sense of support and ownership of the plan on how they intend to address their problems in the environment and incorporate their sensitivities particularly on their needs, aspirations and culture because in the end it is the community who will be responsible in sustaining and protecting the said resources and their environment for their communities’ generations. The use of the resources in every particular environment is always bounded and determined by their biological capacity and ecological limits and hence there is a need to recognize that collaborative efforts in achieving our goal of conserving and protecting the environment sustainably is essential. The important task here is to be able to operationalize our measures such that we will enable development to proceed without compromising the environment’s ecological functions.

Materials: Secondary data from internet sources.

Activity Instructions: Each group will have to select a particular ecosystem that they would like to work on and identify a particular location where the ecosystems are situated. In each particular ecosystem that the group has chosen, the group will have to identify, examine and provide solutions to major issues and conflicts that may arise either on the allocation and utilization of those resources in the particular ecosystem chosen. Each member of the group will play an important role as a stakeholder in the community and an environmental planner. The group will have to go through a process to be able to produce an output that incorporates the needs of each stakeholder in the community where the ecosystems of concern are located. The stakeholders must be able to produce a sustainable management plan for their respective community for the desired ecosystem that needs conserving and or protecting. The following activities will have to be undertaken to produce the plan and for it to be presented in a Zoom meeting.

Activities:

1. Resource inventory and Stocktaking (Ecological Profiling) – the group must be able to present the primary information need in developing the sustainable plan for the desired ecosystem for the identified locality in the Philippines. Maps may be used as taken from the internet as secondary sources for the issue identification and for the identification of the ecological profile of the ecosystem chosen. The outline of the ecological profile of the chosen ecosystem must include the following information:

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| --- | --- |
| Item | Data/Information needed |
| 1. Population and Demographic Characteristics
 | Population, employment, income, education, health |
| 1. Biophysical characteristics
 | Location and boundaries, Resources, Hydrology and Climate, Natural and Geologic Hazards |
| 1. State of environment and natural resources in the given ecosystem
 | Sources and levels of pollution, Natural resources depletion and degradation |
| 1. Use and allocation of the given ecosystem
 | Use issues and problems, present use and allocation of resources in the given ecosystem |

1. Survey and Mapping of the subsystems – this activity will look into where the resources are situated in the given ecosystem and map the subsystems to determine where the respective areas are and the status of the extant subsystems.

Example: Aquatic ecosystems

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| --- | --- | --- | --- | --- |
| Subsystem | Location | Area (has.) | Present use | Remarks (i.e. economic, social, infrastructure, etc) |
| Tidal flats |  |  |  |  |
| Estuaries |  |  |  |  |
| Coral reefs |  |  |  |  |
| Seagrass beds |  |  |  |  |

1. Identification of problems and issues affecting the resources and or ecosystem – this activity identifies the priority issues and problems confronting the ecosystem. The ecological profile generated previously will serve as the reference in the identification of the problems and issues with regard to the ecosystem selected and the resource use and development. The priority issues and problems that must be considered should include both the biophysical (i.e. pollution, water quality deterioration, loss of endangered species, deforestation, etc. ), socio-cultural issues (i.e. poverty, resource use conflict, rapid population growth, etc.) and institutional policy (i.e. lack of enforcement of laws, lack of mechanisms to limit “free access” of some resources, etc.)

Example: Aquatic ecosystem

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Ecosystem | Description | Distribution | Use | Threats |
| Coral reef | Shallow, less than 50 m, clear waters etc. | Flatform reefs present | Ornament; fishery, tourism, etc. | Cyanide blast, muro ami fishing, El Nino, etc. |
| Seagrass bed | Reefal and non reefal, 20-30 m beds found in clear waters | Island and riverine types | Food production, fertilizer, fishery, etc. | Effluents, shell collection, anchor damage, etc. |
|  |  |  |  |  |

1. Formulation of goals and objectives – this activity varies from community to community depending on the needs, traditions and norms of the community. The formulation of solutions to the identified issues or problems aims to promote the sustainable use of the resources in the identified ecosystem and overcome the consequences of an uncoordinated sequence of project that may result in the resource degradation. Some examples of these objectives are listed below:
2. Provide planning guidance
3. Encourage participation
4. Restore damaged ecosystems, etc.

Example: Forest ecosystem

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| --- | --- | --- | --- |
| Conflict area/issues | Brief description of conflict/issue | Alternatives/ options | Recommended action |
| Settlements in forests | There are 10 families within the forest area engaged in kaingin  | a) Physically relocate families outside the forestb) Designate the settled area as a multiple use area within the forest and inform settlers of their responsibilitiesc) Close monitoring of the settlers in the forest area | Designate the settled area as a multiple use area within the forest area and inform the settlers of their responsibilities. The settlers should be made fully aware of the limited use conditions in the buffer zone and be trained on sound forest management practices. Physical relocation not socially acceptable.  |

Outline of the Report/Plan for Zoom Presentation:

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| Topical outline | Brief Description |
| 1. Introduction
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| 1.1 Rationale | State why the planning was undertaken and what its uses are and who are its users. |
| 1.2 Planning process | Describe briefly the major steps taken in plan preparation emphasizing the sectors represented in planning and participatory activities such as consultations, rapid assessments and workshops |
| 1. Ecologic Profile and Analysis
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| 2.1 General description of the area | Give a general description of the area, total land area, and population, current use distribution, current development thrusts in the area, show maps indicating the area  |
| 2.2 Resources | Show the distribution and resources in the area with the current uses and the map delineating where the resources are in the area. |
| 1. Sustainable Management Plan
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| 3.1 Objectives | State the long-term goal of the plan |
| 3.2 Major issues and proposed actions | Summarize the major issues on the ecosystems which were identified in the planning process. For each of these issues, indicate the recommended actions. Highlight in this section all pending issues (if any) |
| 3.3 Management Plan | Present the proposed use and allocation of the ecosystem into protection and production areas. Describe and point out in map new areas included in protected areas. The potential areas for environmental management must be indicated in the plan. Must show a matrix indicating the activities, identified roles and responsibilities of concerned sectors, time frame, and budget for operationalization and identified evaluation indicators per activity for every issue or problem assessed from the given ecosystem.  |
| 3.2 Major strategies | Present the major strategies to implement the plan including the recommended policy reforms that may be taken at various levels.  |