PROTECTED AREA BUFFER ZONES:

A buffer zone can be looked at as an area adjacent to a Protected Area, where land use is partially restricted to provide an added layer of protection to the Protected Areas themselves while providing valued benefits to the community in the neighbourhood.

Two main functions of buffer zones:

- The social Buffering: Management within is to provide the needs of the people in the surrounding areas. Hence putting the needs of the people first. The objective of the Protected Area is not compromised e.g. can have some plants which are not useful to the animals but are needed by people e.g. eucalyptus, sisal, tea etc.
- The extension buffering: This includes an extension of areas of those habitats contained within the Protected Areas into the buffer zone. Certain activities are allowed within the extension buffering area e.g. hunting, selective logging, and serving as a natural ecosystem to serve the needs of the local people. This allows larger breeding populations of plant and animal species than would survive in the reserve alone.

Factors considered when determining the type and extent of buffer zones required around Protected Areas.

- We need to take into consideration the need for the buffer zones to serve other protective functions like soil and water conservation, fire break protection.
- The needs of threatened wildlife species for use of additional habitats outside the Protected Area or boundary.
- The need to contain wildlife species likely to move outside Protected Areas.
- The reasonable needs of the local people for grazing land, land for agriculture, forest products, wild game meat etc.
- Suitability of possible buffer crops for the particular land type and environmental conditions and the interests of local wildlife.

Therefore priority is given to resources within the Protected Area itself, needs of the local people and cash crops.

Buffer zone restrictions:

- Buffer zones should not have permanent structures in them.
- Avoid planting crops which are likely to encourage wild animals to forage outside the reserve.
- Certain dangerous activities are prohibited e.g. hunting of certain species of animals.
- Introduction of animal or plant species which are likely to threaten the Protected Area should be avoided in the buffer zone. Need to plant species like sisal, <u>Lantana camara</u>, tea
- Avoid creating buffer zones within the Protected Area.

Types of Buffer zones:

- **Physical buffers**: Where there is no land for development of a buffer zone, the boundary itself must serve as a buffer. This may necessitate creation of physical barriers e.g. fence, walls, spiny hedges, ditches, live boundaries such as bright trees, beautiful flowers etc.
- Economic buffers: Areas which may be set aside on public land for the establishment of economic activities which are beneficial to the people in the surrounding areas e.g. plantation crops, plantation trees, May also have other resources where other activities like game hunting are permitted for economic and nutritional needs of the people. Wildlife cropping may also be allowed in this zone. Establishment of such an area requires availability of land and consideration of the surrounding conditions such as population density.
- **Forest buffers:** May be composed of planted or artificial forests or natural forests. They are meant to benefit the people by providing forest products like timber, firewood, fibres fruits, medicinal plants etc.
- Traditional use zone inside the Protected Area: Inside some Protected Areas can exist establishments or settlements which were created before the area was made a Protected Area e.g. in Queen Elizabeth National Park and Mt. Elgon National Park that have villages and traditional use areas for salt mining and bamboo harvesting respectively. Such areas are traditionally used by people for food, building materials water etc. Such areas can be allowed in a buffer area to allow for continued use of the resources by the people. People may also use certain areas to perform certain rituals within Protected Areas and these may be regarded as a traditional use area. Some grazing and watering points are also used by the people but these activities must be controlled and restricted. If possible the following must be avoided in traditional use areas: settlement, grazing, hunting/poaching, bush burning and lumbering.

LOCAL PEOPLE AND PROTECTED AREAS/ COLLABORATIVE MANAGEMENT

In Africa and Latin America, Protected Areas were gazetted/created where they used to fallow their land for agriculture. Then the gazetting was sudden and done by legislative bodies. Local people were not consulted and no guidance given to articulate their views if they could benefit from the Protected Area. Gazetting was done by the Act of parliament on the advice of the Queen of England. Locals were considered to be backward and ignorant. People were kept away from the Protected Area at gun point. Yet they used to use these resources e.g. as sites for cultural practices, hence development of very negative attitudes towards Protected Areas resulting into habits like poaching and intentional killing of animals. Sometimes due to no alternatives, they poach and encroach to survive. They do not like the autocratic management.

