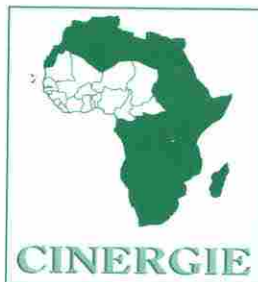


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OCDE/OECD

Organisation de Coopération
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LAND USE POLICIES IN WEST AFRICA

Working paper N° 5

SAH/D(93)421

General distribution

population

land

development

The WALTPS study is coordinated by the CINERGIE unit in Abidjan, Ivory Coast. CINERGIE is a joint initiative of the Organisation for Economic Co-operation and Development (OECD) and the African Development Bank (ADB).

The study is being conducted jointly by a group of experts based at the Secretariat of the Club du Sahel in Paris and by several groups of African experts in the countries of West Africa. National case studies and the main sectoral studies dealing with political and social change, regional migration, land use planning and management of border areas are being conducted under the direct responsibility of African specialists.

The scientific committee in charge of monitoring the study and defining priorities comprises around twenty people, one-half of whom are researchers from West Africa.

A committee of experts comprised of sixty people is also consulted on a regular basis. Forty-five West African researchers and specialists who are members of this committee form the core of a network of correspondents whose role it is to make constructive comments and recommendations on the study itself as well as to promote the dissemination of its findings in their respective countries.

The CINERGIE unit maintains permanent contact with senior political decision-makers and with the media. A region-wide network of journalists has been set up by the unit to maintain contact with public opinion and mobilize the West African press on the subjects addressed by the study.

GENERAL INTRODUCTION

Purpose of the study

The purpose of the West Africa Long Term Perspective Study (WALTPS) is to make a contribution to ongoing discussion and debate about sustainable growth and regional integration by focusing on the long-term dimension of these issues (one generation hence) and on aspects related to population dynamics - i.e, the growth and redistribution of people within the region.

African governments, their partners from foreign aid agencies and the scientific community will find in this study :

- a detailed analysis of the present distribution of population and activities in the west Africa region;*
- an assessment of the megatrends which affect population dynamics, land use patterns, the real economy and social and political change within the region;*
- identification of the underlying mechanisms of these megatrends, and of the potential seeds of change;*
- a conceptual framework and a series of analytical tools that help to capture the linkages between these varying factors;*
- long term images of the region based on these megatrends and on alternative policy options; these long term images are complemented by the analysis of a series of medium term scenarios;*
- a tentative analysis of the policy implications of the issues raised in the study for African decision makers and their foreign partners.*

The authors hope to provide sufficient evidence of the paramount importance of the population variable in development issues in West Africa; of the necessity for the scientific community to devote more attention to these linkages and to encourage African decision makers and their partners to shape their action in a long term and regional perspective.

Reasons for conducting a regional study

One may wonder whether a regional approach is the best way of addressing development issues in a group of 19 countries ¹ with GDP ranging from one to one hundred in size, and among which attempts to foster institutional integration and cooperation have come up against major blockages for so long. Indeed, the study clearly shows that a regional approach is unavoidable for the following reasons:

- West Africa is characterized by high mobility of populations and the interdependence of the real economies, for which political frontiers have never been a significant constraint. This mobility is likely to continue, and, as a result of population redistribution, countries in the region will become more and more interdependent.*
- So far, countries of the region, with their diverse interests, have poorly exploited the potential for growth offered by the regional market. As a result, most countries have become increasingly dependent on external forces. A better understanding of population dynamics and of spatial patterns of development is a prerequisite for the governments in the region to move from words to deeds and for cooperation to materialize.*

¹ Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone and Togo

Reasons for focusing on long term trends in human geography

One may also wonder whether the time is right for in-depth discussion about the long term future of West Africa. Is it reasonable to concentrate on population dynamics and the links between settlement patterns, economics and society at a time when African countries are in such a difficult economic situation and when the overriding priority is to restore their economies and rebuild their institutions? For a number of reasons listed below, this approach is indeed both reasonable and legitimate.

West Africa is undergoing unprecedented population growth. The region had 45 million inhabitants in 1930; today its population is estimated at some 220 million. Forecasts estimate that this figure will double by the year 2020. The population will thus have undergone a ten-fold increase in less than a century. At the same time, there has been intense migration between different ecological zones, between countries, and between rural areas and urban areas, with the total urban population increasing more than one hundredfold. This migration has profoundly altered the way the region is structured, the way markets are organized, and the entire economic geography of the region.

Viewed in the short term, these population movements appear to be the consequence of political and economic change. If seen in the long term, however, the concentrations and movements of population have a significant influence on political and economic change and on the sustainability of development in the region.

The redistribution of population is one of the main factors which influence the way individuals and African societies perceive their basic needs and their willingness to change their behavior. The minimum risk strategy for West Africa, to accommodate its unprecedented demographic growth without causing an environmental, social and geopolitical disaster and to succeed in resuming sustainable economic growth is to create favorable conditions for a high degree of mobility within the region and to give its people the maximum amount of freedom to decide where to settle.

Urbanization is a key component of population dynamics, with far reaching consequences. Urbanization is the first form of the necessary division of labor. Migration to the cities increases the demand for goods and services, including food. It also increases the need for cash income and therefore the productivity of individuals and the mobilization of resources. Urban growth also implies the accumulation of public and private capital, which generates a significant proportion of the economic activities of cities and their hinterlands.

Social changes which result from urbanization have been enormous and have taken place at a remarkable rate. Within three decades, we have witnessed, at one end of the spectrum, a tenfold increase in the population of the urban informal sector, and, at the other end of the spectrum, the emergence of intellectual and economic elites whose lifestyles are much closer to those in Western societies than in the traditional societies in rural Africa. With the complicity of its foreign counterpart, the first generation of the urban elite following independence has based its wealth and influence more on rent seeking activities than on the development of the productive potential of the region. Income disparities between social classes have remained high and relatively stable, thanks to a variety of compensating mechanisms which include migrations and the capacity of the elite to adjust its levy on the economy. However, a new generation of urban entrepreneurs and intellectuals, with quite a different background, is progressively emerging, at least in some countries which have engaged in the political and economic adjustment process.

Significant political changes have also taken place. After a long period of stability perpetuated by authoritarian single-party regimes, the last few years have seen the rise of democratic movements, demands for decentralization and greater autonomy of local governments. This shift is undoubtedly linked to the process of urbanization which implies the emergence of cities as economic and political powers competing among themselves and with the State, which must remain strong enough to arbitrate among diverging local interests.

Organization of the study

The study is based upon a retrospective of the last thirty years which attempts to identify the mechanisms that have enabled societies to adapt to an evolving environment, sometimes through quite significant changes.

Based on the long term retrospective, the study sketches a number of future scenarios. The long-term images which are presented illustrate the main themes mentioned earlier. Different settlement patterns give rise to the corresponding "images" of national economies and the regional economy that appear "compatible". This exercise is an opportunity to illustrate the interactions between population dynamics, the behavior of individuals and social groups, and economic change. These images provide plausible answers to the following questions in a few contrasted long term images:

- Where will the 430 million West Africans live a generation from now ?*
- What will be the needs of the different categories of people in the different parts of the region? How and to what extent will those needs be met (what incomes, what activities, what trade)? What conditions must be met for the changes that are needed to come about ?*
- What strategies, policies and investments are needed to make the process of population redistribution as efficient and sustainable as possible? What obstacles and blockages need to be overcome?*

These long term images of the region, combined with the medium term scenarios which explore various plausible combinations of assumptions regarding changes in the external and regional environment, should help to improve the dialogue between the African decision makers and their foreign partners. Ultimately, this could lead to the negotiation of a common plan of action based on the following fundamentals:

- the creation of an independent, African regional capacity for information and analysis of population dynamics and economic and social changes, which could perform an effective advisory role for the region's governments and regional institutions,*
- the definition of an overall framework for infrastructure investment strategy that takes the requirements of the necessary population redistribution into account,*
- the definition of macroeconomic and sectorial policies (including agricultural policies) that fully take the process of urbanization and its implications into account,*
- the definition of strategies for exploiting the potential of regional markets, which have remained almost untapped so far.*

WEST AFRICA LONG TERM PERSPECTIVE STUDY

Working paper N° 5

LAND USE POLICIES IN WEST AFRICA

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L.A.R.E.S.

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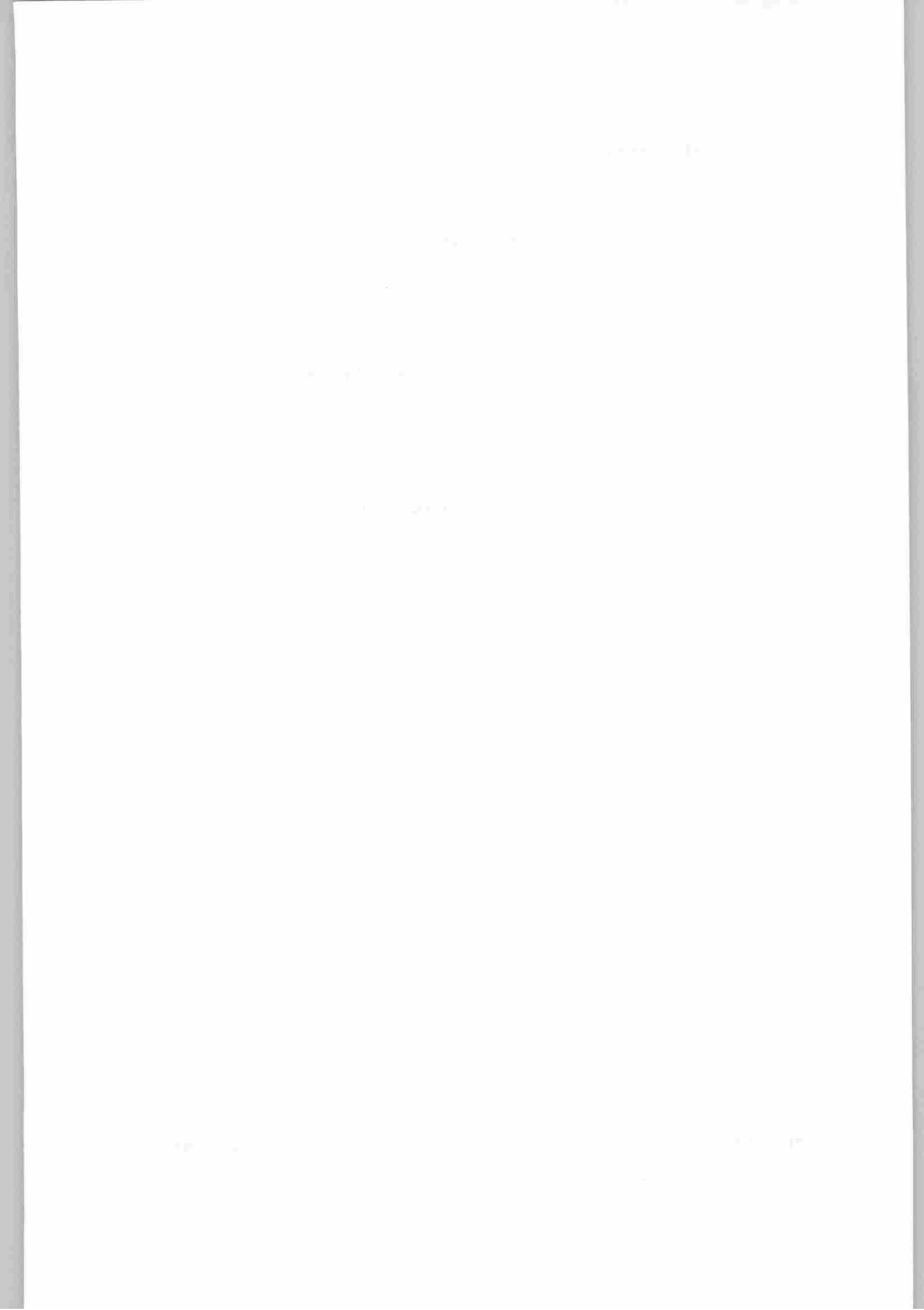


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INTRODUCTION

The African State is already the subject of an extensive literature; this report is intended to complement some of the more recent publications, such as the one from the Reims Institute of Geography on "African space in crisis: forms of adaptation and reorganization"¹.

How have the territorial units defined by colonialism been equipped with infrastructure and to what extent have land use planning policies influenced economic development and the welfare of citizens? This field of investigation is of particular relevance at a time when recent research on Africa has revealed that the continent is on the sidelines of human development. "Of 45 countries in Africa, 35 have populations below 10 million and 15 are landlocked. With some 520 million people in 1990, sub-Saharan Africa has 10% of the world's population, 2% of its GDP, 1.7% of its exports and less than 1% of its manufacturing valued added²." There is general agreement that Africa is irrelevant to the running of the world economy³.

How has Africa managed to sink so low? This paper investigates the role of various forms of spatial organization, especially the administrative reforms accompanying the changes that have affected the continent. In this respect it is important to examine the borders that have been inherited from colonization, both because they are artificial and because of the scale effects they have produced. Are these various shapes and sizes suited to the type of dynamic and consistent land use planning likely to guarantee citizens' security?

This type of question must be answered and belongs naturally to the West Africa Long Term Perspective Study. The West Africa of the future will have new requirements, beginning with the reshaping of its political space⁴. There seems already to be unanimity on the need to change the role of the governments that have inherited these colonial divisions. Can this change be effective without new spatial patterns, whether within existing national borders or in West Africa as a whole?

In this paper we intend to present a retrospective analysis in order to explain more clearly the extent of the reforms that need to be made. There are three main subjects of analysis:

- the present dimensions of states;
- the types of borders and their role in consolidating states;
- land use planning policies.

¹ *Travaux de l'Institut de Géographie de Reims, n° 83-84, 1993.*

² *Hugon P. L'économie de l'Afrique, Collection Repères, la Découverte, Paris, 1993, 124 p.*

³ *Durand M.F., Lévy J., and Retaillé D. Le Monde, Espaces et systèmes. Presses de la Fondation Nationale des Sciences.*

⁴ *Brito, José. Science and Technology in Africa's Future. United Nations Regional Conference on Space Technology for Sustainable Development in Africa. pp. 25-29, October 1993.*

I. STATES AS TERRITORIES

"Without space, there is no state."

Rolland Pourtier

The State in Africa has been examined in political, economic, sociological and territorial terms. This research and these debates have been motivated without doubt by the failure of development and the seriousness of the resulting crises.

Those observers who have considered the issue politically mention problems related to proper governance, the type of political system and the management of development resources. They are also interested in the issue of power in the widest sense, i.e. the importance of the various networks of influence within the social groups seeking control of the State, including the role of international lobbies. The best illustrations of this approach are from J.F. Bayart and J.F. Médard⁵, but the literature in this area is particularly extensive⁶.

Macro-economic analysis of the State examines economic statistics to see if they indicate an improvement in living conditions. Economists also analyze the allocation of resources and whether that allocation is consistent with development objectives. It is in the field of economics that publications on the African State are the most numerous and most ambivalent, particularly in recent years at a time when the World Bank and the IMF have played a determining role in the future of the State⁷.

Sociologically, the State in Africa has been the subject of a number of studies, of which some of the most important are by Georges Balandier, J.L. Amselle, E. M'Bokolo and Axelle Kabou⁸, to name but a few. Their analyses deal with social relations in terms of class conflict.

Analysis of the territory of states is far less extensive. Some geographical studies touch on the question, usually in terms of regional devolution or relations between town and

⁵ Bayart J.F. *L'Etat en Afrique: la politique du ventre*. Paris, Fayard, 1989. Médard, J.F. *Les Etats d'Afrique Noire, formation, mécanismes et crise*. Karthala, ARSAN, 1991, 408 p.

⁶ An extensive bibliography may be found at the end of Bayart (1989), see note 5.

⁷ In this area there is an abundance of material. Some idea of its extent may be obtained from the bibliographies in Coulibaly, Mamadou. *Le libéralisme, nouveau départ pour l'Afrique Noire*. L'Harmattan, Paris, 1992. Assidon, Elsa. *Le commerce captif*. L'Harmattan, Paris, 1989.

