

SOCIAL ISSUES IN ECOLOGICALLY SENSITIVE AREAS

1. Development projects undertaken in areas where biodiversity is unique or whose ecosystems are sensitive, such as tropical forests, coastlines and shorelines may cause significant social change for people whose livelihoods and culture depend on these habitats. These changes may in turn include unacceptable environmental risks. For this reason, environmental impacts assessment should identify possible social changes that could have positive or negative effects on the environment, formulate measures to prevent or mitigate the fight against the negative effects and increase positive impacts in environmentally sensitive areas.

Relationship to Bank Investments

2. Some communities occupy environmentally sensitive areas for thousands of years, while others have settled there only recently. Because of the fragility of these resources, human populations of these regions are normally modest and have often not increased in size or density over many centuries. Due to their small number, these people do not pose a threat to environmentally sensitive areas to the extent that their production methods are sustainable and based on resources scattered over a large area, in addition, they were able to keep poachers and intruders of all kinds out of those areas.

All these factors vary for each of the main types of environmentally sensitive areas. The environmental impacts assessment should therefore assess the social changes that are associated with a development project and that may transform access to resources as well as operating modes practiced in the areas discussed below.

Forests

3. BOAD estimated that forests that resides its Member States are sensitive ecosystems. The sensitivity of these forests refers to the fact that rainfall is more irregular, and the land that are not protected by vegetation, even in low slope, are subject to severe erosion. In areas prone to erosion and soil degradation, regeneration of these forests due to their exploitation requires controlled conditions and significant costs.

4. Human populations living in forest areas depend on agriculture, gathering of forest products, fishing and hunting for a living. They collect resins, seeds, nuts, roots, fibers and medicinal products of all kinds relate their cash income.

Social changes that a project results in within these areas may lead to displacement or changes to policies governing forest and other resources, in turn, trigger changes in the livelihoods of forests people or lead to new settlements.

Coastal Marine Areas

5. Coastal zones are areas whose organic production is among the richest in the world. In West Africa, they are constituted of beaches, dunes, estuaries, mangroves, wetlands and coral reefs. Estuaries, mangroves, marshes and other wetlands provide breeding and nursery grounds and habitats for many species of fish and crustaceans of commercial importance and consumed worldwide. These areas are particularly sensitive, since the food chain and life cycle of the species that live there, both complexes, are easily disturbed even

if only some of them are affected by the changes occurring in the natural environment. Thus, the discharge of urban and industrial waste, the flow of agricultural effluents containing chemicals that, a priori, could damage a relatively small part of the area may, however, affect the entire ecosystem.

6. Projects that may have adverse effects in coastal zones are usually related to aquaculture, tourism, improvement of port facilities, production of electricity from dams and power plants, effluent discharge or industrial fertilizers and pesticides, and finally, poor watershed management. The abundance of marine resources in certain seasons and their rarity in others result in a cycle of "boom and bust" feature of many fishing communities. For this reason, coastal communities are accustomed to exploit not only the sea but also the beaches and inland through farming, hunting and gathering. Nearly half of their food and income may come from activities on the beach and inland. Women run the villages while the men work at sea or in inland during the heights of boom and bust periods. Social change associated with development projects in these areas include access to one or more sub-regions restrictions, overexploitation of certain species to meet the new market demand, displacement and arrival of new populations. Adapting to these changes often result in additional environmental impacts elsewhere along the coast.

Rangeland

7. Areas where grows natural or semi-natural vegetation and which provide habitat for livestock and wildlife are defined as rangeland and can be either arid or semi-arid, bush, uncultivated land, savannas or grasslands. These areas are characterized by low population density that moves over large areas and

whose existence is largely based on herding and complex cultures particularly adapted to the harsh conditions of drought-prone regions.

