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ECONOMIC COMMISSION FOR AFRICA

Seminar for lawyers on Development of
Environmental Protection Legislation
in the ECA region

Addis Ababa, 29 September-3 October 1980

COMMISSION ECONOMIQUE POUR L'AFRIQUE

Séminaire de juristes sur l'élaboration
d'une législation relative à la protection
de l'environnement dans la région de la CEA

Addis-Abeba, 29 septembre - 3 octobre, 1980

DISCUSSION LEADERS ANNOTATED PAPERS ON LEGISLATION FOR:

- a) Marine and coastal zone protection
- b) Natural biological resources
- c) Wildlife
- d) Mineral exploitation
- e) Pollution control
- f) Environmental education
- g) Human settlements, cultural heritage and land use

Documents annotés relatifs à la législation pour:

- a) Protection des zones maritimes et côtières
- b) Ressources biologiques naturelles
- c) Faune et flore sauvages
- d) Exploitation des ressources minérales
- e) Lutte contre la pollution
- f) Education et protection de l'environnement
- g) Etablissements humains, patrimoine culturel et utilisation des sols.



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ANNOTATED GUIDELINES FOR THE SECTOR ON NATURAL BIOLOGICAL RESOURCES
(EXCLUDING WILDLIFE) LEGISLATION

In discussing this sector the following scheme is proposed :

Part I : Man, environment and development

Part II : What constitutes natural biological resources

Part III : Natural biological resources in Africa and their importance to development needs

Part IV : Treatment given to natural biological resources in Africa

Part V : Proposals; A framework for natural biological resources legislation in Africa.

Part I : Man, environment and development

- Man's environment consists of the aggregate of the physical and biological factors and situations which influences his life and of all social and cultural conditions which surround him.
- The relationship between man and the environment is therefore a special one. In the course of his development man has progressively responded to the challenge posed by the environment. Initially he was at the mercy of the environment but later commandeered technology to master it.
- Relationship, one of environmental challenge and response :
 - man, the cave and forest dweller, dependent on the environment;
 - use of fish and meat as part of man's food and hence making of weapons like spears and clubs for hunting;
 - domestication and breeding of animals;
 - cultivation, tillage and irrigation;
 - development of technology.
- It was therefore not surprising for the UN Conference on the Human Environment to proclaim :

"Man is both creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of the human race on this planet, a stage has been reached when, through the rapid acceleration of science and technology, man has acquired the power to transform his environment in countless ways and on an unprecedented scale. Both aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights - even the right to life itself."

- Man has the reason, will and organization all of which he utilizes in facing the challenge posed by the environment. He is able to generate change on the environment consciously. Animals may destroy the vegetation of a locality without knowing what they are doing. On the other hand, man may remove it wilfully in order to sow field crops. Sometimes man destroys it wilfully for short-sighted benefits.
- Important aspect in the relationship between man and the environment is the direction which the change generated on the environment takes. The change, may be for the betterment and enhancement of man's opportunities or it may be worse for short-sighted benefits.
- The need for measures and controls in the protection and preservation of the environment is therefore obvious. Planned utilization of the resources is another important aspect in this regard.

Part II : What constitutes natural biological resources

- Environment is an interrelated subject. To consider protection and preservation of one sector of the environment it is in most cases necessary that other sectors be taken into account. Thus to consider marine environment it sometimes become necessary that river pollution be examined. The same applies when considering land use in which case invariably natural biological resources have to be taken into account.
- In protection, preservation and utilization of the resources offered by the environment sectoral implications cannot be discounted due to the need for a systematic scheme of carrying out these three tasks.
- Natural biological resources constitute those living organisms which have economic value and on which man has not spent substantial energy as part of their independent natural growth.
- The resources covered in this sector include :
 - FORESTRY;
 - FISHERIES;
 - WILDLIFE;
 - OTHER SMALL BIOLOGICAL ORGANISMS.

