Lab Activity – Estimating the Carrying capacity of an ecotourism area in the Philippines.

Introduction:

Carrying capacity refers to the number of individuals that a given area can support within the natural resource limits without degrading the natural, social, cultural and economic environment for the present and future generations. The use of carrying capacity assessments have been used in planning and managing our environmental resources so as to guide decisions about the use allocation of such resources. This particular basic technique is widely used so as to help us define the capability of an area to endure the maximum level of development from tourism, agriculture, industry and infrastructure. As there may be differences between the activities, it is appropriate to define carrying capacity according to the specific uses. In this respect carrying capacity is site specific and use specific.

In this particular lab activity, let us look at doing carrying capacity assessments in an ecotourism area in the Philippines. In estimating the carrying capacity for ecotourism purposes, it is necessary to consider the ecological carrying capacity, physical carrying capacity and environmental carrying capacity of a particular resource in relation to the activities that users will benefit from the said resources. Ecological carrying capacity measures the number of tourists that an area can absorb before an ecological decline takes place. Physical carrying capacity measures the limits of the land area for construction of accommodation facilities, water supply, electricity supply and solid waste disposal. Environmental carrying capacity measures the capacity limit to preserve the environmental quality of the resource and the desirable expected activities by the tourist.

Materials: Manual from DENR on calculating carrying capacities, secondary data from internet sources.

Activity Instructions:

Develop a report indicating the group’s ecotourism carrying capacity assessment in the Philippines. The following are the activities expected from each assessment:

1. Identify a particular protected site or area;
2. provide a site description of the area;
3. Identify the aims of doing such assessment and the scope and limitations of the assessment to be performed;
4. Provide a physical description with maps and or photographs if applicable and an ecological and biological description;
5. Indicate the significance of the protected site in the Philippines;
6. Provide information on the socio-economic profile of the communities that reside near the protected site identified;
7. In the given assessment, identify the important ecological assets and the activities which tourists will undertake in order to enjoy those assets. At least 3 ecological assets and at least 3 activities must be indicated in the report; and
8. Calculate the environmental carrying capacity, physical carrying capacity and ecological carrying capacity in the specified protected site. Make the necessary assumptions deemed for each carrying capacity measure as needed.
9. Present the report in a ZOOM presentation with a maximum time limit of 10 minutes. Any incremental increase beyond the time means a deduction in the scores.