⁸ Balandier G. *Le détour, pouvoir et modernité*, Fayard, 1985. Amselle J.L. and M'Bokolo, E. *Au cœur de l'ethnie: ethnies, tribalisme et Etat en Afrique*. La Découverte, 1985. Kabou, Axelle. *Et si l'Afrique refusait le développement?* L'Harmattan, 1991.

country⁹. This relative lack of research is regrettable for colonial divisions has made Africa the most balkanized continent in the world, containing many countries with considerable problems related to the exercise of power and the role of the State.

The difficulties in discussing the advantages and disadvantages of a given territorial size arise from the subjective nature of the exercise. Countries such as Switzerland, Luxembourg and Singapore, after all, are among the richest and most dynamic in the world; however, regional integration, open markets and the viability of investment in infrastructure suggest some of the advantages of large territories.

In our opinion, territorial analysis in the spatial sense remains essential for future land use planning. This analysis must, however, take account of the extreme variety of cases: states that are too small or too big, poorly located, poorly defined, etc. Each situation is so complex that it will necessarily require closer attention.

For example, those African countries which are seen as big have problems in properly administering their population because of the skeletal infrastructure left behind by the colonialists. Furthermore, the population is often sparse and unevenly distributed; it is hard to mobilize and administer people for production or, more generally, development and national unity. In these cases, it can be fair to say that space "eats people".

In countries that are too small, the problems are the reverse. The lack of land is often associated with a lack of resources and a small domestic consumer market. Furthermore, the population may also be limited and have weak purchasing power, resulting in an economy that does not have the resources to meet its development needs.

In *Et demain l'Afrique*, Edem Kodjo cites a number of small African countries with annual operating budgets of less than FCFA 25 billion¹⁰. Such tiny resources strangle small countries throughout the continent and particularly in West Africa.

Apart from size problems, some countries are landlocked or suffer climatically from their closeness to the Sahara or to cold ocean currents that reduce rainfall¹¹.

The greatest territorial handicap that countries have inherited from colonialism is border disputes, which have even lead to armed conflict. The disputes are of various kinds:

⁹ Gallais, J. *Pôles d'Etat et frontières en Afrique contemporaine. Les Cahiers d'Outre-Mer*, 138 p, 1982. Seck, A. "Découpage territorial et mal développement en Afrique," in *Tropiques, Lieux et liens*, ORSTOM, Paris, 1989, pp. 377-383. Pourtier, R. "Les espaces de l'Etat," *ibid.*, pp 394-401. Retaillé, D. "Le contrôle de l'espace entre territorialité et géographicit . Les probl mes d'int gration des Etats sah lo-sahariens." in Th ry, H. ed. *L'Etat et les strat gies du territoire*. CNRS, Paris, 1991, pp. 89-100.

¹⁰ Kodjo, Edem. *Et demain l'Afrique*. Stock, Paris, 1985.

¹¹ These are the Sahelian countries and Cape Verde, Senegal and Mauritania affected by the cold current from the Canaries. It also applies to some extent to the coast of the Bight of Benin between Accra and Cotonou, where there is an upwelling of a cold current in July and August that lowers the temperature and prevents rain.

- ethnic groups that refuse to belong to the country (the Casamançais in Senegal, the Tuareg in Mali and Niger, etc.);
- badly drawn borders, which either break up historic entities (e.g. the division of the Hausa between Niger and Nigeria, of the Evé between Togo and Ghana), or cross areas with desirable mineral resources (as between Mali and Burkina Faso).

Border conflicts and instability hamper the prospects of development and swallow up what few resources there are in arms and security operations.

These varied situations make the examination of territories in Africa particularly relevant, despite the subjective nature of the approach. The territory problem means the need first to consolidate a country's borders, and then to create a firm national community. It also means maintaining a thriving cultural community, the common human reference without which a State is unlikely to function properly. In practice, the emergence of a true national community bound together by common cultural references is often prevented by multiple ethnic and tribal divisions, cunningly exploited by those who seek power and privilege. The colonial powers were also faced with these problems.

France decided to deal with the issue by assimilating the colonized peoples and given them her moral values. In practice, this policy only ever concerned a small section of the population, represented now by the urban elite. The limits to this policy are made clear by current debates about the unity of the French-speaking world and the right of the formerly colonized to migrate to the former mother country. The British took quite a different approach by introducing "indirect rule", allowing the colonized peoples the chance to develop according to their own cultures, although no British colony corresponded to a historical entity. This lack of an independent cultural territory made "indirect rule" an essential factor in tribal tension in the English-speaking countries.

In our opinion, it is this background that explains the severity of the African crisis because it has hampered the governance of the new States. It is why Africa's current leaders, whatever their convictions, education or ethics, always fail in the same way. The basic issue in rescuing Africa from its misfortunes is not just democratic freedoms, but also how to cope with the colonial legacy and the borders it has left behind.

The question must be asked whether the people of Africa have actually integrated into their consciousness the arrival of the new states. This awareness is needed if they are to become attached to their new countries and are to work to equip them and make them function.

We deal with these matters under three headings:

- the reasoning behind the colonial division;
- the nature of the States thus formed;
- the limitations of territories.

1.1. The reasoning behind the colonial division of Africa

This is a basic issue in understanding the nature of the State in Africa. When we examine history it becomes evident that the colonial territories were not necessarily designed with a view to development; if they had been, they likely would have been different. There were, in fact, three major concerns in the formation of the colonies: the need for strategic areas, the control of raw materials for home-country industries and the settlement of territory to absorb the excess of European population after the Industrial Revolution. The nature of the territory and its management varied according to the priority given to each concern.

1.1.1. Borders and strategic areas

Strategic colonies are often identifiable by their location and size. Shaped by the conquerors' military supremacy, they are usually to be found where visibility and circulation are easy. France, Britain, and, to a lesser extent, Italy rushed to occupy the African deserts from the Mediterranean to the edge of the equatorial rain forest. France won the battle for the desert, occupying the whole of western Africa from the Mediterranean to the Niger River and extending eastward to the Darfour highlands. Here she set up her largest colonies.

The main features of these African strategic areas are their small population, except for the Mediterranean coast, their straight borders and their vast area. Here the main military bases were built, with impressive forts that were designed to be impregnable, and weapons testing, which included the atomic bomb, was carried out.

1.1.2. Borders and control of natural resources

Unlike the strategic areas, these colonies were usually located in the coastal and forest regions. Their borders were drawn almost at random since knowledge of African geology was so poor that there was no way of knowing how far the reserves of precious metals extended¹². However, three features were almost always in evidence: the sea as a path to the outside world with harbors for exporting raw materials, the great rivers to carry these products to the coast, and tropical forests for logging and botanical research.

The French, British, Belgians, Germans and Portuguese scrambled for the African forest in the tracks of adventurers such as Pierre Savorgnan de Brazza, David Livingstone, and the agents of King Leopold II of Belgium, one of the most important being, strangely enough, the American Henry Morton Stanley sent to look for Livingstone.

Although the major prize was central Africa and its huge forests, this type of colonization occurred along the entire West African coast from the Gambia River to the mouth of the Congo. West Africa contained its own economic prizes, such as trading-posts grown wealthy from pre-colonial slave trading and there was much haggling over territory, since each power wanted access to the sea. For that reason tiny territories such as The Gambia, Guinea Bissau,

¹² Only for West Africa, and more especially the Mali Empire, was the abundance of gold well recorded, from the tales of Arab travelers and the celebrated journey to Mecca of Kankan Moussa in the 13th century.

Sierra Leone, Benin, Togo, Equatorial Guinea and the Cabinda enclave appeared next to giants like Zaïre, Nigeria and Angola.

Borders were usually based on great rivers such as the Congo, Senegal, Volta, Mano and the smaller rivers of the south. But these rivers marking out conquered areas did not form real territories since they often ran through the lands of the same ethnic groups, and where they did not, the river was used for fishing and transport in agreement with the local people.

Despite their huge natural potential, these areas were developed relatively late because of difficulties in moving through the forest, particularly in central Africa. Furthermore, natural resources were exploited by concessionary companies whose aims centered on short-term profits rather than the effective development of the territories. Only where there was a large local population with an advanced traditional political structure and long experience in trade, as in Ghana, Nigeria and Cameroon, did the colonialists make any great effort to promote natural resources and begin the proper development of the territory.

1.1.3. Settlement colonies

The desire for settlement areas had an entirely different logic. However, there are no examples in West Africa of this type of colony. It is mentioned merely to make the point that unlike the other motivations, this form of colonialism encouraged proper infrastructure, but only for the Europeans.

Out of these three types of colonies emerged countries that vary in size, type of operation and quality of infrastructure.

1.2. The nature of the States formed by the different types of colonial division

We have shown that colonization had varying objectives and intended results. It is essential to base a typology of modern states on this historical background, because of the concern today with the welfare of local people. Only such a typology can properly explain the development options chosen by each State and the difficulties each State has encountered because of the weight of its colonial past. The three types of colonies have given rise to three types of States.

1.2.1. Large sahelian States based on strategic areas

There are five: Mauritania, Mali, Niger, and Chad, plus Burkina Faso, which was once part of Côte d'Ivoire. The first four each have an area of over one million square kilometers, a population of less than 10 million and a population density, consequently, of less than 10 per sq km. The inhabited areas are less than one-quarter of the total. Only the inhabited areas were administered, until mineral deposits were discovered in the hinterlands, such as iron in Mauritania and uranium in Niger. Even within the inhabited areas, administration was never easy because of the distances between urban areas and the off-center position of the capital cities.

The distance problem is compounded by borders that cut people off from their immediate neighbors in other countries. In Niger, for example, the towns of Zinder, Maradi, Tahoua and

Agadez are 600-1,000 km from Niamey. The same is true of Timbuktu and Gao in Mali with respect to Bamako. Links between towns are made harder by poor quality roads. The off-center location of the capitals of the Sahelian countries makes it much more difficult for them to act as catalysts of national integration. The furthest-flung parts of their countries are virtual "blind spots". As a result of this, Niger is divided into a number of poles: the Niger-Nigeria area covering all the Hausa lands, the Lake Chad basin with all the Kanouri lands, the Niamey area and the desert fringes. Because these different areas have different interests, the State has never been able to hold sway properly over the country's entire territory.

The Sahelian countries are very vulnerable and subject to many problems, such as their landlocked location (except for Mauritania), drought, desertification and poor food security. Building infrastructure is also difficult because of the size of the countries, their low population density and the inadequacy of the infrastructure left by the colonialists. The inherited infrastructure from colonial times is generally only a few railway lines designed to transport raw materials to the coast, rather than a railway network.

Infrastructure was less of a problem in the colonial period because the objectives were simple and all the colonies belonged to larger units such as French West Africa or French Equatorial Africa, where transport to the coast and food supply were well-organized. The disappearance of those larger units is, today, a great handicap for the Sahelian states.

National unity is also threatened by ethnic problems. Conflicts between Moors and Blacks in Mauritania, the Tuareg question in Mali and Niger, and tribal clan problems in Chad ruin any chance of well-balanced development, especially when these countries are unable to afford investments in new infrastructure or maintain what exists. In territorial terms, tribal tension encourages socio-cultural groups to turn inward, to create new spaces in which cultural identity is expressed by strengthening these spaces against the space defined by the State. This turning-in by ethnic groups is a cause of great concern, despite older ties based on Islam.

1.2.2. Territories as reserves of raw materials

The colonies with significant mineral and agricultural resources were luckier than the Sahelian countries. The exploitation of mining and agricultural development based on a strong plantation economy encouraged economic growth and made possible better infrastructure and investment. Examples are Côte d'Ivoire, Ghana, Nigeria and Cameroon. Better infrastructure helped to establish a stronger national identity. Indeed, this national feeling has often had negative consequences such as the reaction against the waves of migrants who have actually helped to build the country. Immigration has also played a large part in rapid population growth, higher population densities and urban development. These territories are more functional than those on the edge of the desert. But the fall in commodity prices in recent years has severely compromised their investments and considerably increased the burden of maintaining existing infrastructure. The State has become unstable as it lays off the many workers it had taken on during the boom years.

1.2.3. Trading enclaves

The final type of State is the trading enclave, such as The Gambia, Togo and Benin. These corridors were carved out to provide access to the ocean for the countries in the Sahelian hinterland or to show the flag along the coast. These territories have based their economies almost entirely on transit trade, and today that trade is increased by re-export activities. The economic advantage of these countries resides in their function as trade relays between the world market and their neighbors. However, the income from these activities is barely enough to cover administrative costs and extensive warehousing facilities. This lack of resources reduces investment in infrastructure for these small countries.

These three types of State affect the way in which West African borders function and the way the territories within those borders are defined.

1.3. The limitations of territories

The colonial origin of these States makes them inherently unstable. There is uncertainty in their present-day existence and operation, well analyzed in a recent study by Jean-Pierre Raison entitled "The spatial forms of uncertainty in contemporary Africa"¹³. This uncertainty can be seen in the following territorial dislocation phenomena:

- the crisis of the State as spatial entity;
- complex and excessive mobility;
- gaps and unevenness in infrastructure,
- growing spatial differentiation within a given territory.

The crisis of the State as a spatial entity begins with the lack of operating funds. The debt burden is so great that the outside intervention required, mainly from the World Bank and the IMF, prevents the State from fulfilling its basic administrative functions. The absence of any effective function is the main cause of the absenteeism of public officials, concerned with augmenting their incomes by working in the informal economy.

Although the present movement towards democracy does not in itself undermine the existence of nation-states and borders, many countries have already broken up (for example, Somalia, Ethiopia, Sudan, Liberia, to a lesser extent Senegal, and some Sahelian states faced with the Tuareg issue). The extent of this break-up proves that these nation-states have little dynamic content and are form than substance. It is hard to see them surviving as coherent hierarchical systems of organization. The political content of these States is radically changing and there is a shift towards what might be the basis for a consistent land use planning policy.

Mobility takes many forms: rural emigration, Fulani transhumance, cross-border migration, forced migration of refugees. This mobility is an indication of how incapable existing territories are of providing full security for their citizens. It reduces the effectiveness of

¹³ Raison, J.P. *Les formes spatiales de l'incertitude en Afrique contemporaine. Travaux de l'Institut de Géographie de Reims*, n° 83-84, 1993, pp. 5-18.

borders as barriers, because the border areas themselves become areas of attraction for security or economic reasons. This migration often completely submerges the native population, as in Côte d'Ivoire, Gabon and Congo, and is part of a shift in settlement patterns that is changing the shape of spatial organization and territorial infrastructure.

The changing nature of territory, as a result of the crisis of the State and massive migration, is leading to the creation of new spaces in which ethnic groups are becoming more conscious of their identity and asserting their autonomy with respect to the State. In other words, the national territory is breaking up and tribal groups are turning inwards. This trend is creating new entities which are, today, becoming the new bases for political power.

There is, therefore, increasing spatial differentiation, which is evident in a number of ways:

- outward-looking areas clustered around the centers of the modern economy: centers of modernized farming or mining where growth and prosperity are based on close relations with the outside world;
- urban areas which have sometimes been created from nothing, located around an administrative center or a mine;
- trading areas structured around major trade routes sometimes covering large distances. These are the wholesale markets analyzed in other studies¹⁴.

The existence of these types of areas confirms the break-up of the territory, leaving no real center to structure the nation-state. This break-up encourages migration of all types and strengthens the role of the border areas, which operate as thriving enclaves between nation-states.

1.4 Conclusion

The framework for land use planning policies is becoming ever more problematic. First, the State itself is artificial, primarily because it is based on a colonial conception of territory and the extraction of local resources for the mother country. Colonial administrative structures were not designed for development but to support this extraction. Nominal independence changed the purpose of these territories overnight, but did not change their method of operation. These changes are still causing problems, leading some economists to suggest that African states are structurally handicapped¹⁵.