Part III : Natural biological resources in Africa and their importance to development needs

- There are several natural biological resources in Africa which are important to the economic development of the continent;

- Forestry and vegetation cover generally: Africa has a wide range of forestry ranging from tropical rainforests to the Mediterranean vegetation with its ever green species;
- Importance of forestry: Source of timber, charcoal and rubber, wattle, etc.; as part of vegetation cover it is important to maintain ecological balance; conservation of soil and prevention of soil erosion;
- Fish: Africa has plenty of fish of different species both marine and fresh water. Our concern is with the latter;
- Importance of fish: Fish is important in the food economy as a source of proteins, the amount of protein in fish being about the same as in lean meat;
- Small biological organisms: Bacteria and fungi are important for biological control of plant and animal diseases;
- In this sector emphasis is made on forestry and fish.

Part IV : Treatment given to natural biological resources in Africa

- Destruction of vegetation cover; accounts for the loss of soil through erosion. Such destruction impairs the soil holding quality of the vegetation making the soil vulnerable to erosion and other forms of depletion;
- There is an African country where it has been estimated that in the period 1964-70 an average of 60 ha lost forest cover due to agricultural settlement, woodcutting for domestic fuel and charcoal burning;
- Unplanned harvests of fresh water fish stocks;
- Pollution of rivers and lakes leaving effects to fish as well as other biological resources present therein;
- The need for preservation and protection as well as planned utilization;
- Plants must adjust to each set of natural conditions in the form of the physical environment - temperature, light, moisture, soil, air relations - which account for well over half of all disorders in plants;
- The same applies to other natural biological resources;
- Efforts should therefore be directed to adapt plants, etc. to withstand tough physical conditions and protect them from unplanned and wanton destruction.

Part V : Natural biological resources legislation

- Environmental law; rules and regulations that are aimed at protection and preservation of the environment as well as those aimed at planning utilization of resources that are abundant on the environment;
- It should not be assumed that such rules and regulations are absent in Africa. These are present. But Research should be carried out to indicate where these are not present and how best they can be made to operate effectively.

Legislation for forest and forest produce

- Legislation for the conservation and utilization of forests and forest produce;
- Creation of forest reserves;
- Prevention of cutting, removing, setting fire, clearing and cultivation in forest reserves;
- Licensing system for:
 - Working and removal of forest produce;
 - Prescribing areas in which all or different kinds of produce may not be removed;
 - Regulating the use of land in forest reserves;
 - Regulating entry of persons in forest reserves, etc.;
- Legislation for conservation of soil and protection of natural resources;
- Regulations on soil conservation/prevention of the adverse effects of soil erosion on land;
- Regulating clearing land for purposes of cultivation and gathering natural produce generally;
- Regulations for afforestation;
- Protection of vegetation in game reserves where game is protected by prohibiting causing fires, cutting, burning, injuring or removing trees, bush or seedlings.

Legislation for fisheries

- Such legislation should be geared towards protection, conservation, development, regulation and control of fish and fish products;
- Legislation to regulate:
 - fishing;
 - collecting manufacturing or gathering fish products in rivers and lakes.
- Licensing system also proposed:
 - regulations for issue, suspension and cancellation of licences;
 - terms and conditions upon which licences should be utilized;
 - prohibiting use of certain fishing gear ;
 - prohibiting the use of explosives.
- Legislation for water utilization and control to prevent pollution of waters since this causes substantial injury to fish and other natural biological resources in rivers.

Framework for regulation

- Parliaments may enact laws for the protection, preservation and utilization of natural biological resources;
- Acts of parliaments may not deal effectively with all situations. Parliaments should enact legislation containing general regulating provisions leaving regulation of specific matters to designated authorities;
- Subsidiary legislation should remain one of the principal ways through which conservation, protection and utilization can be effectively carried out;
- In this case institutional mechanisms are important and therefore responsibility should be placed on those organs which are entrusted with planning in this sector.

