

CONSTRAINTS TO PROTECTED AREA LAND USE PLANNING

- Traditional beliefs and ideas: People have their own traditional way of doing things which they are not easily willing to change from. This interferes with external land use plans introduced to them and to their areas.
- Lack of future or cause thinking and planning: i.e. Lack of consequences on use of resources which may be long term or short term e.g. in using or cutting down the forests they may not appreciate or understand the future consequences. Or people upstream may not be aware of the consequences of the use or diversion of the waters of river/stream downstream.
- Poor economic conditions/situations: (Poverty) Economic status dictates certain ways people think or do certain things or the way they make certain decisions affects the success of land use planning.

PROTECTED AREAS AND SOME LAND USES

- **Transport:**

As a land use transport includes roads, railways, water, paths (foot), tracks, trails etc. These increase accessibility within and outside the Protected Area. Transport has some negative impacts on Protected Areas as well as their surroundings which include,

- Noise
- Air, land and water pollution
- Visual interruption
- Trampling
- Increased water run-off
- Tracks encourage poaching

Quite often damage caused to Protected Areas are ignored or underestimated in the planning of the transport infrastructure. The difficulty of reconciling large road building programmes with the needs of the Protected Area are acute when large Protected Areas lie on routes of main centres.

Effects of transport on Protected Areas can be minimized by e.g.

- setting speed limits,
- use of sign posts,
- reducing road networks in the planning,
- developing policies such as a land use policy which is geared towards sustainability in the transport sector.
- Link transport planning to land use planning in order to reduce the need for journeys such as in private means
- Use of economic instruments like charges and taxes to promote efficient transport use and cleaner technologies.

Tourism:

Protected Areas contribute to regional development by attracting tourists to rural areas. In this way these areas are able to realise some economic benefits. Also with proper planning some of these benefits might accrue to communities where these Protected Areas are found. Tourism is an industry which with proper planning can show spectacular growth in an area. The Protected Areas can also contribute greatly to this growth. Tourism development in and around Protected Areas can bring numerous benefits to the surrounding areas by:

- Employment
- Improvement of infrastructure
- Markets for local products for e.g. foodstuffs, crafts etc.
- Etc.

Tourism also contributes to negative impacts on the Protected Areas and these include:-

- Range drives can disrupt animals
- Mass tourism may endanger the ecosystem e.g. greater trampling effect or greater release of substances not conducive to the environment.
- Mass tourism leads to increased demand on Protected Area resources
- Foreign habits may be introduced
- Disease transmission i.e. human to human and human to animal and vice versa'

Agriculture and Protected Areas:

Protected Areas offer useful services to the surrounding agricultural areas. These may include:

- Control of diseases and pests, Protected Areas harbour bees and birds which can help by feeding on certain pests e.g. birds may feed on caterpillars Diseases are controlled to some extent for example when vectors like aphids, rats, which spread diseases such as plague are fed upon, hence reducing disease spread.
- Control of floods
- Pollination and fertilisation of crops by e.g. bats, bees and birds. These organisms also help in dispersal of seeds.
- Regulation of micro climate. Most areas surrounding Protected Areas tend to have moist conditions.

Negative effects of farming in and around Protected Areas:

- Damage caused by wildlife such as monkeys, elephants, baboons etc.
- Danger of diseases that can endanger human life e.g. rabies, sleeping sickness, malaria etc. Therefore control measures must be instituted to solve some of these problems. Both Protected Area officials and local people must be involved. The disease threat needs careful control measures to avoid negative effects on the ecosystem e.g. spraying of certain chemicals may be used and can be a danger to the rest of the ecosystem.
- Danger of fires e.g. in bush burning and wild forest fires.

- Encroachment for farmland.
- Invasion of the Protected Area by farm weeds and domestic animals.

The general principle is that intensive agriculture and Protected Areas do not make good neighbours, thus the setup of buffer zones or intermediate land use between the two is required. Where there are sufficient natural or artificial deterring factors like swamps, rivers to human animal and incursions no further buffering is required. In general there is need to develop a specific buffer zone to reduce direct interference between Protected Areas and other land use zones.

4. Forestry:

Forestry refers to production and harvesting of forest products including the exploitation of timber. Forestry practices can have serious consequences on the forest ecosystem. Such consequences can be on wildlife (flora and fauna), soil and water. Different methods of harvesting timber may be employed e.g. selective logging which has less impact on the forest ecosystem. Strip logging can also be employed. It may be the best method of logging because it allows animals to shift to another part of the forest.

However where good practices are carried out sustainably, they can enhance conservation e.g. selective logging and setting aside some areas for conservation. Where need arises it may be necessary to use more environment friendly methods which do not have serious consequences on the ecosystem e.g. removing only old mature trees i.e. in a natural forest where trees are at different stages of growth.