Most Protected Areas are in remote areas and do not have infrastructure, thus the poor underdeveloped people must depend on the natural resources e.g. mats, fruits, reeds, papyrus etc. In such situations, the presence of a Protected Area makes their lives more difficult e.g.in Kapkwata in Mt. Elgon, people think the park is a hindrance to accessing resources and they do not seem to know where resources from the timber goes.

How to manage Protected Areas for sustainable development:

In the final analysis, Protected Areas become very difficult to manage. They can be expensive to manage. Boundaries need a lot of manpower to guard. Many times Protected Areas are misconceived to be strictly for conservation and protection only i.e. protection only. Protected Areas should however be managed for rural development. They should not be managed only for tourism purposes. Local people should also be taken into consideration and the principles of rural development should be followed. In integrated rural development, conservation must be tackled on aspects of development. Here conservation must not be treated as preservation.

Therefore local people should be the focal point of conservation with the aim of improving their livelihood. (Local people can also be used e.g. by politicians to disrupt the course of Protected Areas). Local people both directly and indirectly bear the costs of conservation of Protected Areas (e.g. when denied the use of resources) yet the benefits are collected by others e.g. the whole country when the revenue is taken to the national treasury. They should therefore also have direct benefits.

There is thus need to integrate Protected Areas in national land use plans. A system of national planning should be put in Protected Area land use planning so that the local people also benefit. Development should be done by the local people. In rural development, there is need to address all aspects of life in an integrated way. Sectoral programs should not be followed. Participation at local levels is necessary in order to empower local people to become active participants in their own development and they control their own destiny.

People can be empowered through:

- Education: With the intension of enlightening them
- Giving information: e.g. on benefits of Protected Areas, Value of Protected Areas, Creating
 awareness etc. This makes them change their perceptions of things and situations e.g.
 they should know where the revenue from Protected Areas is going and they are
 motivated to participate if revenues are shared with them.
- Organising workshops and seminars: To inform them
- Participation: Allow them take part in management and decision making e.g. if everyone
 perceived the management action as a source of income to all of them then no one would
 poach or encroach on the Protected Area. The community would not allow such negative
 action as management of the resources would be governed by societal norms.
- Financial empowerment

After the empowerment of the people, the other benefits will come on an incremental basis e.g. from empowerment to participation to sharing revenue and to collecting revenue from them.

Caution must be taken not to over-empower the people because they may want to take over the whole project. This may only be bad if other people will not benefit from the project e.g. the central government may not get revenues if the project is taken over by the local people.

However, dealing with local people in sensitisation and empowerment is not easy. There are always challenges in collaborative management. These include:-

- There are those who will not pick up the idea (i.e. change of ideas, culture and beliefs). In any development process, people are in groups of:-
- Innovators: These are few in society. They have a robust character and are risk takers. They are willing to take any development ideas.
- Early majority: These follow the innovators In development work, always involve the innovators and the early majorities.
- Late majority: They weigh if the risks are minimal before taking part in development. They always wait for I and ii to react then they follow.
- Laggards: These do not see anything good in any development activity.

Young people are usually good innovators. Therefore most development agents look for the young/youth. But local development should avoid discrimination. It should use women, youth, the poor, rich etc. Even the laggards should be included. Use I and ii to bring out participation of the laggards as well. They are a stimulus to society to achieve certain objectives of development. Children can also be innovators e.g. they can rear rabbits instead of hunting squirrels.

- Population pressure and poverty: Most of these areas have high population densities and they are very poor people. New approaches are therefore needed to manage Protected Areas with consideration of factors such as population pressure and poverty. People need to be brought in early in the decision making process to understand the value of conservation.
- Need to define appropriate incentives which will address conservation and rural development e.g. allowing people to harvest some resources e.g. firewood, place beehives in the forest,, share benefits etc. Caution must be taken that their benefits are not hijacked by the local elites e.g. the Chairman of the committee will benefit on behalf of the people in such ways as always going for educational seminars alone on behalf of the local people.
- Lack or loss of authority: e.g. lack of authority from the chiefs or L.C.s will affect success
 of land use planning introduced by such authority. This is brought about by lack of trust in
 such people in authority.
- Land may actually be allocated to other users. So it is difficult to convince such a user to change to a new use in the land use plan introduced.

•	Individualistic social structure: People tend to think about themselves rather than the societal or community needs where people have to sit and plan together. This can be a big drawback when you are planning for better utilisation of the land or the resources.