Policy for wild fauna in Africa:
legal aspects

by

the Legal Office of FAO*

1. In continuation of its series of legislative studies, the Legal Office of FAO has prepared a publication devoted to the fauna of Africa (see annex). The work is based on a sampling from countries belonging to various regions of black Africa whose legislation is of Anglo-Saxon or French inspiration. It has not, unfortunately, been possible to include present legislation from Portuguese-speaking countries, which, except for certain ad hoc texts, is in course of elaboration.
2. Comparison of the texts selected shows two distinct legislative "generations". The first extends up to the late 'sixties; the second starts in the 'seventies. They may be distinguished one from the other by their approach to the relation-ship between man and the animals. The law-makers of the first "generation" had had as their principal concern to ensure the survival of species, particularly by reducing the pressure from hunting - or, one may prefer to say, they were essentially "protectionist". (Incidentally, they endeavoured to secure for the State a revenue from taxes on hunting and to avoid wastage of the meat). The law-makers of the 'seventies, while retaining the principle of protection, have opened the way for the rational exploitation of the fauna.
3. The distinction between protection and management must not be exaggerated. It will be seen that in reality the two ideas are substantially complementary. The cost of protection is going to rise with the economic development of Africa. To defend cultivated land against the ravages of animals, reserving for these vast zones which may not be used for any other purpose - in a word, to organize the co-existence of man with the fauna - will appear as an ever-increasing burden as land development and the standard of living improve. In this perspective, the development of the fauna with a view to obtaining equitably-distributed benefits would be the condition of its survival. It is a question of taking advantage of the available livestock for human consumption, giving priority to the local population and no longer to the opportunists in search of skins, ivories and trophies, and of enhancing the cultural and touristic appeal of the wild fauna - in other words, to obtain optimum benefit from natural assets.
4. Obviously, such an orientation is not without danger. It could lead, in the long run, to the extinction of species which are without economic value, and to the domestication of the others. This is why management must include protection.

* This note is a résumé of a study prepared by Mr. Christian du Saussay, consultant to FAO, on legislation for fauna in Africa (in press).

5. On the legal plane, one can see that the concern with exploitation is not absent from the oldest texts. Furthermore, these could well be used to implement a policy of management. Here, the administrative methods and the application of the laws count rather than the provisions themselves. The type of question dealt with by the legislation is always identical. It is, on the one hand, a question of knowing to what degree and how the animals can be hunted or captured, and, on the other, to administer the parks or nature reserves. In other words, the legislation establishes the legal régime both for fauna and for the protected areas concerned.

I. Legal régimes for fauna

6. The points on which evolution has been most evident are the classification of species, the conditions attached to hunting rights and the traffic in animal products.

7. On the subject of classification of species, one can make two main observations: the number of categories of animals envisaged in the legislation tends to diminish, and the classification in these categories to acquire more flexibility.

8. Initially, one identified these species which were completely protected, those which were partially protected, the ordinary game, the vermin. The remaining animals were ignored by the law. The vermin were the first to disappear. The systematic extermination of particular species is no longer pursued, at least as far as the higher animals are concerned, the very notion of "vermin" having lost all significance in the scientific world.

9. The system of limiting the number of animals to be slaughtered during a hunting season, formerly a characteristic of the partially-protected species, has been extended to ordinary game. These two categories thus tend to merge into one.

10. The classification procedures have, moreover, acquired a greater flexibility, notably by the possibility given to ministries of including new species in the existing lists, without this possibility being limited to mammals and birds. Every animal is thus eligible for protection by the law when the need makes itself felt.

11. The right to hunt is confined within increasingly restricted limits. Customary hunting rights, which are not covered in many texts, tend to become extinct. As to licences, their evolution is such that one can no longer speak of a true "right to hunt" but of precarious authorizations the expediency of which is judged by the administration.