8. In general, projects that have an impact on the land include dry land farming, forest planting, irrigation, settlement and the creation of human settlements, farming, dairy farming, tourism or establishment of natural parks. As these areas are often seen as little exploited, human impacts of these projects are not immediately perceived. Human populations are mobile on a territory which often includes marginal lands with limited resources that generally will not be used which nevertheless become indispensable during drought. These resources reserved for famine period will be consumed only if the population and livestock must turn to them. Contrary to what we used to think, the ownership of these lands can be very concentrated and often, a small percentage of families control most livestock. Many communities have a tribal structure and are subject to access to water sources and pasture governed by ancient rights. In other cases, these rights are controlled by certain families powerful enough to dominate others. Social changes resulting from development projects on these lands result lead in a deterioration of land-population ratios, worsening income inequality, loss of land resulting in the displacement of people and the health risks due to conversion of subsistence products such as milk, food for urban consumption. The settlement of pastoralists always results in serious environmental degradation and impoverishment of those affected.

Zones of Unique Biological Diversity

9. Many areas rich in biodiversity were, until recently, isolated or protected areas from development. All species found there and their ecological role may be poorly known in scientific terms. For example, of all ecosystems,

tropical forests are habitat to the greatest variety of plant species, but only a fraction of them have been identified and studied rigorously and evaluated for biological, medicinal or economic interests they represent.

Sensitive areas such as forests, coastlines and shorelines as well as rangeland can also be seen as remarkable areas for their biological diversity, which are unique habitats for native plant and animal species and fulfil their ecological roles at little or no cost. Projects likely to lead to social changes that may affect these areas are generally those which open up remote areas to exploit resources or create new settlements. In these circumstances, the role of traditional knowledge of indigenous peoples is essential, both to mark out areas distinguished by their biological diversity to determine the issues raised by the protection of endangered species.

Guidelines for Environmental Impacts Assessment

10. Environmental impacts assessment must assess the changes that the project may bring in pressure on natural resources in ecologically sensitive areas. A first step is to classify the human population encountered in and around the area. There are generally three categories of communities that exploit resources: people who have lived there for several generations, those who are newly established and non-resident populations that are entering only to extract or periodically use some resources. Each category can be divided again into sub-categories.

11. Social groups who have lived in ecologically sensitive areas for generations are aware of the constraints that their activities have on the environment and could therefore develop modes of stable production, low energy consumption, sustainable yield well adapted to the environment and compatible with modern methods of environmental management.

We should design projects to increase the efficiency of the exploitation of natural resources by changing stable and sustainable production modes that have negative effects on communities and the environment.

12. Modes of stable production, with low energy consumption and with sustainable performance are based on knowledge passed on from generation to generation, with valuable lessons on natural resources of the area and the way to manage them.

Environmental assessment impacts can be improve, by taking into account local knowledge on flora and fauna, ocean currents, hydrology, soil and any other aspect of the natural area environment that may affect the project. Environment impacts assessment can help to curb the negative effects assuming that wherever stable production modes have been developed, most of the operating practices of natural resources being environmentally friendly.

13. Recently installed inhabitants in ecologically sensitive areas constitute another social group. Unlike those who always live there, these new people know very little about the strain on the environment and sustainable resource use practices. As a result, they may occupy areas for unsuitable production methods they employ.

14. If these agricultural activities fail, the settlers might make most of their income from logging, often they are used by neighbouring farmers or ranchers looking to expand the cleared land they farm. Environment impacts assessment will determine the effects of occupation, institutions and social conditions that are responsible, and propose alternatives that mitigate these effects.



OPERATIONAL GUIDLINES OF BOAD

15. Non-residents who practice mining activities or exploitation of certain resources include suppliers that supply urban areas in firewood, forest concessionaires, mining and oil companies, hunters and poachers, tourists, electricity companies, livestock and plantation enterprises. With few exceptions, most of the activities in question are carried out by owners who do not live on site.

16. Development projects having a major impact on forests generally involve construction of roads, which causes clearing of land and new settlements, clearing space for mining operations, agricultural or industrial activities and forest plantations; logging to produce building materials and paper, forest products processing, wood industries and production of wood, not to mention the projects that prohibit access to forest areas with commercial purposes or in order to create a reserve.