Using two contrasting case studies, discuss management schemes

Business, Management



Using two contrasting case studies, discuss management schemes in fragile environments. A fragileenvironmentis when there the balance between climate, soils, vegetation, animal life and people could easily be upset and the ecosystem destroyed. In order to maintain a fragile environment dynamic sustainability needs to be established. An example of a fragile environment is the Serengeti National Park and Jau National Park. The Serengeti National Park is situated in the Tropical Grassland biome. This means that it has temperatures are high throughout the year averaging at around 280C.

There are wet and dry seasons due to the movement of the ITCZ (Inter Tropical Conversion Zone). In the Serengeti there are long periods of drought during the dry season and during the wet season convectional rainfall results in heavy downpours. In the Serengeti management schemes are essential in order to maintain the ecosystem. One way that the ecosystem is maintained is through monitoring and controlling the number of elephants and fires within the ecosystem. In the past fires and elephants have shaped the ecosystem.

They both affect the vegetation within the Serengeti as they can destroy it. Elephants eat the tress and fires burn them into ash. The elephants and fires need to be controlled because if there are too many elephants or fires then the number of trees in the Serengeti will decrease but if there is not enough of them then again the ecosystem will change as they control the establishment of trees. Fire is monitored and controlled through the Park

Ecology Department who ensure that there is enough fire but that they do not get out of hand.

The Serengeti is also managed by having a top-down approach to management where the park authorities co-operate with the Masai (indigenous people in the Serengeti). There is a game management strategy, which means that the Masai who live around the edge of the park are able to some controlled and licensed hunting of game so they do not hunt to much and endanger the animals there. This means that the hunting that the Masai do controls the herds, keeping them in balance with the grassland resources. Hunting can stop the tendency to overgraze the area that can arise if the number of animals grows too high. The Serengeti also uses a strategy when it comes to the use of land. In order to maintain a balance between crop production for the animals and the local people the authorities have zoned

the areas so that there is enough grazing land, and enough space in areas around the park for growing crops. The Jau National Park differs from the Serengeti as it has a double maxima of rainfall.

The National Park has very low annual temperature range with the temperature being between 26OC and 27OC throughout the year. The ecosystem contains three main vegetation types: dense tropical forest, seasonally flooded forest and dry shrub woodland. The Jau National Park also has management schemes in place in order to conserve the ecosystem. Jau National Park is one of the few conservation units in the Brazilian Amazon with a management plan that is both compete and being implemented.

To integrate local residents with conservation initiatives within the Park there are periodic meetings with residents to disseminate planning decisions, provide training for environmentaleducation professionals and research on the economic valuation of natural resources. The management plan has three phases: I: protection, minimizing of impacts and integration with neighbors; II: research into and protection of biodiversity; III: specific activities. Jau National Park has a zoning plan in place with four management zones: 1.

Primitive – where there is minimum intervention and maximum protection. Nothing is done to the area and it is left to have its natural vegetation and animal species. 2. Extensive use – some human activity. This is where small tribes of indigenous people are allowed to live their chosen lifestyle in the area. 3. Intensive use – already altered by humans. This is where farming is allowed. 4. Special use – the park services core – this is where hotels and buildings are with toilets etc.