12. The products from fauna have been subject to regulations aiming to control the pressure from hunting as well as the trade in, and marketing of, skin and trophies.

13. The emphasis is laid on imports and exports. Certainly the control over these should discourage the heavy poaching which is rampant in Africa. It is therefore now common to submit the traffic in trophies and live animals to the double control of the exporting and importing States, as called for by the Washington Convention (CITES).

14. Meat from hunted animals is generally the subject of provisions attempting to avoid its wastage but prohibiting or restricting its sale to the public, in an effort thus to discourage "commercial hunting". However, if it is the intention to increase reliance on game for human consumption - particularly by marketing preserved products, it would be appropriate to provide a legal framework for these activities.

15. Finally, to maintain a great density of animals cannot be socially and economically tolerable without compensation for those who bear the brunt of it. Some legislation therefore provides for damages and for formulae allowing the users or owners of the land to share the benefits brought by the fauna. Besides the re-allocation to local institutions or groups of part of the revenues from the fauna, the encouragement of "game ranching" in the legislation of Kenya may be noted.

II. Protected areas for fauna

16. The institutions of parks and reserves and their design have varied little during recent decades. The range of types of protected area is narrow: national parks, reserves and wildlife sanctuaries. The admission of the public to national parks and their integration in the tourist industry is a well-established fact. The major problem in the protected areas of Africa is that of the illegal presence of populations within their boundaries. This seems to be a result of administrative weakness rather than of inadequacies in the law.

17. Two observations may be made about protected areas:

- (i) Improvements could be made in legislation by extending the possibility of administrative controls over all events which, although occurring outside the confines of the parks, have nevertheless direct effect on these (hunting on the periphery, changes in the water régimes of the river basins due to deforestation etc.).
- (ii) It would be desirable to supplement the system of protected areas by a network of institutions of lesser scope which would allow for more comprehensive protection, of fauna in particular and of nature in general. It would be altogether deplorable if the protection of nature were limited to certain areas, leaving the rest of the territory exposed to uncontrolled development. In other words, environmental protection must be organized (through detailed rules, zoning legislation and land-use planning) in the whole of the national territories, particularly around urban communities.

ANNEX
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Annex II

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Mineral resources development and environmental protection in the African region

1. The Lagos Plan of Action for the implementation of the Monrovia Strategy for the economic development of Africa adopted by the OAU Heads of State and Government during April 1980 recognizes that the main objectives of mineral resources in the socio-economic development of Africa are to supply the Continent with the necessary goods and services for the improvement and sustenance of the living conditions of its people. Thus for the purpose of this note, the aims of mineral resources development in the African region would be the improvement and sustenance of the African human environment.
2. The Lagos Plan of Action further notes that the hitherto "dangerous over-dependence" on the export of mineral raw materials of Africa had stagnated the Continent economically. Thus the Plan directs member States to increasingly use their mineral resources internally in such other development sectors as food and agriculture production; transport and communications; industrial development; energy development; etc., so that the mineral production of the region can contribute towards a regionally located self-reliant and self-sustaining socio-economic development process.
3. From the above one could conclude that in any African country where mineral resources development will not urgently and increasingly be integrated with the other economic development sectors of both the country and the region at large, so that the mineral development sectors are supported by the other sectors and the latter supported by the former, then this country would be considered as a major threat to the human environment in the region, as it would be impeding the efforts of African countries towards the improvement of the African man's environment.
4. Hence, one of the major considerations by the "Seminar for Lawyers for the Development of Legislation for Environmental Protection in the ECA Region" should be how to bring the new African mineral development strategy to African governments decision makers and planners in various sectors of development so that mineral resources development activities in the region respond to the requirements of the Lagos Plan of Action and the eventual improvements of the living conditions of the African people.
5. In the course of developing its mineral resources as directed by the Lagos Plan of Action, the African countries will increasingly face various other environmental problems notably: the preservation of local ecosystems; keeping pollutants from mineral activities to the minimum while avoiding excessive

production costs; reclamation or restoration of disturbed areas; recycling of minerals whenever possible as these are non-renewable; the provision of education on environmental matters for the people of Africa so that various development issues and problems can be appreciated, etc.