Nor does their often ill-defined areas of sovereignty make it easy for states to evolve quickly. Many countries claim that their borders are wrongly drawn and argue for territorial changes. They negotiate bilaterally with their neighbors to shift border markers or to define them more accurately. When negotiations fail, border conflicts break out, as they have all

¹⁴ Igué, O.J. *Echanges et espaces de développement: cas de l'Afrique de l'Ouest*. Travaux de l'Institut de Géographie de Reims. n° 83-84, 1993, pp. 19-39

¹⁵ Samir, Amin. *L'Afrique de l'Ouest bloquée*. Editions de Minuit, Paris, 1984. Coulibaly, Mamadou. *Le libéralisme, nouveau départ pour l'Afrique Noire*, op. cit.

over Africa. All West African countries suffer from ill-defined borders, mostly unmarked. Local people take advantage of this and increase their autonomy with respect to the central administration by claiming double nationality. Ill-defined borders are a serious handicap since there is no adequate control over the areas where infrastructure might be built.

Finally, the widely varying size of these countries must be mentioned, with all the problems it poses for development and infrastructure. The vast areas of the Sahelian countries are a handicap, with their low population densities and uneven settlement patterns. Similarly, fragmented states like Cape Verde are difficult to equip¹⁶. Whatever the political will, this fragmentation prevents any effective infrastructure policy because of the cost. Long, narrow countries find it hard to establish a real center of gravity that could be a center of development and provide an impetus for the country. Consequently, part of the country is isolated from the capital and regionalist sentiments are reinforced.

All these problems suggest difficulties for infrastructure policies in Africa and the importance of border areas, which are now elements in a new redistribution of territory because of the limitations of the nation-state.

II. TYPES OF BORDER AREAS

The word "frontier", writes Daniel Faucher, evokes "the barrier and its constraints", "the arbitrary and the artificial", "the colonial and imperialism". Etymologically, the word comes from "front" or "front-line", in other words, war¹⁷. However they are defined, borders are always evidence of the need to hold sway over an area of land: "they are the result of the forces applied to space by various forms of territorial control; apart from their ability to control territory and people, they are heavily marked by power-holders' conceptions of place and space"¹⁸. Borders can be viewed as the result of a territory-forming process, so it is instructive to examine the links between the shape of a territory and its internal structure.

The internal structure is worth examining because the drawing of borders has often provoked negative reactions, especially since the colonialists were pursuing different objectives. This is where we find the origins of the contradictions at the center of contemporary border disputes. For example, Britain was mainly interested in colonial conquest to further trade¹⁹. She consequently sought out territories that opened onto the sea and the great navigable rivers. France, on the other hand, needed to expand her Empire and possess secure military bases.

¹⁶ Cf. Lesourd M. "Le problème du contrôle territorial dans les petits espaces: l'exemple de la République du Cap-Vert, Micro-Etat insulaire," in Théry, H. ed. *L'Etat et les stratégies du territoire*. CNRS, Paris, 1991. pp. 101-110.

¹⁷ Sall, E. *Sénégal: territoires, frontières, espaces et réseaux sociaux*. CEAN, Travaux et documents, n° 36, 1992, pp. 1-28.

¹⁸ Retaillé, D. *Le contrôle de l'espace...* op. cit.

¹⁹ Sall, E. *Sénégal...* op. cit.

These two different motivations also influenced economic activity in the border areas, resulting in contrasting situations that make the study of these areas quite unique.

The border areas continued to develop after independence as local communities sought to create new types of relationships and protect themselves from the negative consequences of partition. Indeed, the true significance of borders and the real importance of national affiliation is subject to question²⁰. This raises the whole issue of African nation-states, which all have permeable borders and contain social groups claiming different national affiliations.

To examine the effects of these border issues, we have divided West African border areas into various types. Border areas are structured in such a way as to reduce the significance of the border as front-line. Three particular types are worthy of special note:

- inert border areas;
- transit border areas;
- "nation-peripheries".

2.1. Inert border areas

The border areas we define as inert are those that contain no notable activity. Indeed, the borders in these areas are often approximate. Either they are ill-defined, ill-marked from the outset or no longer operative because their physical markings have disappeared. The approximation in the definition of the border is the result of natural difficulties which often make human life particularly arduous. Population densities are, therefore, low. In West Africa, these are the borders in the Sahara and concern the northern edges of the Sahelo-Saharan countries. Even where the border is accurately defined, it is difficult to recognize on the ground, because of drifting sands and the absence of permanent human settlement. Apart from a few transit corridors between Black Africa and the Mediterranean world, human activity is virtually non-existent in the desert.

Before the arrival of Europeans, trade flourished across the desert. Large towns grew up along the caravan routes. However, the European development of trading posts along the Guinea coast and penetration inland ruined trans-Saharan trade and the towns that lived off it.

When Europeans began to overrun the desert, little remained of the historic trade routes that had made the reputation of the Sahara and the people who lived round it, especially to the south. The very name of Timbuktu brought early explorers like René Caillé across the desert from Morocco on foot.

However, the partition of the independent Sahelo-Saharan states was so crude that there was no chance of the border areas thriving. No account was taken of geography or history, let alone tribal areas or types of production. These borders are geometrical and abstract; they are based on three elements:

²⁰ Sall, E. *Sénégal.... op. cit.*

- topography: lines and distances measured from triangulation points;
- tribal considerations, which made no sense since tribal membership is a tricky issue in the Sahara, where there are many tribes of fewer than 1,000 members and they are all highly mobile;
- the conviction that "it is pointless marking the desert". The word "desert" replaces well-defined borders. This vagueness is at the root of approximations in the borders between Black Africa and the North African countries. It has given rise to conflicts, not all of which have been properly settled (for example, between Morocco and its southern neighbors, and Libya and Chad).

Apart from approximate borders, other difficulties have their roots in the inhospitable nature of the Sahara. The border areas are inert now because of:

- natural conditions;
- types of settlement;
- the historic development axes of the desert colonies;
- the consequences of colonial choices of areas for development, reinforced since independence.

The Sahelo-Saharan world lies between North Africa and Black Africa and is entirely desert. Its area, including Sudan and Somalia, is more than 8 million sq. km and its topography is varied. In the center and east are the partly volcanic mountain ranges of the Hoggar, Aïr and Tibesti; to the north the dunes of the Great Erg; elsewhere vast plains and rock-covered plateaux (*regs*). Among the plateaux are the Adrar des Iforas in the west, with massive crystalline shapes eroded by the wind. In the south are a succession of sandy flat-bottomed basins and dried-up fossil valleys that rarely see a drop of rain. In general this part is made up of shifting dunes grouped in ranges across massive hollows of fine sand, of which the most famous is the Ténéré in Niger. These dunes are now moving south, threatening the farm and rangeland of the Sahelian countries.

The worst disadvantage of the desert is its aridity. Rainfall is barely 200 mm per year, insufficient to support a large population or develop agriculture. Worse still, whole years may go by without any rainfall at all, especially since the great droughts of 1973-80. These droughts drained the aquifers that supply the oases where people live. Date palms, which made up most of the vegetative cover and supported economic activity in the oases, have died. The drying-out of the oases has completely altered the settlement pattern in the Sahara, with massive migration of the nomadic peoples to the south where black Africans live. Suddenly land rights have become an issue and relations have deteriorated between Blacks and Berbers, leading to serious crises as in Mauritania. Often these crises occur along the border, making them economically inert.

The second reason that the desert border areas are inert has to do with their settlement patterns. In all the 8 million sq km of the Sahara there are barely 1 million people, giving a density, therefore, of less than one person per square kilometer. In addition, the area is ethnically fragmented with several thousand nomadic tribes. None of these tribes has a fixed territory because of their extensive nomadism, which militates against spatial structuring.

Probably to attenuate these natural and human difficulties once they had marked out the main Sahelo-Saharan territories of Mauritania, Mali, Niger and Chad, the French decided to develop the area around Lake Chad which became the focus for colonization. Far away from this lake, fought over by the imperialist powers for strategic control of the desert, lies Cape Verde, the most westerly point of the Old World. The axis of the Sahelian countries thus runs from Cape Verde to Lake Chad. It should really continue as far as the Nile, but the French defeat at Fashoda stopped their colonial ambitions in the western foothills of the Darfour. The Cape Verde - Lake Chad axis became the backbone of French colonization, with a development zone stretching across the four colonies. These countries occupy strips of land roughly 1,000-1,500 km wide along that axis and are open to the desert. However, their capitals were built along the same axis and turned their backs on the desert hinterland, although it constituted most of the territory. This decision to favor the Sudan over the Sahara contributed to the inert character of the northern borders, which lie thousands of kilometers from the centers of decision. This has had two negative consequences on the economic life of the border areas.

The first has been the total cessation of trade in the Saharan part of these territories, although it flourished before colonization. In this way, the pre-colonial relationship between the Mediterranean coast and the Sudan across the Sahara and the thriving trading and cultural cities like Timbuktu, Gao and Agadez was totally destroyed.

The second was the shift in socio-economic relations following the strengthening of the Dakar-N'Djamena horizontal axis with the building of the Dakar-Niger railway (which never went further than Bamako). These east-west relations formed a network that included the coastal countries to the south. The two shifts were fatal for the desert peoples.

After independence, the colonial framework remained, with the exception of Mauritania, which in 1960 turned its back on Saint Louis to build a new capital, Nouakchott, and is now developing relations with North Africa within the Maghreb Economic Union.

In short, the inert nature of the border areas in the north of the Sahelo-Saharan states is due to geographical factors as well as to the infrastructure decisions of the colonial period which ignored major historical trans-Saharan connections. The inert border areas, which were vibrant during the pre-colonial period, now undermine the economic health of these countries. The center of gravity of the societies living in the Sahel has shifted towards the coastal countries, with the appearance of what we shall call "transit" border areas.

2.2. Transit border areas

These are active border areas with no major infrastructure or trading facilities (border towns, thriving periodic markets, warehouses, parallel foreign exchange markets, etc.). Here trade does not structure space and the border is a mere transit corridor where settlements are no larger than villages.

This type of border area is the most typical in West Africa, and can be found mainly between countries with a common colonial tradition and similar economic policies: the French-speaking countries of the Sahel (Senegal, Mali, Burkina Faso), and of the forest and coastal zones, particularly Côte d'Ivoire and Guinea.

The obstacles to create the proper infrastructure to encourage spatial structuring are numerous, including distance from urban centers and political difficulties between neighboring states.

The role played by the border can be looked at in a number of ways.

First, there are the borders that correspond to a real demarcation and function relatively well because they mark limits to settlement or ecological zones. They thereby enjoy a certain legitimacy, since they are lines that separate rather than join. Examples are the borders between Mali and Senegal, Senegal and Guinea, and Guinea and Mali. In each case the border areas are indeed ethnic frontiers with a no man's land. The no man's land is now used as a "transit zone" for traders such as the Fulani from the Fouta Djallon in Guinea, the Murid brotherhood from M'Backé, and the Serer from the Kaolack area in Senegal.

Second, there are the borders that cut through major ethnic groups, such as the Senoufo in Côte d'Ivoire and Mali, and the Lobi in Burkina Faso, Côte d'Ivoire and north-western Ghana. The Senoufo and Lobi societies are too deeply rural for these groups to engage effectively in cross-border trade, which is a factor of spatial structuring. In the Lobi lands, for example, making one's living mainly by trade is traditionally not approved of. Outside traders conduct the cross-border trade in these areas, but do not invest enough in infrastructure at the border to structure space.

Finally, there are the borders drawn along an ecological divide, which become natural borders with complementarities that favor trade. These are the southern borders between the Sahelian and coastal countries. The complementarity explains the trade in kola and a range of manufactured goods from the more industrialized coastal countries, which are more open to the outside world, in exchange for livestock from the Sahel. But the rigidity of the border lines makes it impossible to create thriving border areas here, despite this trade.

The economic weakness of these border areas is also due to their distance from urban centers which dictate cross-border trade. Low population density and the absence of ethnic groups straddling the border mean there are no border towns to act as relays to the urban centers. Consequently there are no local traders. Trade is controlled from places at some distance from the borders, as in Guinea, where Labé and Kankan, considerably far from the borders, are the main towns engaging in trade with neighboring countries. In this case, the border areas do not attract activity.

The lack of interest in the border areas is also increased by the ideological differences between heads of state in West Africa, of which the best example was, for a long time, Sékou Touré of Guinea. These differences translated into an absence of good neighbor policies which could have brought people together. For a long time, Guinea's relations with Senegal and Mali were tense, and the roads linking them remain poor. The best roads in Guinea stop well before the border. For example, it takes a day's driving to cover the 275 km from Labé to Koundara, both 50 km from the borders with Guinea Bissau and Senegal. Siguiri, located close to the Malian border, is accessible with great difficulty, despite its importance for supplies of gold and rice. It takes five hours to get from Siguiri to Kankan (a distance of only 90 kms) in the rainy season. Similar conditions prevailed in Senegal and Mali under

Presidents Senghor and Modibo. The result today is that the western part of Africa is extremely poorly integrated.

All these factors have led to poor spatial development in the border areas, even where trade is considerable, as between Guinea and Senegal and Mali, and between Côte d'Ivoire and Mali and Burkina Faso. In all these cases, trade has developed across borders that have remained mere transit corridors.

Trade between Guinea and Senegal is based on the complementarity between the two countries, particularly given Guinea's great farming potential. A number of Senegalese traders and Guinean Fulani emigrants in Senegal purchase bananas, oranges, avocados and kola nuts and potatoes, which grow in abundance in the Fouta Djallon. In return, Guineans buy transistor radios, sandals, cigarettes and a range of cheap goods imported either from The Gambia or the Canary Islands. The first incentive to trade was for profit. In recent years, the concern has been with the better supply of goods in Guinea. The centers of this trade are the forest area of N'Zérékoré, where kola, avocados and oranges are harvested, and the Fouta Djallon, around the wholesale markets in Mamou, Dalaba and Labé, where there is a large local community of trading agents essential for the Senegalese traders. From these markets the goods are moved to Senegal, either via Koundara, 50 km from the border, or another border township called Mali. However, the road from Labé to Tambacounda via the town of Mali is very poor in the rainy season, so much trade passes through Koundara, which has a daily market and operates as a pivot for trade with Senegal, Guinea Bissau and The Gambia.

Trade between Guinea and Mali is even greater and more varied. Conakry and Bamako are linked via Kankan and Siguiri in Guinea and Kourémalé, Djoulafounda, and Koflatè in Mali. From Guinea, Mali receives rice imported from the world market and locally produced rice from Siguiri. Gold is mined in Siguiri, Dinguiraye and Mandiana. It is estimated that 12 tonnes of Guinea's annual gold production was sold on the parallel market until 1987, when the Central Bank of Guinea began to buy it. But the bank's market share has never exceeded 2 tonnes, and most gold is still sold on the active parallel markets run mainly by Malian traders. Bamako is at present considered to be the largest gold market in West Africa. The city has a proper gold exchange where gold is often quoted higher than on the world market. In return for these goods, Guinea buys vehicle spare parts from Nigeria, via Benin.

Border trade between Côte d'Ivoire and Mali has its real centers in Abidjan and Bamako. Unlike elsewhere, border trade here does have a structuring effect on the border, as witnessed by the exceptional expansion of Tingréla in Côte d'Ivoire. Tingréla was originally a small village, but has now grown, because of trading activities, to a population of 25,000. The town is some 10 km from the border and has a large market attended in great number by traders from Côte d'Ivoire and Mali. The size of this market makes trading the main activity in Tingréla, whose influence extends up to 100 km.

Most of the trade that brings people to Tingréla is kola, manufactured goods, a few foodstuffs such as yams, plantains and fruit, and also timber. From Mali, Côte d'Ivoire receives livestock, poultry, fabrics (*bazin* and secondhand clothes). Of all these goods it is livestock that forms the backbone of Ivoirio-Malian border trade. Because of this there is a special livestock market at Débété on the Ivoirian side of the border. Some 150 head of cattle pass through this market every day from various regions in Mali, such as Sikasso, Massingué,

Ségou and Kadiana. The number of arrivals varies by season and by year. Volume was very high in the 1980s; in recent years, worsening pen conditions in Côte d'Ivoire have greatly reduced the trade²¹.

