**Environmental impact.**

Ecosytems, landscapes and natural features are threatened by human activity.

Examples of this include;

* Agriculture. A diverse forest ecosystem can be threatened by agricultural monocultures such as rubber plantations, fruit orchards or arable fields. Grazing animals can also reduce biodiversity by selectively eating certain plants. Agriculture byproducts such as fertilizer runoff or animal waste can also threaten freshwater systems such as wetlands, Irrigation may make large demands on freshwater systems.
* Aquaculture. Mangroves may be cut down for prawn or fish farming. Prawn farm effluent can poison seagrass or other marine plants and animals and affect marine ecosystems such as coral reefs or bays close to the shore.
* Industrial developments. Land may be cleared for building factories or roads and railways to service them. Pollution from factories can affect freshwater ecosystems or pollute soil and air. Sources of water for washing or cooling may be needed
* Residential developments. Land is cleared for housing. New roads and electric powerlines are built. Poorly planned housing developments may pollute fresh and salt water ecosystems with sewage and detergents. Additional domestic water supplies are required.
* Tourism. Many aspects including the building of resorts, restaurants and other tourism services and direct visitor pressure on natural attractions, increased waste disposal issues and plastics pollution, need to provide tourist services like toilets, car-parks and footpaths. Tourism can also have a positive effect in increasing public awareness of vulnerable ecosystems and support for their conservation.
* Commercial or local exploitation of the ecosystem. Includes fishing, logging for timber, making charcoal, collecting forest products such as honey or mushrooms, hunting.

**Conservation.**

Seeks to mitigate environmental impact due to all the above. This is commonly done by designating an area as a National Park or by giving it an alternative special status such as a Forest Park, Royal Project or a wildlife reserve or no hunting area.

This may mean;

* Forbidding agricultural activities within the designated area and excluding non-native animals such as pets or domesticated animals
* Limiting farming, whether land or water based, in the zones near to the protected ecosystem, especially upstream or immediately adjacent.
* Excluding industrial and residential developments from the protected area or nearby. (zoning system)
* Regulating to prevent or reduce pollution. (Requires active monitoring and enforcement to be effective)
* Controlling or banning exploitation of the ecosystems by local communities
* Managing tourism.
  + Limiting volume through permit system or by charging entry fees
  + Controlling access. Limiting to certain footpaths, excluding motor vehicles
  + Establishing and enforcing boundaries.
  + Waste management and “no plastics” policies
  + Controlling car parking and location of services within the protected area
  + Reversing deforestation and other destructive processes by replanting/restocking

Compare the Conservation strategies at

1. Khao Chamao National Park
2. Kung Krabaen Bay Mangrove area
3. Kung Krabaen no-hunting area (Pink Rock)
4. Khao Wong Caves.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Location | Khao Chamao | Kung Krabaen | Pink Stone | Khao Wong |
| Status |  |  |  |  |
| Ecosystem type |  |  |  |  |
| Ability to absorb CO2 |  |  |  |  |
| Entry policy |  |  |  |  |
| Vehicle management |  |  |  |  |
| Waste management |  |  |  |  |
| Human impact and infrastructure in visitor centre area |  |  |  |  |
| Human impact and infrastructure in tourist accessible zones away from HQ area. E.g. footpath erosion, litter, used or abandoned structures |  |  |  |  |
| Extent of area inaccessible to visitors |  |  |  |  |
| Other comments |  |  |  |  |