6. The environmental factors referred to above in the sector of mineral resources development are neither exhaustive nor unique to this particular sector. Indeed, they could equally be applicable to other natural resources development efforts.

7. The effective management of these environmental factors, however, demands that they be taken into account right from the planning stage of mineral resources development so that measures to protect the African environment are designed and implemented during mineral development activities.

8. Summarizing what has been said above, one would suggest that among the important aspects to be considered by the seminar on legislation for environmental protection in the African region in the sector of mineral resources development would include:

(a) the conditions for the integration of the African minerals sectors with the other economic sectors of the African region both at the national and regional levels;

(b) measures for the reduction of potentially harmful effects of the development process upon the environment; and

(c) the education of the people of the region at all levels so that they accept and include the two aspects mentioned above in the planning and execution of socio-economic development activities in the region.

9. Generally, as regards environmental aspects of mineral resources development in the African region, the existing mineral development legislation in many of the countries gravitate predominantly on the maintenance of safe working conditions around mining and mineral processing centres. Normally, the ministries responsible for mineral resources development provide working safety standards within Mining Codes of Mining Regulations and these are implemented by each mineral development centre under the supervision of Government Agencies such as Mines Departments.

10. The seminar under reference should thus suggest appropriate measures for the broadening of the scopes of Mining Codes and Regulations for the African countries, in the manner proposed above, so that environmental aspects of mineral resources development outside the mineral development centres are given their rightful place.

(d) Pollution legislation in the Africa region

(Annotated agenda for discussion)

The following are items selected for discussion by the above panel. The list is not exhaustive and, at the discretion on the panelists/participants, more items and questions may be added.

1. Definition of pollution

The purpose of this item is to establish the scope of the concept. Discussion to include, inter alia, what constitutes the injury of pollution? To what extent must the injury occur to justify intervention by law? What is the value of the concept of de minimis to the definition? At times it is argued that the emission causing damage need to be only to an "appreciable extent" but others might argue that there must be "substantial injury" for purposes of the definition. Is identification of the perpetrator (by man, etc.) important for the definition?

2. Value of environmental quality standards

What is the public policy on environmental quality, and is this generalizable, in Africa? Globally what are the types of pollution problems in Africa and what purpose is environmental legislation supposed to achieve vis-a-vis the problems? What target of pollution should be used to assess pollution sensitivity vulnerability: human beings or other natural resources?

3. Responsibilities of the "Developer"/"Industrialists"

The focus is on those who undertake activities that might pollute. And the purpose is to package legislations that will protect the environment from pollution. In this context, protection refers to measures that will prevent actual pollution from occurring rather than laws relating to fixing of liability ex post facto. Discussions should assess the value of "environmental impact assessment" before "development" commences, as a tool for protection of the environment from pollution. Further, the discussions should carefully appraise the experience of the countries which have deployed environmental impact assessment and then critically examine its relevance and appropriateness to the African region. What are the other options?

4. Monitoring of environment for pollution

Monitoring of the environment both for establishment of baseline information before pollution occurs, as well as to determine when pollution has occurred, may be a regulatory mechanism. But is it susceptible to legislation?

5. Incentives to induce compliance

Environmental laws will prohibit discharge of polluting substances or energy into the environment (water, air, soil, vegetation, etc.). Under this section the discussions should focus on laws requiring the public by legislation, or other agencies by other means, to provide facilities, activities or industries that encourage compliance with the regulations. These may include, inter alia, laws providing for alternative modes of waste disposal; rewards for proper disposal or recycling of wastes; and industries utilizing the wastes.