Trade between Côte d'Ivoire and Burkina Faso is similar to that with Mali, except that there are more routes between the two countries, such as those between Katiola and Bobo-Dioulasso, and between Bouna and Kampti. On none of these routes is there any sort of infrastructure that might structure the border area.

In general, the trade that has developed between the coastal and Sahelian countries in the western and central parts of West Africa has not had a structuring effect on space because of the nature of the borders and the location of the traders far from the border areas. These conditions suggest that what is needed for the development of nation-peripheries is true border regions between two or more countries.

2.3. Nation-peripheries

The third type of West African border is located in thriving border areas. These are all over West Africa, wherever the commodity wealth of a few states can be distributed among neighbors and wherever ethnic groups split by colonial division feel a solidarity that rejects that division. The growth of these border areas limits the impact of colonial division on local communities by creating a whole system of social and economic regulation based on migration and trade. When trade is run by communities divided by a border, the birth of new border towns and the growth of existing ones is encouraged. These towns usually face each other, like twins, at the main crossing points.

These border areas have been called "border peripheries"²², but this expression does not fully reflect the complexity of the phenomenon. In practice, at least in Africa, these are *de facto* free-trade zones operating independently from the nation-state.

Their autonomy with respect to national laws means that they are nation-peripheries, or enclaves whose economic and social importance marks them off from their adjacent nation-states. The term nation-periphery suggests an autonomous economic area attached to two or more nation-states and operating on the basis of marked geographic contrasts.

Signs of this autonomy are:

- use of several currencies at a rate determined throughout the zone by a parallel foreign exchange market;

²¹ Ancey, V. *Politiques Commerciales Extérieures du Bétail et de la Viande au Ghana et en Côte-d'Ivoire*. SOLAGRAL-IRAM mission report, December 1992.

²² Border regions in Europe and America are often called border areas or border peripheries. The first term is widely used in Guichonnet and Raffestin, *Géographie des Frontières*. op. cit. The second less common term is from Rivière d'Arc, Hélène, *Espace national et périphéries frontalières en Bolivie*. Notes et Etudes documentaires n° 4533-4534, Paris, 1979

- ineffective customs control by officers whose actions are thwarted by the pervasiveness of this trade. Many of these officers become genuine allies of the traders;
- strong ethnic solidarity in communities split by the colonial division. Where this nation-state consciousness does exist, it is accompanied by a pragmatic ethnic consciousness evident in the thriving trade networks that resolve problems in cross-border dealings among themselves.

This new type of area grows like a transplant on the bodies of the neighboring states, providing markets exempt from official restrictions and, in many cases, a sort of buffer zone despite political rhetoric to the contrary²³.

Four types of factor determine the growth of border regions:

Structural factors such as:

- the historical background of African states. Trade, which is a source of wealth for these regions, may have become illegal as independent states set up customs and tariff barriers, but it is part of the legacy of historical relations in these areas.
- population or wealth differentials enabling some countries to distribute some of their profits from the sale of commodities to their smaller, poorer neighbors.
- currency differences between countries linked to relatively strong or stable convertible currencies and those with less stable, independent currencies. As the latter lose their value on parallel exchange markets, speculative trading develops.

Cyclical factors of weather, social crises and armed or latent conflicts.

Comparative advantages and complementarities in farm production. Despite the conventional wisdom that Africans have nothing to trade with one another, there are indeed complementarities between grain-producing and tuber-producing countries, livestock and arable countries. Consequently, a natural common market has arisen "unofficially" that compensates for the lack of official structures of integration.

Comparative advantages also arise from inequalities in natural resources and differences in labor costs, and border trade avoids the rigidity and restrictions of official trade policy.

²³ Nigeria took advantage of this during the Biafran war. But when it closed its borders in 1984, official pronouncements turned against the profits the country gained from its neighbors Benin, Cameroon and Niger. However, these nation-peripheries have enabled the Federation to use its French-speaking neighbors as relays for regional and even continental action. More on this last topic can be found in Nwokedi, O.C. *Le Nigeria et ses voisins francophones: contribution à l'étude de la politique régionale du Nigeria de 1970 à 1981*. Bordeaux, CEAN, degree thesis, 1983. Bach, D. *Le Nigeria en Afrique de l'Ouest: limites et paradoxes d'une influence*. Round table on Nigeria's insertion in the international system, Bordeaux, CEA, 2-3 May 1985.

Differences in economic policy include the monetary disparities mentioned above, customs disparities, unequal export taxes, overvalued or undervalued currencies and different import subsidy systems.

Nation-peripheries can be found in two types of areas in Africa:

- between states formed by different colonial empires, with different resources, markets and economic policies;
- on lines of geographical contrast, as between the coastal and Sahelian countries in West Africa, the best example being the border between Nigeria, Niger and Chad.

The border areas we call nation-peripheries have grown up mainly between Nigeria and its neighbors, Ghana and its neighbors and between The Gambia and Senegal. There have been other areas: between Guinea and Liberia before the civil war and between Senegal and Mauritania. The development of these nation-peripheries seems to depend largely on disparities in economic policy, particularly tariffs and currencies.

Structurally, these border areas have three main features: periodic markets, border towns and border warehousing.

To avoid interference from colonial policies, border communities set up a number of markets where they could communicate regularly. These twinned markets were originally the focus of community solidarity. But the differences created by contrasting colonial governments turned the markets into major elements in the regional economy. The geographic contrasts resulting from imbalances between present-day nation-states have given the border markets a crucial role in trade.

However, not all these markets are the result of colonial partition. Some were famous traditional trading centers before the arrival of Europeans. Between Benin and Nigeria, Kétou, Oké-Odan and Badagry played an important role in the pre-colonial trade between Oyo, Abéokuta, Egbado and the Gun kingdom of Porto Novo. Near these historical markets others grew up, such as Ilaro, Odja-Odan, Toubé and Adjarra, upsetting the commercial tradition. At present there are many more markets that benefit from the flow of commodity wealth.

The largest markets between Benin and Nigeria are found in sets of twin towns, one on each side of the border. In these cases, a Nigerian market faces one in Benin usually less than 10 km away. The following are some of the pairs from south to north:

BENIN	NIGERIA
Adjara	Toube
Avrankou	Ago-Sassa
Ifangni	Koko
Kétou	Ilara

Between Niger and Nigeria there are also historic markets that go back to the trans-Saharan trade. In Niger: Maradi, Gazoum, Roudji, Matameye, Magaria, Zinder and Birni-Nkonni. In Nigeria: Daura, Zongo, Katsina, Madaoua, Illela and Kamba. They differ in structure and organization from those in Benin. They are usually markets on the edges of settlements, either at the entrance to or hidden behind the village. The few to be found within a town, such as Kamba, Katsina, Maradi and Daura, are completely enclosed. They all operate once a week on different days. By size and volume of trade, they can be divided as follows:

- centralized or first-rank markets, covering wide areas and often supplied from a distance;
- bush markets, or satellites of the first, that sell manufactured goods and collect farm production.

All these structures operate efficiently and improve the circulation of goods between Niger and Nigeria.

Elsewhere in West Africa, there are the markets straddling the borders between Togo, Ghana and Burkina Faso that handle trade between the three countries.

The biggest of these market networks is in the area between the border towns of Bawku (Ghana), Dapango (Togo) and Bitou (Burkina Faso). These towns are administrative centers in their own countries and form a triangle centered on the town of Cinkassé on the Togo-Burkina border; the Burkina side has a population of 1,016 and the Togo side with 2,800 is only 3 km from Ghana. Cinkassé and Bawku are the two major regional markets where border trade between the three countries is centralized.

The Cinkassé market is held on Mondays and Thursdays. The Bawku market is held every three days, as is the Gourmantché custom. Both are the centers of networks of secondary feeder markets which are their areas. In Burkina Faso: Bitou, Yorgatenga, Sengha and Tindégou; in Ghana: Ouidana, Puisiga; in Togo: Dapango, Kayire and Largande.

The conduct and volume of trade in all these markets relies on the ethnic cohesion of the Gourmantché, who, despite having their territory divided between the colonial empires of Britain, France and Germany, have maintained their historic identity around Fada N'Gourma (Burkina Faso) and Gambaga (Ghana). These markets draw their customers primarily from the border towns near them as well as from neighboring countries. They are major attractions for even more distant countries.

The border towns play a crucial role in the life of the nation-peripheries. In size and location they help these areas prosper. Their origins are of four types:

- historic seats of border communities;
- towns that have grown up at major crossing points and along main roads;
- towns founded in more accommodating colonies to escape bureaucratic interference, and former villages promoted in rank as compensation for cooperative or docile chiefs or to fill a traditional power gap for the purposes of "indirect rule".

The towns that grew up at major crossing points are all twin towns. They developed as infrastructure was built at those points and migration increased. The crossing points are staging posts for migrants seeking to benefit from economic prosperity in the neighboring country. There are more migrants in areas where there are more chances to slip across the border unnoticed. Many move no further, but take up residence and live off profitable activities. Towns that have grown up at crossing points include Kraké-Kweme and Igolo-Idiriko²⁴ between Benin and Nigeria, Aflao (opposite Lomé) between Togo and Ghana, and Malanville (opposite Gaya) between Niger and Benin.

But twin towns are not only to be found at crossing points. Sometimes a new town has grown up near a historic city. In these cases, dispossessed chiefs who refused to submit to the colonial power set up a new seat across the border, almost facing their former capital. The prime example is Ifoyintendo, founded in about 1920 after Chief Tori of Avrankou was nominated by the French to rule the Kingdom of Ifoyin, whose capital Ifoyin-Ile, was in Benin (now the *sous-préfecture* of Ifangni). The Yoruba king, unwilling to submit to his vassal, transferred his seat to British territory.

Towns set up to evade colonial interference include Ilaro, between Benin and Nigeria, and Jibiya, between Niger and Nigeria.

The best example of a village raised in status as the seat of a chieftain is Mèko opposite Kétou (Benin). When the border was drawn, its chief, who was a vassal of the Kétou chief, was made king as part of the British administration's "indirect rule" of the Kétou people.

The desire of governments to wean the people in these border towns away from their allegiances resulted in the construction of a certain amount of infrastructure to promote urban development. Today, these towns are taking advantage of their common origins to evade the administrative clutches of their central governments by strengthening the autonomy of the nation-peripheries.

Between these towns and markets there are other places that have warehouses for large quantities of goods waiting to cross the border. These border warehouses are operating centers for wholesalers who work on either side of the border and trade in goods that may come from a great distance. Other warehouses can be found in agricultural areas and are used as collection and distribution centers. These warehouses play a crucial role in border trade, which is the main activity of the nation-peripheries. They handle millions of tons of unofficial trade.

The three features above are typical of African border areas and explain their efficient operation.

²⁴ The underlined towns are in Nigeria.

The operation of these nation-peripheries is indeed special. They are all autonomous areas that evade the economic legislation of the States whose territory they occupy. Their autonomy is obvious in several respects:

- use of more than one currency;
- high daily movement of people;
- high volumes of trade in farm and manufactured goods.

The currencies used regularly may include those from neighboring countries and even all of West Africa, with a preference for the currency of the strongest country. There are consequently a number of foreign exchange markets operating like bank branches. The daily movement of people is due to the influence of the cities behind these border areas and the presence of large numbers of markets.

The goods traded are agricultural products, manufactured goods, livestock, meat and fish, with the composition varying considerably from one area to another. The volume of this trade is significant in Benin, which is one of the most thriving and original examples in West Africa of the structuring effects of trade and its impact on society.

Benin's trade with Nigeria is considerable and adapted to every social and political characteristic in the two countries. But this trade is especially driven by Nigeria. Benin's trade policy is based on re-exporting to make up for the State's meager resources. Revenues for Benin depend almost entirely on taxation, especially customs duties. To increase its receipts, Benin trades on a large scale with Nigeria, using informal circuits across their permeable border.

Goods imported from the world market and re-exported to Nigeria flow in one direction; in the other direction, the African giant sends Benin an extensive range of manufactured goods and, above all, fuel.

Re-exported goods for sale in Nigeria are all bought on the world market. Although their type and volume vary, the following fourteen are presently the main goods passing through the Cotonou Autonomous Port and Benin customs: milk, rice, wheat flour, vegetable oil, sugar, tomato concentrate, spirits, cigarettes, tobacco, sea salt, used tires, cotton fabrics, batteries and secondhand cars. Of the fourteen, five are particularly important according to volume and customs duties paid: rice, cotton fabrics, secondhand cars, wheat flour and cigarettes.

This re-exporting brings to the parallel market large quantities of non-convertible naira paid by Nigerian consumers along the border and in the main markets. Recycling this foreign exchange involves massive imports of Nigerian goods, particularly fuel and goods either manufactured directly in Nigeria or imported from Southeast and East Asia.

In this way, re-exporting depends on traders being able to recycle their naira without delay.

Naira recycling could be an opportunity for Nigeria, because it encourages Nigerian exports of petroleum products and manufactured goods. However, since there are no effective trade agreements, the exports are almost all smuggled.

The export of petroleum products is the most significant example of parallel trade because of its volume, its role in recycling naira outside Nigeria and the government measures it involves. Fuel leaves Nigeria because of the difference in pump prices between Nigeria and Benin, and, to a lesser extent, because Sonacop does not effectively supply the whole of Benin. A liter of gasoline at the pump still costs less than FCFA 30 in Nigeria, while the price is FCFA 175 in Benin. This price difference brings large numbers of Beninois traders and consumers into the border area and Nigerians have been quick to see their advantage. Along the border hundreds of sales points have been set up, concentrated around the main roads. These include makeshift sales points supplied with 50-liter jerrycans, 200-liter drums or Nigerian cars with specially enlarged fuel tanks. Each of these centers is surrounded by a throng of retailers, with urban unemployed, women, high school students and young people from the countryside who, faced with variability in harvests and farm prices, turn to small-scale gasoline trafficking.

These traffickers are now estimated to be some 15,000, handling more than 210,000 tonnes of gasoline (87.7% of Benin's total consumption). Turnover is some FCFA 24 billion, of which 14 billion is profit. Various local authorities impose local taxes on this activity to pay for infrastructure. In addition to these advantages, fuel smuggling is a boon for the country. Generously subsidized by the Nigerian state, this fuel helps to solve energy problems and even protects the environment (by substituting for fuelwood). But the greatest advantage of fuel smuggling is that the market is highly fragmented, so that the smallest hamlet in Benin is supplied directly. Easy access to this form of energy for all classes of society is an important factor for rural change, encouraging the use of motorized transport. The time the farmer saves can be devoted to other tasks.

The trade in manufactured goods from Nigeria is even more complex, since every company in Benin is involved. All Beninois buyers, however, use the same method to obtain goods from Nigeria. They go directly to a Nigerian city, usually Lagos, and buy the goods they want. The goods are then handled by specialist agents with good connections with the Nigerian police and large warehouses in Nigerian cities. There are some six agents in Lagos, four men and two women, all from Benin. They have their offices in four sections of the trading estate where they have warehouses for their customers' goods.

Each of them acts as a forwarding agent. He or she receives goods from the customer, records them and issues a receipt. Then the goods are kept in the warehouse until they can be transferred to Benin.

The goods are loaded on Bedford trucks capable of carrying 10 or 15 tons. They head for the border under the control of a Nigerian transit company, Dodos Nigerian Limited, which acts in agreement with Nigerian customs and police officials. To facilitate the supervision and protection of this company, all heavily loaded trucks leave from the Eri-Gnanrin bus station. But once out of Lagos, each truck takes the route suggested by the Beninois agent.

How the goods are brought into Benin depends on their weight and fragility.

Small traders move their own goods. Most do not go as far as Lagos, but buy from towns nearer the border, such as Badagry, Ilaro, Oyo, Shaki and Kaima.

Ordinary Beninois buy their Nigerian goods in border markets close to the border itself. There are many of these markets, selling everything the Beninois consumer needs. The largest periodic markets are, in south to north order: Toubé, Ago-Sassa, B.B., Oja-Odan, Ilaro, Towé, Okuta, Guré, Chikanda, Babana and Kamba.

There is a constant flow of people back and forth between these markets and the major towns in Benin, clear evidence of the importance of this trade.