6. System of administration

The pollution control legislation require personnel and the infrastructure for its administration: activities such as monitoring, survey and investigation of air, water, soil and noise pollution. This is exclusive of the system which enforces the sanctions.

7. System of enforcement

Discussions here will focus on the system by which the government ensures that the environmental quality standards are adhered to. To some extent, the panel should appraise the value of monitoring under (4) above, as an enforcement mechanism. To another extent the panel should focus on other systems for policing adherence to the rules. The panel should also appraise the force of administrative decisions and circumstances warranting appeal to judicial courts.

8. Choice of sanctions

Discussion to appraise the options sanctions that are available, and among them those that are likely to elicit the desired result: prevention of pollution and protection of the environment. It has been argued, for example, that sanctions such as "polluter pays" or "tax levy for pollution load" are frequently ineffective because industrialists often agree to pay then pass the costs to the consumers.

9. Use of technical experts and evidence

Pollution is a highly technical problem but is there a need for special legal provisions relating to technical experts and their evidence or is this to be treated as is generally the practice in law of evidence? It is probably necessary that the court itself be composed of lawyers as well as experts from the natural sciences?

10. International aspects

(a) The panel should examine here the legal problems of trans-territorial pollution as well as pollution in other areas beyond the limits of national jurisdiction. Is the definition of pollution under municipal law adequate for purposes of the international environmental law? Is the scope of liability similar for national responsibility at the international plane as in individual responsibility at the municipal plane? (Is state liability to be based on negligence? Intentional conduct? Strict liability?).

(b) Settlement of disputes: Discussions on choice of applicable law and fora.

To what extent should the national position on international regulations be stipulated in the national environmental legislation dealing with prevention of pollution?

11. Education

The doctrine that ignorance of the law is no defence in a proceeding was based on the assumption that crimes were malum in se, so obvious that one ought not plead not to know. But the permutation of laws today is such that the presumption ought to be backed by deliberate education of the public as well as enforcement officer as to the law and its purposes. But how can a legislation on pollution best provide for education on laws leading with prevention of pollution?

12. Comprehensiveness of the legislation.

The panel should discuss how comprehensive the national legislation to control pollution should be. What are the specific aspects that deserve to be left to other administrative regulations?

13. 14. 15. Other items.

HUMAN SETTLEMENTS, CULTURAL HERITAGE AND LAND USE LEGISLATION IN AFRICA

By Professor L.R. Vagale

A. Background

1. Human Settlements are the most precious possession of mankind. They have, throughout history, served as cradles of civilizations and cultures. In their origin, growth, decay and rebirth, settlements have truly reflected the spirit of their epochs. The city is one of the paradoxes of history. It is the seat of government, centre of learning, hub of economic activity, focus of modernization and the core of innovations. At the same time, the city has tended to become vast, bulky, complex and devoid of human scale, social character and cultural heritage. The growth of the city has often occurred at the cost of rural settlements and fertile agricultural land. It has become the centre of political unrest, cultural erosion, economic distress and physical degradation. The city, which was meant and built for the people, seems to have been invaded by the automobile and dehumanized.
2. The African continent has had an age-old and rich heritage of both rural and urban cultures, in the past, as evidenced by such historic and great settlements as Kano, Sokoto, Bamako, Addis Ababa, Tunis and Alexandria. During the colonial era, the capital cities, industrial townships, port towns and transport nodes, built essentially to serve the needs of colonial rulers and educated elites, grew fast at the cost of indigenous towns and villages. In the post-colonial period, developing countries in the African Region witnessed drastic and dramatic changes from poly-ethnic tradition to contemporary sophistication; tribal cultures to urban ways of life; primary occupations to diversified and gainful employment; and from subsistence economy to cash economy. The exodus of young and energetic people from rural to urban areas and the growth of cities are the major phenomena to be reckoned with.
3. The contemporary African city has failed to keep pace with massive urbanization. Under the stress and strain of urbanization and modernization, the African city has been growing in the most disorderly manner, with all the disadvantages such as gross deficiencies in housing, water supply, energy, sewerage, transportation, education, health, recreation and other utilities and services. It is now characterized by urban decay and suburban sprawl, slums and squatter colonies, traffic congestion, tax delinquencies, social disorders, cultural erosion and inefficient local administration. The major urban centres of Africa such as Lagos, Nairobi, Dar es Salaam, Douala, Abidjan and Accra bear ample witness to these phenomena.
4. To restore order to the African city, it is necessary to undertake urban and Regional Planning, which includes Land use Planning and aims at creating a healthy and efficient environment for living, working, recreating, communicating and worshipping. The ultimate objective of all development endeavours is to improve man's environment and quality of life.