The range of goods imported from Nigeria is wide, as evidenced in the variety available in the markets. But the supply is so diffused that it is not always easy to estimate the volumes.

Thanks to this trade with Nigeria, every company and household in Benin, no matter how small, is well supplied with such goods as fuel, soap and drugs. This suggests that behind it all there is an impressive network of retailers in Benin. The size of the network is a serious handicap for any effective customs control or official regulation of these imports.

At present, imports from Nigeria go well beyond Benin to neighboring countries with no common border with Nigeria, such as Togo, Burkina Faso and Mali. As a result forwarding activities have developed around crossing points, reinforcing Benin's role as re-exporter and increasing the wealth of the border areas.

The Benin model shows the role played by trade in the economic buoyancy of border areas and its impact on neighboring countries. This role is characterized by:

- a buffer stock of unprocessed goods and cash that enables states to depend on their neighbors to solve some of their food and financial difficulties;
- the circulation, mostly illegal, of goods, people and money (via parallel foreign exchange markets) reveals the physical limitations of the territories of existing nation-states. This is especially the case when what is illegal on one side of a border is legal on the other. This clearly indicates how restricted the autonomy of the states really is. Nation-states are all connected together via these nation-peripheries, which operate like fragmented territories and require planning above the strictly national level.

2.4. Conclusion

The various types of border areas described above reveal the widely contrasting effects they have on the territorial unity of states.

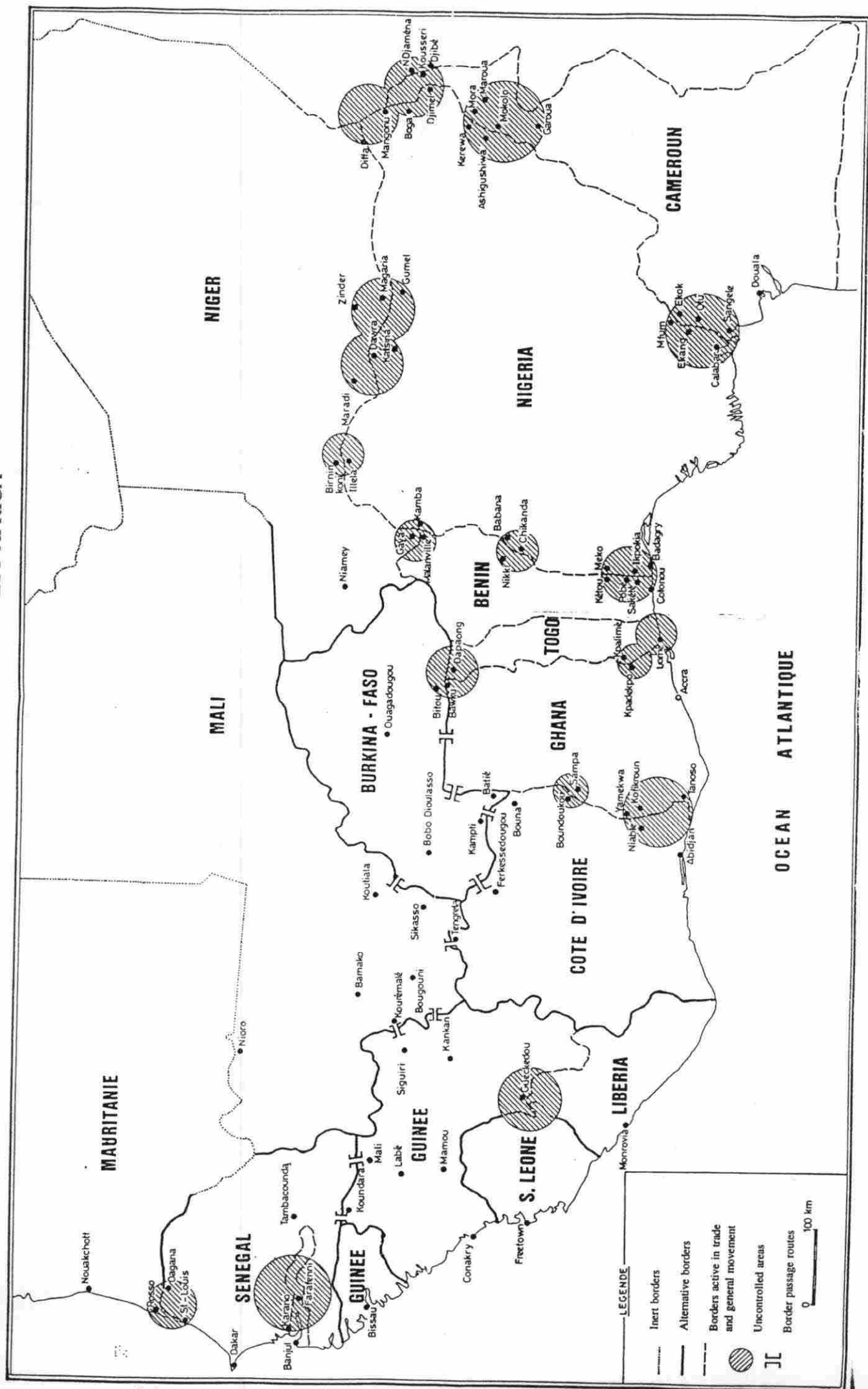
Inert border areas in the desert part of the Sahelian countries restrict the actual size of these countries, whose territory really only consists of a strip of land environmentally suitable for human occupation: the Sudanese zones and major river valleys. The useful parts of Niger, for example, run along its borders with Benin and Nigeria. This type of border makes it possible to distinguish clearly between the state and the area eligible for land use planning. The state may be said legally to cover the whole of the territory within its borders. But the useful part is the only area where government action is concentrated. This reality is one cause of Tuareg resentment, for they are always neglected by the political power structure.

The Tuareg question as presently understood makes it harder to manage areas where the relationship between people and the land is markedly biased against the former. This reality also raises the issue of border instability, illustrated by relations between Blacks and Moors in Mauritania and the perennial dispute over the Aouzou strip between Libya and Chad. Neither problem can be settled properly without ultimately correcting the colonial borders.

Transit border areas lead to a sort of front-line with a no man's land that confers an obvious legal and economic reality on the territory as marked out. Here, land use planning can cover the whole territory, since government action extends to all parts of the nation. These borders can be said to be relatively stable, except for a few disputes such as the earlier one between Mali and Burkina Faso and the intermittent desire for autonomy among the Casamançais in Senegal.

In the case of nation-peripheries we can see the break-up of the national territory, widening the area of land use planning and spilling beyond its traditional boundaries to include neighboring countries. But the unofficial nature of this break-up has become an incitement to fraud through the enormous development of parallel trade. Nigeria is aware of this problem and has undertaken a number of cross-border projects with its neighbors in road-building, water and power supply for border towns beyond its own territory. This territorial overflow also causes some border instability which blurs the edges of the area of the state's land use planning policy.

TYPES OF BORDER AREAS IN WEST AFRICA



III. LAND USE PLANNING POLICIES

In Africa, deliberate planning of land use has a long history. Its origins can be traced to the end of World War II in the desire of the colonial mother countries to provide their colonies with a minimum of infrastructure. In those days, this was called "regional planning". The terminology was also used in reconstruction work under the Marshall Plan.

In French-speaking West Africa, particular efforts were made to equip countries that were seen as bridgeheads of the colonial administration in their conquest of more colonies. This explains the enormous investments made in Senegal and Congo, particularly in the cities of Dakar and Brazzaville. This regional planning also led to the construction of transport infrastructure, particularly harbors and airports.

In the British colonies, major investments were made in education (universities in Ibadan, Nigeria and Legone, Ghana) and public health. The most efficient infrastructure was the transport networks. This investment not only increased the colonies' dependence on the mother country but also had two purposes:

- opening up areas distant either from centers of decision or from trading ports: the Lagos-Nguru railway opened up northern Nigeria and furthered the growing of groundnuts, for which Nigeria was long one of the top world producers;
- integrating the colonies with transnational infrastructure such as the Dakar-Niger railway linking Dakar in Senegal to Kolikoro in Mali, the Abidjan-Niger line from Abidjan in Côte d'Ivoire to Ouagadougou in Burkina Faso, and the line run by the Benin-Niger joint railway board, OCBN. This supranational aspect could also be found in education, with the universities of Dakar and Ibadan.

After independence, this approach to land use planning was overwhelmed by the new realities the states had to face. The countries varied greatly in size and development potential, the colonial period had left its mark, and ethnic conflicts were increasing: all this led states to adopt divergent development policies. At present these divergences are considerable both in theory and in practice. Land use planning, sometimes a misnomer, is now of two types.

There are infrastructure policies based more on copying foreign models than on any concern for the practical use of land or rational management of the country's resources. Priority often goes to urban rather than rural investments.

There are also isolated attempts to regionalize economic activity by a form of decentralization that rarely provides local authorities with sufficient power.

In many countries land use planning is not only a poorly formulated policy but also an activity with ill-defined purposes and objectives.

And yet, so much land use needs to be planned.

3.1. The principles of "*aménagement du territoire*"

The French expression for land use planning, "*aménagement du territoire*", comes from the verb "*aménager*", which the Collins-Robert translates as "fit out, convert, develop", a notion that is easy to grasp in practical terms. But adding "territory" complicates the issue, because of its political connotation. The territory under a given authority is both an area in which sovereignty is exercised and also an area in which people live and work, and which may be unevenly endowed from one place to another. Depending on which word is stressed, the definition and content of the expression may vary. Some authors come closer to the English usage, "regional planning". This is inaccurate in that regional planning is essentially an economic planning device and only an instrument of land use planning policy.

Leaving aside this controversy, the idea of "*aménagement du territoire*" has been clarified in both its definition and objectives since Claudius Petit coined the expression in 1950. For its inventor it meant, "the attempt, within a geographical framework, to achieve a better distribution of people with respect to natural resources and economic activity"²⁵. It seeks continually to match, therefore, three fundamental elements: people, resources, and space. But although the point of achieving this balance is clear, those who put the idea into practice do not often agree on what type of instrument to use. Should it be political or technical, i.e. purely economic. For A. Colin, "land use planning is first and foremost not a technique but a policy"²⁶. On the other hand, Philippe Lamour sees it as simply a way of bringing a country up to the level of its equals. For him, "the issue in land use planning is how to adapt a country that is largely not sufficiently developed to be compared to the countries with which it is associated"²⁷. Other authors see land use planning as a policy for rationalizing territory. Philippe Laurent believes that "planning land use means introducing rationality into areas formerly subject to mere natural determinism or uncoordinated individual purposes". This last concept is doubly interesting. First, it emphasizes the political essence of the notion. "Introducing rationality into areas formerly subject to mere natural determinism" requires decision-making of a political kind, because the operation is ultimately intended to contradict traditional concepts. And second, land use planning is presented as an instrument to correct imbalances. These are the ideas we shall be using²⁸.

With this point of view, land use planning in Africa becomes more complex, involving both the State and, to some extent, its citizens. The structural imbalance left behind by colonialism has always had two parts: the official one linked to the acceptance of colonial reality by those who are now the elite, and the unofficial one, resulting from the desire of citizens to challenge the colonial borders. The response, on the part of citizens, to mobilizing

²⁵ Quoted in de Lanversin, Jacques. *La région et l'Aménagement du Territoire*, 3rd ed. LITEC, Paris, 1979.

²⁶ Colin, A. *France Forum* n° 32, p. 6. 1961.

²⁷ Lamour, P. *L'Aménagement du Territoire*, p. 7. 1962.

²⁸ A paper more narrowly focussed on transport infrastructure complements the present one with an analysis of the various types of reasoning behind infrastructure policies: "*Les choix de localisation des infrastructures routières en Afrique de l'ouest, analyse 1960-1990 et éléments de modélisation*", WALTPS, December 1993.

various natural resources for coherent national development will be determined by the way these different individuals view the dysfunctions in the territories.

3.1.1. Human problems of land use

Population problems in land use planning in West Africa are population growth and uneven distribution.

a) Continually growing population

Africa is the continent with the fastest growing population in the world. Despite attempts at birth control, the natural rate of growth remains high and structurally out of balance with the state of development. Whereas average annual economic growth in Africa is some 1.5%, population growth is 2.8%. At a time when natural resources are being exhausted, the population of West Africa is likely to reach 430 million by 2020. Within these overall figures, there are, of course, variations. Countries like Ghana and, more recently, Benin have for some years posted much faster economic growth than population growth. On the other hand, Cameroon, the Central African Republic, Niger and Chad have negative economic growth and must prepare to make major adjustments. However, the imbalance between economic growth and population growth is less of a problem than the uneven distribution of people within West Africa and within each country in the region.

b) Unevenly distributed population

With an average density of 22 inhabitants per sq km, West Africa as a whole is neither over- nor under-populated. But there are great variations within the region and the states which compose it. In the region as a whole one can distinguish three zones of settlement.

The first is **the forest zone** from the coast to the 8th parallel North. It contains more than two-thirds of the total West African population. Densities vary from 250 per sq km in the Benin oil-palm areas to 1,000 in southeast Nigeria.

The second runs roughly **from the 8th to the 14th parallel**. Settlement thins out towards the north. The greatest densities in this zone are to be found round the highland areas (Kabyè and Dogon lands) and in areas that were historically seats of political power: the Hausa and Mossi lands.

The third extends **from the 14th parallel to the northern borders of the Sahelian countries**, Mali, Burkina Faso and Niger. Here depopulation has been going on for centuries, and densities rarely exceed 5 per sq km.

This uneven distribution of population can also be seen within countries. The regional imbalance is increased by polarization around cities. In Senegal, Dakar contains 27% of the country's population; in Côte d'Ivoire, Abidjan has 15%, and so on. This ongoing concentration of population in one or two cities in each country and rural depopulation increase the dominance of the coastal areas over the interior. However, it is now generally recognized that there can be no development without at least a minimum of balance between the coast and the rest of the country. This is particularly so since the coast was rarely the

historical base for these countries, whose first settlement centers did not often coincide with natural resources.

3.1.2. Natural resources for development

Natural resources are the natural endowment of various parts of West Africa. Here too, there are great disparities in the environment and natural resources, especially minerals.

There is a clear contrast between the high-rainfall forest zones and the arid Sahel. But water management is a difficult problem everywhere. In coastal cities such as Douala, Lagos, Cotonou and Conakry, periodic flooding is the main urban planning problem. On the other hand, in the Sahelian countries the problem is water shortage. The prime concern of land use planning in these countries is theoretically the organization of water management infrastructure.

Apart from water, each country has to cope with problems of natural resource management:

- management of cash crop farming as world prices fall. Taking land out of production, setting up buffer stocks, replacing exhausted plantations, irrigating new areas are all features of land use planning which involve both the environment and the economy. This problem faces Côte d'Ivoire, Ghana and Cameroon for cocoa and coffee, and Benin for oil-palms and even cotton.
- the difficulties of managing mineral resources as, once again, commodity prices fall. Some deposits (iron ore at Tambao in Burkina Faso and Loumbou-Loumbou in Benin) are too far from the traditional routes to the coast to be effectively exploited.

All West African countries are faced with similar problems, making land use planning essential in practice to make best use of resources. But are policies directed to that end?

3.2. Content of land use planning policies

3.2.1. General objectives

Except for Senegal, which adopted a national land use plan (PNAT) in November 1989, the countries of West Africa have gone no further than regional schemes, as in Cameroon, Togo, Mali and Burkina Faso, or the reorganization of the land use planning department and a definition of its mission, as in Benin. However, official documents abound -- five-year plans, working guidelines for ministerial departments, etc. -- which reveal the outlines of national policy.

The objectives laid out in the 5th Cameroon five-year plan are a good summary of the main concerns. Land use planning is to be "the optimal socio-economic organization of the geographic area in which people and their activities will be properly distributed and the national territory rationally used". Whether in English-speaking countries, where they talk of "planning", or in French-speaking ones, where "*aménagement du territoire*" has the wider meaning explained above, the aim is to correct regional imbalances by:

- developing rural areas so as to reduce migration to towns;
- setting up regional development centers by decentralizing authority and providing secondary towns with adequate infrastructure;
- protecting the environment, the latest development issue.

This final aspect shifts land use planning beyond its traditional objective of ensuring a balance between regions and between town and country. This shift implies also achieving a balance within planned areas in town or country by harmonizing projects with the environment.

However, the main emphasis, at least in official pronouncements, continues to be on the need to transform rural areas by providing production units and building roads to open them up. But these concerns are seriously affected by the current economic crisis affecting every country, forcing them to implement Structural Adjustment Programs. Although the SAPs are not a handicap for land use planning, they do make it more difficult to apply the policy on the ground. Conditionalities with aid reduce governments' discretion in taking steps that are most advantageous for their countries' development. Development policies have now become just a part of the Structural Adjustment Programs.

3.2.2. Typical country-specific objectives

The different objectives of land use planning policies can be illustrated with the following seven examples: Côte d'Ivoire, Nigeria, Ghana, Cameroon, Senegal, the Sahelian countries, and the smaller coastal countries.

a) Côte d'Ivoire

Despite its economic problems, Côte d'Ivoire is one of the West African countries that has come closest to economic success, although it became independent with no particular infrastructure, no well-structured urban network and no particularly top-level intellectual elite. At that time it was seen as one of the most backward colonies in French West Africa. The new authorities saw this as a challenge, a competition with two other countries.

One was Ghana, its English-speaking neighbor, which, under Nkrumah, had achieved a booming economy after independence. Côte d'Ivoire was anxious to match Ghana's success because the two countries' leaders had always had profound ideological differences: Houphouët-Boigny wanted to show the achievements of capitalism, indeed its superiority, over the socialism on which Nkrumah based development.

The other was Senegal, which had been the administrative capital of French West Africa and benefitted from the double advantage of better infrastructure and a larger and better educated elite. The Ivoirian authorities saw a challenge in preventing Senegal from becoming the leader of West Africa. Consequently Côte d'Ivoire was quick to base its land use planning policy on:

- diversifying cash crops away from the traditional coffee-cocoa pair by promoting crops such as rubber, pineapple, oil-palm and cotton. Trade in these products would provide the money for the extensive infrastructure the country intended to build. This policy was a success, despite current reconversion problems largely caused by worsening terms of trade;
- urbanization, beginning with the splitting of the country's 6 *départements* into 34. The new main towns became regional development centers, each with a certain minimum investment, providing the country with a good urban network. Particular attention was paid to towns such as Abidjan, Yamoussoukro (now the country's pride) and a number of inland centers. The success of this policy was increased by a massive road-building program to connect one town to another and towns to rural areas. This work was followed up by a major program to build health facilities, schools and universities.

But the final result of these choices was to make the economy more dependent on the outside world. Agriculture, which was to be the engine of development, was hit in the mid-1980s by falling world prices for cocoa, coffee and oil-palm products. This event raises the question of whether agriculture can lead development in Third World countries given present shifts in the terms of world trade.

b) Nigeria

In Nigeria, land use planning has to cope with four main issues: tribal problems, relations between north and south, food security for what has always been the largest population in Africa (90 million in 1992), and the redistribution of oil revenues.

Tribal problems became a land use planning issue after the civil war in 1967-70 when the Ibo tried to secede from the Federation and set up the state of Biafra. The war quickly revealed the country's latent problems: 250 ethnic groups dominated by three major ones: Yoruba in the west, Ibo in the east, and Hausa-Fulani in the north. Planning policy resulted in the most profound administrative reform in West Africa, both by the power granted to local authorities and a simple three-tier structure: Federation, State (3 at independence, now 31), and Local Government Authority, the real hubs of development.

The north-south opposition is made up of major disparities in settlement patterns, environment and natural resources. The Sahelian north is basically agro-pastoral, while the south, also agricultural, contains the country's main mineral resources of oil and natural gas. Between these two zones is the under-populated Middle Belt, inhabited by minorities who are often ignored. The government began to develop this area in the 1970s with oil revenues. The aim was primarily to reduce the rivalry between the north, whose political, military and religious aristocracy had traditionally held power, and the south, which had the wealth.

A major feature of this policy was the creation of the new capital, Abuja, "the symbol of Nigerian aspirations to unity and greatness" (1976 Structure Plan, p. 27).

Food security has also been addressed by a land use planning policy unequalled in Africa. A large number of dams have been built to supply towns and irrigate wide farming areas. This infrastructure is managed by Agriculture Development Projects and River Basin and

Rural Development Authorities and gives Nigeria the largest irrigation capacity in West Africa.

The desire to redistribute oil revenues led to an ambitious infrastructure policy benefiting all the states in the Federation. The infrastructure was of three sorts:

- Schools and especially universities. Each of the then 21 States received its own university funded by the federal budget. Now the country has 31.
- Communications -- roads and airports across the country, opening up all its regions.
- Industrial development, reducing the pressure on cities such as Lagos and Port Harcourt.

The urban network in Nigeria is such that it is the only country in West Africa where the growth of towns has not weakened the rural areas. Rural areas in Nigeria include many settlements of over 5,000 population with adequate infrastructure despite the economic crisis.

The road network is by far the densest and most modern in West Africa. All urban centers and secondary towns are linked by good roads of four classes: express roads, federal roads, state roads and local government authority roads.

In health and education, despite some deterioration due to recession, Nigeria has roughly one hospital bed for 1,000 people, far behind Cameroon (758) and Togo (698), but ahead of Senegal (1,379) and Mali (3,023). Education is without doubt the field in which Nigeria is furthest ahead. The Federation has 31 universities, 65 tertiary education establishments, nearly 6,000 secondary schools and roughly 40,000 primary schools. The size of some campuses, such as the universities of Ibadan and Zaria, is most impressive and without equal in West Africa. To manage this infrastructure the country has a national university commission, which is a sort of federal academy of science.

There are, however, two weak points: the failure of industrialization and the limitations of indigenization.

Despite the huge sums invested in industrialization, Nigeria still depends on labor-intensive factories. The major production units provided for in the five-year plans of the 1970s quickly collapsed, such as the steelworks intended to use ore from the Ajeokouta mines and even from the Nimba mountains in Guinea. The only operational large-scale industry is oil extraction and refining.

Indigenization (local preference in employment) is a state policy that virtually restricts socio-cultural groups to their home areas and encourages the persistence of internal micro-nationalism. It prevents extensive population mixing, even if it is a powerful factor for grassroots development.

c) Senegal

Senegal is the country that is furthest ahead in the definition of a land use planning policy. This is due to its history, since Senegal was the West African colony which most benefitted from the French presence. It was thus the first to be aware of *aménagement du territoire*.

Senegal was the first French colony to be established in West Africa and a bridgehead for the conquest of further colonies. It contained the capital of French West Africa, with all the infrastructure that this implied such as the harbors, airport and university in Dakar. The country was thus able to produce high-ranking intellectuals who formed an extremely dynamic elite both before and after independence. The leading figures affected the administrative division of the newly independent country, since each of them wanted their home area to be a region: Louga-Diourbel for Mamadou Dia, Dakar for Lamine Gaye, Thiès for Senghor, and Saloum for Diagne, etc.

Land use planning was thus a current idea right from independence, with the creation in 1961 of the Bureau des Terroirs et Villages (local area and village bureau), which became in 1962 the Service de l'Aménagement du Territoire and in 1967 the Direction de l'Aménagement du Territoire (DAT). But despite these good intentions, there were hesitations in defining the real objectives of the land use planning policy: was it an instrument for economic development or simply for the administration of the country? The fact that the DAT was transferred from the Ministry of the Economy and Planning to the Ministry of the Interior and then the Ministry of Decentralization is a clear indicator of the difficulties in defining the purpose of the policy. But apart from these problems, linked to Senegal's cyclical difficulties, the proposed objectives listed in the draft national land use plan (PNAT) are perfectly clear. In general, they reflect "the desire to ensure the prosperity and welfare of the population in national independence by the optimal use of all the country's resources and potential where they are to be found". More specifically, the PNAT sets 6 objectives for land use planning:

1. Encourage a balanced development of every region in the country by seeking to utilize all resources (...)
2. Promote an operational urban network and hierarchy, and create centers to counterbalance the effect of the capital.
3. Promote self-sufficiency and full employment in every region in the country.
4. Ensure the conservation, improvement and management of natural resources and especially vegetative cover.
5. Promote industrial development.
6. Encourage the advancement of Senegalese people in the places where they live, by associating them with the development of their territory, the improvement of their environment and the full expression of their socio-cultural identity.

However, Senegal's ambitions for its land use planning were undermined not only by the fall in the phosphate price and poor groundnut sales, but also by disappointments in oil extraction. The country now depends on its extensive diaspora in strategic posts in international organizations such as the ADB, IMF, IBRD, WHO, and FAO to attract funds for the various projects in the PNAT. There are many problems to solve, notably:

- the excessive size of Dakar, which contains 55% of the country's urban population and roughly 21% of the total;
- desertification, which puts conservation of the environment high on the list of priorities;
- regional disparities in development, which need to be reduced so as to counter the independence movement in Casamance.

d) Ghana

Ghana's land use planning policy has varied greatly from the 1950s to the present day. It has generally followed the three political phases the country has experienced since independence.

From 1957 to 1966, under the presidency of Dr Kwame Nkrumah, Ghana had great national and regional ambitions. Superior infrastructure, such as Tema harbor, Legone and Kumasi universities, roads and hospitals meant that Ghana was off to a good start. School attendance rates were among the best in West Africa, as was primary health cover. Nkrumah's pan-African vision led to the building of infrastructure with a regional purpose. The most impressive example is the Akossombo dam, which still supplies Benin and Togo with electricity, the best instrument for regional cooperation in West Africa.

From 1966 to the early 1980s, Ghana suffered from political instability.

From 1981 to the present day, President Rawlings has adopted a policy which, in addition to being incorporated into the Structural Adjustment Program, differs from Nkrumah's continental vision and is simply national. The policy is intended to balance town and country, north and south, with, for example, the imminent opening of the country's fourth university at Tamale in the north. Major investments have been made in renovating cities like Accra, improving urban roads, airports and buildings. Similarly infrastructure has been built around the River Volta to promote rice-growing.

e) Cameroon

Cameroon's land use planning concerns are the combination of three features which make for great contrasts between the country's regions.

The first is the geography of the country. Cameroon stretches nearly 1,400 km from north to south and its mountainous relief makes road-building difficult. To solve the communications problem, the government has invested both in roads and airports. The country now has 42 airports of varying size, including international ones at Douala, Yaoundé

and Garoua. Twelve others are regularly served by Camair: Bafoussam, Bamenda, Bali, Batouri, Bertoua, Dschang, Foumban, Kribi, Mamfè, Maroua-Salak, Ngaoundéré, and Yagoua.

The second is history and the division of the country between the Muslim north and Christian and animist south.

The third is an unusual colonial history. Cameroon was colonized by Britain, France and Germany, which had three quite different forms of administration. Political unification under President Ahidjo did not remove the lingering desire for autonomy in the English-speaking regions which are now the main centers of political opposition.

Faced with these problems, Cameroon's land use planning policy aims to offer the same opportunities for development to all areas by removing them from the influence of foreign countries; the west and north are strongly influenced by Nigeria. Since the 4th five-year plan there have been three priorities:

- limiting rural depopulation by organizing village communities;
- organizing the national territory around the new deep-water harbor at Rocher du Loup, the Lagdo dam and Benoué valley, major national projects;
- managing water resources with planning missions for the upper Benoué valley, the coast and the Nyong valley.

Despite the country's Structural Adjustment Program, Cameroon continues to develop its infrastructure plans with a view to producing its first national land use plan.

f) Sahelian countries

The Sahelian countries are seriously affected by desertification and have made the protection of the environment, especially water management, their top priority in land use planning. **Burkina Faso** has made great progress, using the slogan it has taken to its heart, "Find, control and manage water". The number of retaining dams rose from 328 in 1985 to 800 in 1992, or 144% in 7 years. In 1989, 21,845 boreholes, including 7,020 pumps, supplied 69% of the population's water requirements, still estimated at only 20 liters per person per day.

Mali and Niger have implemented less ambitious programs.

In **Mali**, the largest projects are carried out under the OMVS (Senengue and Manatali dams) and the Office du Niger.

in **Niger**, the irrigation schemes run by the ONAHA are contributing to the development of farming and pastoralism. In 1986 the country had 1,160 boreholes, 1,128 out-of-season crop schemes covering 126,700 hectares of arable land, divided into 125,000 smallholdings in 2,250 villages. Most of the boreholes are to be found between Tillabéri in the west and N'Guigmi in the east. The desert nature of the north pushes people and livestock south in large numbers, causing problems of cohabitation between pastoralists and farmers. These

problems urgently require action on land use, because of their negative effects on the country's economy. First, there are the conflicts between pastoralists and farmers, of which the worst caused 104 deaths at Toda in Maradi *département* in 1991. Then livestock is moving out of the country into Nigeria, gradually depriving Niger of one of its major resources.

g) Smaller coastal countries

Benin, Togo and The Gambia are all warehouse-states, but their methods of trading have produced different strategies for land use planning.

In **Togo**, which serves virtually only the hinterland (mainly Burkina Faso and Niger), priority has been given to road-building. The country now has a density of tarred roads of 47 km per 1,000 sq km, one of the highest in West Africa. The Togolese authorities are concerned with opening up the north of the country and making the harbor at Lomé the port of preference for Niger and Burkina Faso.

Similarly, Togo has built a variety of infrastructure to promote the service industries, including an industrial free-trade zone in Lomé, banks and hotels.

In **Benin**, the existence of the railways run by the OCBN and the low volume of traffic to Niger have led the authorities to concentrate on developing harbor facilities. This infrastructure enables the country to engage in a thriving trade re-exporting goods imported from the world market to Nigeria. Consequently the road network is only developed in the south of the country, except for the 715 km of tarred road from Cotonou up to Malanville. Similarly, to compensate for the development problems of its small size, Benin sets great store by neighborly relations. This strategy has made it possible to set up a sugar refinery in Savè and a cement-works in Onigbolo and to create a committee to manage the border areas. Its joint use with Togo of power from the Akossombo (Ghana) and Nangbéto (Togo) dams will soon be increased by hydro-electric power from the Adjarrala dams in Benin.

The Gambia, a finger of land sticking into Senegal, has the same land use planning strategy as Benin. It has Banjul harbor, which handles virtually all the goods re-exported to Senegal and is making the River Gambia navigable all year round. These two facilities are the key to the smuggling traffic and consequently the country's economy. The failure of the Senegambia experiment, which could have given the country more room for maneuver, forced the authorities to turn to tourism. The Gambia is consequently equipped with relatively well-run hotels.

3.3. Conclusion

There are as many different objectives for land use planning as there are states in West and Central Africa. They can, however, be divided into three broad groups of countries in terms of the theory and practice behind these objectives.

Nigeria, Côte d'Ivoire, Ghana and Burkina Faso are the leading group, because of the extent to which they have put into effect the objectives laid out in their land use planning policy.

Senegal, Cameroon and Togo are an intermediate group of countries which have only reached the stage of defining their land use planning policies. Most are still only analyzing the problem and producing regional schemes.

The third group contains those countries where land use planning is not yet seen as a policy, but rather as a simple regional planning instrument, as in Benin and Mali.

These contrasts probably reflect the different types of problem faced by individual states. However, it is important to point out the incoherence of these policies and the vagueness of their objectives. Many papers on land use planning have an academic flavor out of touch with the realities of their country, both in terms of the purpose of land use planning and the institutions entrusted with it: the states of West Africa have clearly a long way to go.

The major weakness of these national land use plans is the lack of any clear definition of the principles behind them. Philippe Lamour sees three main points that need to be defined:

- the natural framework in which investment is to be made;
- a practical implementation plan and particularly the institutions competent to monitor and coordinate the investment;
- the conditions for the active, ongoing commitment of the communities concerned.

IV. INSTITUTIONAL FRAMEWORKS AND RESULTS OF LAND USE POLICIES

This section describes the institutions set up to plan land use and the results obtained in order to assess the effectiveness of that institutional framework.