B. Land as a finite resource

5. Land is a precious endowment and a basic resource. It is the platform and the stage for all human activities. All objects - living or inert - lie in a land cradle. Each article or effect must stand somewhere on land. It is a resource which is limited in extent and exhaustible. Ownership of land and buildings is a symbol of social status, a means of social security and cultural pride and a hedge against inflation.

6. Though most of the African countries are fortunate in having a high land, man ratio, the rapid population growth and the increasing tempo of urbanization have led to excessive pressure on land and subjected it to competing and conflicting demands and uses. This necessitates the ordering and rearranging urban land use structures and settlement patterns, with a view to achieving the most rational, appropriate and optimum use of land.

7. The phenomenal increase in the area and population of the African city, and the absence of effective measures to regulate the use and value of land, have led to speculation in land and a serious threat to its orderly development and redevelopment. The spiralling and anti-social land values have caused a polarization of intensive and remunerative sprawl in the periphery.

8. To remedy this situation it is necessary to formulate and enforce a national land policy, a rational land use programme and a comprehensive land use legislation, with a view to improving physical environment, strengthening economic base, conserving ecological balance and fostering socio-cultural values.

9. Land has several attributes - physical, economic, social and cultural. The physical attributes of land are manifest, in its configuration, terrain, soil, water, buildings, structures, fauna and flora. The social attributes of land are reflected in the pattern of its use and the socio-cultural linkages between various sections of the community. The economic attributes of land are apparent in its potential value or opportunity value or use value. A parcel of land has not only spatial but also time dimensions. The extent, quality and use of land may change over a period of time, due to either natural phenomena or man-made efforts.

C. Viewpoints regarding urban land and its use

10. Urban land and its use are considered from different viewpoints by various countries. Those countries which have central economies tend to look upon land as a homogeneous continuum; a platform over which capital, labour and management interact within the framework of a set of spatial co-ordinates. On the other hand, countries with free and mixed economies view land as a resource of primary consequence and a resource no different from other forms of wealth. In both cases, however, the use of land is recognized to be the result of a set of decisions taken within the calculus of decision-making units.

11. The various professions look at the nature of land and its use from different points of view. To some economists, land is one of the basic factors of production, and sources of raw materials such as food, minerals and energy. To economists belonging to the traditional school of thought, land is simply a commodity or an endowment which exists in the natural order of things and no labour has been expended on its production. The sociologists look at land and its use as a means of fostering social cohesion and cultural values. In their view, land should serve social needs and cultural aspirations of the individual, the family and the community.

12. The view of the legal experts regarding land and its use does not conform to the abstract concept of the economists. The land-lawyers look at land in its totality - improved, developed and worked upon. Land to them is much more than a natural surface, it includes land in its fulness; all that nature gives of soil, water, minerals, vegetation and in addition all man-made environmental elements such as roads, buildings, structures, utilities, services and facilities etc., superjacent and subjacent, above and below the surface of land.

13. The human settlement planners treat land and its use in a comprehensive manner which integrates and synthesises the viewpoints of all the disciplines; and develop a unified approach. Therefore, they are often called "Land Use Planners".