4.1. The institutional framework for land use planning policy

The ministry in charge of the land use planning department varies from country to country and from one regime to another. Land use planning generally comes under one of three types of ministry.

The planning ministry, where land use planning is seen as a technical instrument supporting economic planning. This system has been adopted by a large number of countries. But in many cases the land use planning department rarely achieves a full expression of its identity. It is considered to be at the service of the national plan, with no great objectives of its own.

The ministry of town planning and housing, and more recently the environment. In these countries, land use planning is sometimes reduced to urban infrastructure issues, with a few projects tagged on that were undertaken as part of an incomplete regional planning policy. At present, urban infrastructure is taking a back seat to the environment. In Benin, while the authorities are still wondering what their land use planning policy will consist of, a national environment plan has already been produced.

The ministry of the interior or of decentralization, where land use planning is seen as an instrument of government or propaganda to soothe desires for independence or autonomy in particular regions.

Senegal is symptomatic of the vagueness of the role assigned to land use planning. There the land use planning department has come successively under:

- the General Commissariat of the Plan, 1961-67,
- the Ministry of the Plan and Industry, 1967-78,
- the Ministry of Town Planning and the Environment, 1978-83,
- the Secretariat of State for Decentralization, 1983-88,
- the Ministry of the Interior, 1988-91,
- the Ministry of the Economy, Finance and Plan, 1991-93,
- the Ministry of the Interior, from June 1993.

Apart from this negligent attitude by the authorities towards land use planning, the absence of any positive legal framework for such a policy is a matter for concern. Although the states of West Africa have tried since independence to establish firm institutional and political frameworks, they have been hampered by frequent ideological shifts. Some countries have gone in thirty years from a market economy to socialism or collectivism and back to liberal democracy. Through all these changes, close attention needs to be paid to the rules governing state land, the investment code and the bodies entrusted with implementing land use planning policy.

For rules governing state land, most countries used the pre-independence regulations defining land use and reserved areas such as forests and water. Sometimes superficial land tenure reforms have been added, usually restricted to urban areas.

In fact, the main challenge in the management of state land is to move from a system of customary land tenure to a modern system without upsetting the environmental and traditional balance of rural areas. A number of countries have attempted to solve the problem with limited agrarian reform by defining only those areas where the state intervenes.

In Benin, Act n° 61-26 of 10 August 1961 first defined the areas for rural land use planning and the conditions for their development. In Senegal, Act n° 64-46 of 17 June 1964 still regulates the use of state land. In Nigeria, major development projects were advanced by the 1978 Land Use Decree, which laid down the conditions for state expropriation of land.

The greatest weakness in all these regulations is their superficiality. In no country have they been accompanied by agrarian reform in depth. Generally they lay down how landowners are to be involved in development areas, either by the leasing of their plots or by their integration into production cooperatives. Both solutions have usually caused misunderstanding between state and local communities, leading to riots that halt the development. In 1990 in Benin, landowners destroyed 4,000 hectares of oil-palms in protest against the non-payment by the national fats corporation of the land rent they were due. Nigeria saw similar disturbances in the Bakalori rice-growing area in Sokoto State in 1979.

The investment codes that partly determine the funding of various land developments are theoretically useful regulations for governments. In Benin, for example, Article 18 of the 1990 investment code stipulates that "to be approved for tax concessions, the activity created must substantially contribute to the implementation of the land use planning policy by introducing activities into economically less developed areas and developing local resources". However, in practice these conditions are rarely respected either by politicians or by businesses. The desire to attract investors, mostly from abroad, leads countries like Senegal and Togo to infringe on these principles by creating industrial free-trade zones. This strategy goes against a dynamic land use planning policy by concentrating industrial activity in one area of the country; in 1989, Dakar contained over 90% of Senegal's industrial units.

The bodies entrusted with implementing land use planning policy come under more than one ministry at a time. Apart from the official ministry in charge of the land use planning department, four others have been identified as responsible for applying the national land use plan: Economy and Plan, Housing and Environment, Rural Development and Interior or Decentralization. The main difficulty for governments is coordinating the action of all these ministries.

Only Senegal and Cameroon seem to have coped with these problems by setting up an institutional framework for discussion and decision-making on the crucial issues. The land use planning department comes under an interministerial land use committee which meets once a week. The committee coordinates the requirements of the regional or *département* land use committees working at the grassroots with community bodies concerned with resource management or the local administration.

In the other countries, the work of this body is done by national planning committees, which, in the countries most approved of by the IMF and World Bank, are gradually being replaced by the SAP monitoring committee.

The areas for applying land use planning policy also vary from one country to another. In Senegal, Mali, Niger, and Ghana, local administrative areas (regions or *départements*) are used for the national land use plan. In countries like Cameroon and Côte d'Ivoire, on the other hand, geographical regions, often including a number of administrative subdivisions, are used as the basis for land use planning. The second approach seems more suitable, since administrative areas rarely coincide with the socio-economic realities that give a region an identity.

4.2. Results of land use planning policies

There is no room here to describe exhaustively the results of land use planning policies in West Africa. The fields covered are not only varied but also multidimensional. However, there are a few parameters that are crucial for the operation of an economy and which deserve closer analysis:

- the appropriateness of actions with respect to the administrative framework;
- the effectiveness of the urban network in organizing space and economic activity;
- the state of health and education as a result of investment in infrastructure;
- the efficiency of roads, railways and telecommunications;

- the results of major hydro-agricultural projects in multi-purpose water management;
- the results of industrialization.

4.2.1. Administrative reform as a contribution to land use planning

Every country has carried out some sort of administrative reform, great or small. The objectives of these reforms are many and varied; major ones are:

- decentralization and deconcentration, to bring the administration closer to the citizen;
- correction of regional imbalances by promoting new centers of development, often administrative centers;
- pacification or repression of ethnic rivalries and the desires of some socio-cultural groups for independence or autonomy.

Depending on the priorities adopted, administrative reform, in theory and practice, may take many shapes. Two parameters are often used to assess the appropriateness of the reform: the size and hierarchy of the subdivisions and the actual power devolved to local authorities.

In size and hierarchy, there are three distinct types of situation:

- Nigeria, with three levels: Federation, State, now 30 in number, and Local Government Authority²⁹;
- Benin, Niger, Burkina Faso, Cameroon, with five levels: central government, *département* or province, *sous-préfecture*, *arrondissement* or *commune*, and village;
- Guinea, Senegal, Mali, Togo with six levels: central government, region, *département*, *sous-préfecture*, *arrondissement*, and village or rural community.

²⁹ The Federal Capital Territory of Abuja is the 31st state.

The table below summarizes the situation in selected countries.

Table 1: Hierarchy of administrative units in selected African countries

Country	State	Région or Comté	Département	Sous-préfecture or district	Arrondissement or canton	Commune	Local Government Authorities	Village or rural community
Benin			+	+		+		+
Burkina Faso			+	+	+			+
Côte d'Ivoire			+	+	+			+
Cameroon			+	+	+			+
Niger			+	+	+			+
Nigeria	+						+	+
Ghana		+		+		+		+
Senegal		+	+	+	+			
Togo		+	+	+	+			+

Source: Field surveys

Except for Ghana, the English-speaking countries have fewer subdivisions. In Liberia, for example, counties correspond to other countries' regions and are directly divided into villages, which are the basic units. Apart from their hierarchy, the problem with these subdivisions is their effectiveness, i.e. their ability to act as a framework for relevant development action. At the local level, the village, rural community, *arrondissement* or *commune* are indeed effective, because they correspond to social and geographical realities: they are ethnically and environmentally homogeneous. Some of these micro-regions have a clear identity of their own. But further up the administrative pyramid in every country, the identity of the unit is vague because of its geographical boundaries. Often the region or *département* contains a number of socio-economic sectors and socio-cultural groups vying for control of land and the regional economy. These conflicts are made more bitter by the fact that these higher administrative units operate not so much as frameworks for economic and social development, but rather as instruments for the authorities to control local people.

For all the fine words and best intentions of administrators in every country, except for Nigeria, reform has never devolved real political power to local authorities. Nowhere except in Nigeria is the region or *département* recognized by being granted a legal status. Regions and provinces have no legal identity, no competence, no technical or financial means to be able fully to exercise the role they have been given. The administrative hierarchy is thus purely superficial, unable to take or initiate effective local action. The result is that people look outside the regional economy and migrate in large numbers, not to other specific regions but to individual cities. This explains the current state of the urban networks of West Africa.

4.2.2. The effectiveness of the urban network

Economic activity (production, processing, distribution and trade) cannot fully develop without at least some organization of space. One essential component of organization is

towns. Experience in the industrialized countries shows that urbanization makes a large contribution to economic development.

The striking feature of the urban networks of West Africa is the preponderance of one or two cities in each country. This is explained by the nature of administrative reform in most countries, which has remained superficial and has not devolved enough financial and political power to local authorities. Usually the national territory has been divided into administrative units for political control and revenue collection. In this way many villages have been decreed to be towns by making them administrative centers. In Benin, for example, the 1978 reform increased the number of towns from 46 to 84. Overnight, places with less than 5,000 population legally became towns. But, here as elsewhere, the necessary infrastructure (urban planning, water supply, power, telecommunications) did not follow the political decision.

The result is that in most countries one or two cities have emerged, surrounded by an urban desert in which it is difficult to identify any counterbalancing regional centers of development. Two features are particularly frequent:

- competition between two cities in one country, as in Burkina Faso (Bobo-Dioulasso and Ouagadougou), Cameroon (Douala and Yaoundé) and, in the past, Niger (Niamey and Maradi). But in the last case, Maradi has been virtually swallowed up by Nigeria and no longer competes nationally with Niamey;
- bloated capitals, such as Cotonou (16% of the population of Benin), Dakar (21% of Senegal), N'Djamena in Chad, Lomé in Togo, Conakry in Guinea, Bamako in Mali. These cities contain virtually all the country's economic activity. A study in 1989 revealed that 90% of Senegal's industrial activity was sited in or near Dakar. The rapid population growth of these capitals, roughly 6.5% per year, and their lack of infrastructure make them difficult to manage.

There are two exceptions to this rule: Côte d'Ivoire and, even more, Nigeria. Administrative reform in Côte d'Ivoire split the country into 34 *départements* and provided it with a fairly effective urban network. Furthermore, investment in secondary towns such as Bouaké, San Pedro and, most of all, Yamoussoukro has reduced the excessive dominance of Abidjan.

However, it is Nigeria that has the most effective urban network. This goes back to the country's long urban tradition. In the pre-colonial and early colonial periods much of what is now Nigeria already had a high concentration of towns. In the Hausa lands in the north, according to Heinrich Barth, more than half the population was living in urban centers at the start of the 19th century. In the Yoruba lands in the west, the same was observed. According to P.E. Sada and A.G. Onokorhoraye³⁰, "in the 19th century the Yoruba lands contained a dozen towns of over 20,000 inhabitants and the biggest, Ibadan, had roughly 70,000". Elsewhere the phenomenon was less marked. Both the colonial authorities and those of the independent Federation used this urban base. By building roads and railways to open up

³⁰ Sada, P.E. and Onokorhoraye, A.G. *Emergence of secondary towns and national development in Nigeria. Paper given to the 9th conference on housing and urban development in Africa.*

inland areas the British administration encouraged the emergence of secondary towns at crossroads and junctions and in places where export commodities were produced. So the Hausa and Yoruba towns were joined by a well-defined network in the east centered on Port Harcourt, Aba, Onitsha and Enugu. Just before independence the southwest of Nigeria was 60% urban, the north 23% and the east 18%.

To correct these disparities the Federation authorities took administrative measures which could not be properly implemented until after the Biafran war. They consisted of subdividing the territory further. In 1964 the creation of the Centre-West state boosted the historic town of Benin City, its new capital. In 1967 the number of states rose to 12, enabling another six towns to become political capitals. In 1976, 7 new states were created, and in 1990 the total rose to 30. So the earlier urban network of towns based on cities of over 200,000 inhabitants (Lagos, Aba, Enugu, Onitsha, Port Harcourt, Ibadan, Ifè, Abeokuta, Ogbomosho, Oshogbo, Ilesha, Benin City, Kano, Kaduna, Zaria, Ilorin and Maiduguri) was joined by smaller towns that had become centers of development (Calabar, Jos, Ondo, Yola, Sokoto, Owerri, Makurdi, Minna, Katsina, etc.).

Political decisions thus made a number of secondary towns centers of development. In this way Nigeria provides "the instructive example of a country in which secondary towns are developing as part of simultaneous political development"³¹. To support this policy, the government took a number of measures in 1976, of which the most important were to:

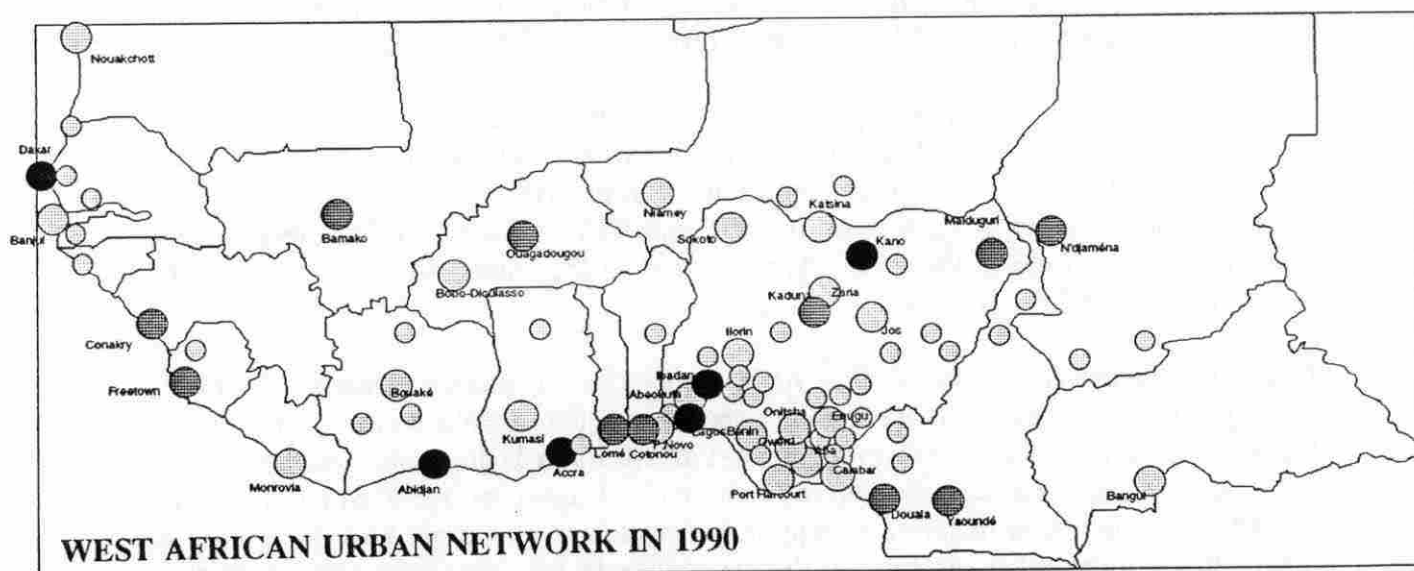
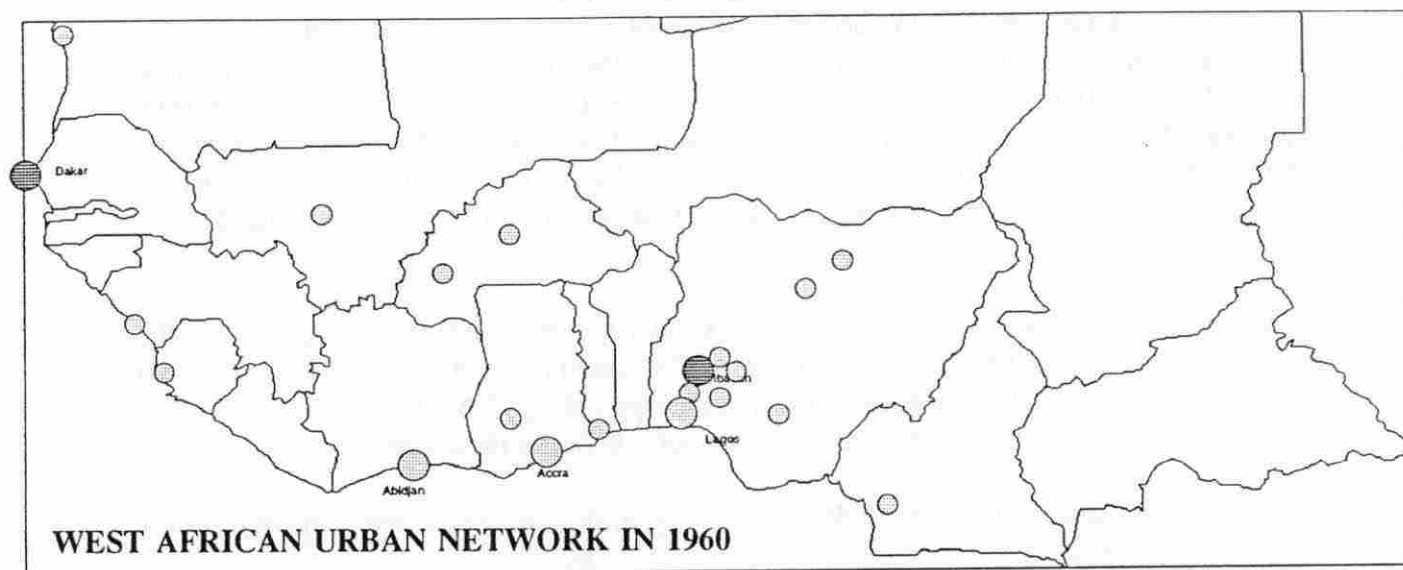
- provide each State capital with a federal university, airport and other public institutions and development projects;
- allocate public revenues by statute to local administrations: local government authorities, for example, were to receive 10% of federal revenue and 10% of State revenue.