D. Land use planning and its objectives

14. The essential objectives of land use planning should be:

(a) establishing a harmonious relationship between areas to be devoted to residential, commercial, industrial and other purposes;

(b) providing for a planned and orderly development of urban and rural areas for the present and the foreseeable future;

(c) satisfying diverse land requirements of the community, without conflicts and competitions;

(d) promoting strong rural, urban and regional economies;

(e) helping the inhabitants to develop socio-cultural cohesiveness and a sense of belonging to the community; and

(f) rationalizing and optimizing the use of land; minimizing of the misuse; preventing abuse, regulating the disuse and guiding the reuse of land.

15. To achieve these objectives, settlement planners carry out land use surveys, studies and analysis and prepare "Existing Land Use Plans" and "proposed Land Use Plans" for villages, towns and regions.

E. Land use legislation

16. Town and Country Planning legislation in general and Land Use regulations in particular are necessary to secure planned and orderly development and redevelopment of human settlements. Land use regulations form an essential component of "Development Control". They are built into the Master Plans or comprehensive development plans. They consist of:

- (a) building by-laws;
- (b) land sub-division regulations;
- (c) zoning ordinances;
- (d) sanitary codes; and

other regulatory measures. These are to be co-ordinated with public health act, highways act, land acquisition act, compensation and betterment act, environmental protection act, new towns act, and several other related legal tools.

F. An overview of the African situation

17. Town and country planning legislation in Africa is still in its embryonic stage. Most of the developing countries in this region do not have comprehensive human settlements legislation. Numerous piecemeal and ad hoc ordinances attempt to regulate the acquisition, development and use of land in the urban and rural areas. The Town and Country Planning Acts in force are old, obsolete and redundant; they neither serve the present needs nor respond to changing conditions. They are often updated only by changing the date. The Acts are rudimentary in scope and do not require comprehensive land use planning as a prerequisite to particular land use decisions.

18. At present, there is a proliferation of planning organizations with overlapping and often conflicting purposes and jurisdictions, at the national, state and local levels. Town planning authorities, urban development boards, transport authorities, port authorities, public health authorities, university commissions, electricity corporations and various ministries concerned with land and its development operate without much co-ordination and co-operation. The views of the public are rarely considered. The land use planning process rarely incorporates a mechanism for considering the views of all the relevant agencies, both in the public and the private sectors. The existing land use regulations are not strictly enforced, due to inadequate administrative machinery, political pressures, interference by vested interests and subjective judgements by decision-makers.

19. Zoning should form an integral part of the comprehensive land use planning process. However, in many African cities, zoning has preceded land use planning. Due to this "Cart before the horse" approach, zoning has become a "master" instead of a "tool" in regulating urban growth. Moreover, zoning has become rigid, negative and restrictive. The inflexibility of use, height, bulk and density regulations has tended to produce monotonous, stereotyped and unimaginative developments. Zoning has often been misused for segregating people on the basis of race, colour, creed, income, occupation and social status. Too many variances and exemptions have resulted in non-conforming land uses and non-complying buildings. As a legal tool for land use planning, zoning needs drastic revision in its scope, contents and application. The obsolete and redundant concepts and functions of zoning, which are a colonial heritage from the Western world, are to be replaced by performance standards zoning developed in the African context.

CONCLUSION

20. Land use policies and land use regulations are essential to ensure a planned and orderly development of African cities and regions. The existing provisions for comprehensive settlement planning in the African region are outdated and inadequate to serve the present day needs of rapid growth and change.

21. The Economic Commission for Africa, in collaboration with the United Nations Centre for Human Settlements/Habitat and other organizations, will do well to undertake an in-depth study and analysis of the Town and Country Planning Legislation in force in the developing countries of Africa and suggest ways and means of formulating comprehensive Human Settlements Legislation. An effort should be made to prepare guidelines which would enable the African countries to evolve appropriate legislation regarding the acquisition, development and management of land and the regulation of its use in the best interests of the communities in both the town and the country.

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