Despite difficulties in implementing the 1976 decree, Nigeria has succeeded in creating the most effective urban network in West Africa. The towns are well distributed throughout the territory and are thriving centers of development. The relative dominance of Lagos (some 30% of the country's industrial activity in 1976 and 68% of Federation business) is now counterbalanced by Kano in the north, Port Harcourt in the southeast, and more recently, Abuja in the center of the country.

In general, the urban network of West African countries remains unbalanced. The towns created by administrative reform are often not operational: they are short of infrastructure (as in Benin, Mali, Burkina Faso) or over-equipped (Lama-Kara in Togo, Yamoussoukro in Côte d'Ivoire, and, to a lesser extent, Garoua in Cameroon). These over-equipped cities exist by executive fiat. They have received exceptional investments that could have been used to improve the national urban network. Yamoussoukro is the most symptomatic of this. Nigeria's new capital, Abuja, also comes under this heading, although it does have the purpose of maintaining the balance between north and south, and integrating the Middle Belt into national life.

³¹ Sada, P.E. *et al. op. cit.*

**EVOLUTION OF THE WEST AFRICAN URBAN NETWORK
BETWEEN 1960 AND 1990
FROM 17 TO 86 TOWNS OF MORE THAN 100,000 HABITANTS**



- TOWNS OF MORE THAN 1 MILLION INHABITANTS
- ◐ FROM 500,000 TO 1,000,000
- ◑ FROM 200,000 TO 500,000
- FROM 100,000 TO 200,000

4.2.3. Education and health

This section deals with two essential features of human welfare, education and health, which have been hit hardest by recession and where infrastructure varies considerably from one country to another as well as within a given country.

a) Education

Education in Africa has generally shown some progress in terms of numbers and buildings. From 1960 to 1983, according to Unesco and World Bank reports³², the number of school pupils increased fivefold to 63 million. The increase in the 1970s was 9% per year, twice as fast as Asia and three times as fast as Latin America. However, there are marked differences at various levels.

In primary education progress has been quite good. From 1960 to 1983 the number of schools in the nine French-speaking West African countries rose from 4,800 to 19,600, an annual increase of 20%. From 1983 to 1989, school-building slowed, as can be seen in the table below.

Table 2: Primary schools 1960-85

Year	1960	1983	1989
Country			
Benin	600	2,700	2,879
Burkina	450	1,200	2,362
Côte d'Ivoire	1,700	5,000	5,796
Guinea	600	2,400	2,332
Mali	400	1,300	1,428
Mauritania	200	600	1,121
Niger	300	1,700	2,215
Senegal	-	2,200	2,422
Togo	600	2,300	2,429

Source: UNESCO statistics

Investment was greater in the first two decades after independence and has declined considerably since. Table 3 shows that the number of pupils has followed the same trend, with great variation in the totals from one country to another.

³² *Education in sub-Saharan Africa. World Bank, Washington, September 1988. Statistics for 1991, World education report. UNESCO, 1991.*

Table 3: School pupils 1960-89

Year	1960	1970	1983	1989
Country				
Benin	89,000	155,000	428,000	482,451
Burkina	57,000	105,000	277,000	472,979
Côte d'Ivoire	239,000	503,000	1,160,000	1,214,511
Guinea	97,000	166,000	348,000	310,000
Mali	65,000	204,000	293,000	324,000
Mauritania	11,000	32,000	107,000	158,000
Niger	27,000	89,000	200,000	344,848
Senegal	129,000	263,000	533,000	682,925
Togo	103,000	229,000	457,000	569,388

Source: Education in Sub-Saharan Africa, World Bank, Sept. 1988. Mémoire statistique de l'UNESCO, 1991.

These overall figures only become significant when like is compared with like.

Table 4: Average number of pupils per school

Year	1960	1983	1989
Country			
Benin	149	158	168
Burkina	127	230	200
Côte-d'Ivoire	140	232	209
Guinea	161	145	133
Mali	163	225	226
Mauritania	55	178	141
Niger	90	118	156
Senegal	-	242	281
Togo	171	198	234

Source: Calculated from previous sources

But the pupil-teacher ratios and attendance rates are even more revealing.

Table 5: Pupil/teacher ratios and primary attendance rates

Country	Pupil/ teacher ratio (1989)	Primary attendance rate 1990		
		Boys	Girls	Overall
Benin	35	69.7 %	37.5 %	53.6 %
Burkina	55	33.8 %	22.3 %	28 %
Côte d'Ivoire	41	71.1 %	55 %	63.1 %
Guinea	38	26.4 %	12.8 %	19.6 %
Mali	39	17.9 %	11.3 %	14.6 %
Mauritania	49	48 %	37.6 %	42.8 %
Niger	41	32.2 %	19.2 %	26.2 %
Senegal	58	55.3 %	40.3 %	47.8 %
Togo	55	91.8 %	64.9 %	78.4 %

Source: Annuaire statistique de l'UNESCO, 1991.

Even these country averages conceal local disparities. In Senegal, for example, where the national primary attendance rate was 42.8% in 1990, the figure was 87.6% in the Dakar region and 29.9% in Diourbel.

While primary attendance rates are acceptable, the same is unfortunately not true at the secondary level. Drop-out rates from primary to secondary are as follows:

Benin	44%	Mauritania	22%
Burkina Faso	18%	Niger	10%
Côte d'Ivoire	22%	Senegal	9%
Guinea	18%	Togo	33%
Mali	39%		

Despite reforms in many countries, the secondary school attendance rate remains very low. Table 6 gives the overall figures.

Table 6: Secondary school attendance rates (1989)

Country	General number of males	Rate of male enrolment	General number of females	Rate of female enrolment	Total number of students	Rate of enrolment	Number of teachers
Benin	66.414	23%	26.707	3%	95.121	16%	2.909
Bk F	63.132	9%	16.184	4%	91.336	6.5%	-
C D'I	200.177	25%	66.624	12%	266.801	18%	-
Guinea	59.368	13%	19.291	4%	78.659	8.5%	-
Mali	47.193	9%	19.238	4%	66.431	6.5%	-
Niger	27.424	23%	11.730	10%	39.154	17%	1.984
Senegal	44.508	9%	18.871	4%	63.379	6.5%	2.282
Togo	115.064	21%	57.480	10%	173.044	15.5%	5.050
	83.552	36%	26.239	12%	109.791	24%	4.374

Of all the French-speaking countries in West Africa, only five have secondary school attendance rates in excess of 10%. These are, in descending order, Togo, Côte d'Ivoire, Mauritania, Benin and Senegal. Many leave school unqualified, because of poor equipment, unmotivated teachers with over-large classes, shortage of educational materials, poor communication with parents and the likelihood of unemployment even for those who graduate. In all, fewer than 25% of secondary pupils go on to higher education.

The main problem in higher and technical education is the lack of university space. Although all the West African countries (except Cape Verde, Guinea Bissau, The Gambia and Mali) have universities, there are still serious problems with respect to facilities.

Table 7: Establishments of tertiary education

Country	Universities	Technical and professional training centers
Benin	1	3
Burkina	1	2
Côte d'Ivoire	4	6
Guinea	1	-
Mali	-	2
Mauritania	-	1
Niger	1	1
Senegal	2	4
Togo	1	3
Cameroon	3	6
Ghana	4	12
Nigeria	23	65

Sources : surveys

Since tertiary education establishments were set up, very few of them have kept pace with the growing number of students. The result is that existing universities are overcrowded. The university of Bangui was designed for 1,500 students and now has 5,000. For Dakar the figures are 3,500 and 24,000. With the exception of a few countries, these universities are more like massive high schools with no special facilities.

The English-speaking countries, Ghana and Nigeria, seem to have done best. This is because of the density of their tertiary education systems, the balanced distribution of establishments throughout the country and the size of the universities of Ibadan, Zaria, Legone and Kumasi. The Ahmadu Bello university in Zaria alone has a campus that is larger than all the campuses of Benin, Niger, Togo and Burkina Faso put together; its budget in 1980 was larger than that of the Benin government.

b) Health

The health situation is alarming, despite the development of private pharmacies and primary health centers supported by NGOs. As for education, most facilities date from independence and suffer from a chronic lack of renovation and extension. Structural Adjustment Programs, by imposing cuts in health and welfare, have made matters worse. The table below reveals the poor and varying health coverage in selected countries.

Table 8: Health coverage in selected countries

Country	Inhabitants per hospital bed	Inhabitants per doctor
Benin	810	27,500
Burkina	1,419	32,250
Senegal	1,016	30,200
Cameroon	758	28,520
Togo	791	23,283
Niger	667	21,300
Nigeria	1,842	46,500
Ghana	1,050	-

Source: National statistics

Within each country there are great disparities.

In 1991, Cameroon had, nationally:

- one doctor per 28,520 population,
- one nurse per 1,655 population,
- one hospital bed per 758 population;

whereas the South province had:

- one doctor per 16,260 population,
- one nurse per 860 population,
- one hospital bed per 662 population;

and the North:

- one doctor per 104,000 population,
- one nurse per 11,400 population,
- one hospital bed per 4,160 population.

In some countries, whole regions have to make do with dispensaries (Niger has only 3 major hospitals for a population of 7 million). In Benin, Mono *département*, which contains 18% of the country's population, still has no regional hospital.

Altogether, the education and health situation in West Africa is catastrophic, at a time when new diseases like AIDS are assuming alarming proportions.

4.2.4. Communications

Two types of communications infrastructure have made spectacular progress: harbor facilities and telephones. This reflects the importance of connections between West Africa and the outside world. On the other hand, roads and railways to integrate countries and regions seem to be poor relations, except in Nigeria, Côte d'Ivoire and Togo, whose achievements in these areas are considerable.

a) Roads

Roads are the most extensive form of infrastructure in every country. The network is dense and usually classified as follows:

- national roads,
- regional roads,
- local roads,
- unclassified.

Few roads are ever called international, revealing the wholly national concerns of planning authorities. For all the political rhetoric about regional cooperation and integration, there is no common inter-state road program. Burkina Faso and Benin tried to be the exception by jointly initiating the surfacing of the main road from Fada N'Gourma in Burkina Faso to Djougou in Benin. So far only Burkina Faso has managed to complete its section, since Benin has not been able to raise the funds. Furthermore, from one country to another it is the poor quality of the roads that is striking. Rarely are more than 25% of a country's roads paved.

Table 9: Length of road network in selected countries

Country	Total length of roads	Paved roads	Paved roads as percentage of total
Senegal	13,870 km	2,960 km	21.3 %
Mali	14,444 km	1,795 km	12.4 %
Benin	9,000 km	1,200 km	13.3 %
Cameroon	38,800 km	3,804 km	11.2 %

Two countries are exceptions. Togo has made great investments in its roads in order to carry out its function as a transit country. The country's small size has also made road-building easier. Of a total network of 2,898.3 km, 1,579.8 km are paved, or 54.5%. But the country with the best roads is Nigeria. There, all roads serving settlements of over 5,000 population are paved. There is also an efficient system of expressways

between Lagos and Ibadan and the eastern states, and between Abuja and the great northern city of Kano.

Another feature of the West African road network is its lack of functionality. In many countries the roads run in straight lines, because they were built to carry raw materials straight to the harbors for export. Very few countries have remedied this so that roads would no longer be routes to the world economy but links for rural and neglected areas.

In fact, the road network only partially fulfills the role of integrating regions within each country and among countries within West Africa. Many inland areas are still cut off by poor roads and natural obstacles such as forests, mountains and drifting sand. Along the coast the main cities are at least linked by roads of variable quality, but the much needed trans-Saharan highway is taking a long time to get started. Consequently the Sahelian regions are marginalized, since, even when they do cooperate, they have to go through coastal states.

b) Railways

Once again Nigeria comes out at the top for the length of its network. But in general, investment in railways since independence has been slight or non-existent. Most lines have not been significantly altered since independence and are in financial difficulty because of competition from road transport.

In the colonial period, railways in West Africa, and specifically the former French West Africa, were a key factor in the integration of the territories. Of all the attempts to make the Federation of Mali work, the most relevant and effective was probably the Dakar-Niger railway. Since the break-up of the Federation and economic recession in Mali and Senegal, the network has only operated fitfully. Local gossip has it that its only remaining function is to carry Malian beggars to Dakar.

The Abidjan-Niger line, also built in the colonial period, has been managed separately since 1989 by Burkina Faso and Côte d'Ivoire.

The network run by the Benin-Niger joint railway board, OCBN, not only has not been extended since the last section was built at the end of the 1930s, but has been cut back in Benin. The oft-stated intention of extending the line from Parakou in Benin to Dosso in Niger is blocked by the expense, the lack of economic viability and pressure from the Niger road hauliers who serve Parakou. The only country at present attempting to promote railways to open up its territory is Burkina Faso. Beginning in 1985, on the initiative of President Thomas Sankara and with national funding and human investment, Burkina began the construction of the section from Dori to the iron and manganese mines in Tambao.

The modernization of the existing networks is hampered by their narrow gauge, which restricts the speed and tonnage of trains and so the viability of rail transport. Railways are falling further behind roads which offer users and business people greater opportunities.

c) Waterways

Although West Africa has many rivers -- the Niger, Senegal, Gambia, Volta and other smaller ones -- river transport is not particularly developed. It is mostly restricted to internal traffic. The Niger River is not navigable over large stretches because of rapids and waterfalls. Only upstream in Mali and downstream in Nigeria can it be used for transport. Although there is a Niger River authority comprising 12 countries, no significant action is being taken to make the river navigable over most of its length. The same is true of the Senegal River, which is only navigable for about 500 km between Senegal and Mauritania.

d) Harbors

West Africa's harbors of varying size are used almost exclusively for transport to and from world markets. In regional terms, they mainly handle imports for re-export. Most of the traffic into Cotonou in Benin is for re-export to Nigeria. Banjul harbor serves the same function for Senegal.

The ports of Lomé, Abidjan and Cotonou serve the hinterland countries of Niger, Burkina Faso and Mali. In the late 1970s and early 1980s there was substantial crude oil traffic between Nigerian and Ghanaian ports, and, to a lesser extent, Lomé; but nowadays goods traded between West African countries rarely travel by sea. Nigerian manufactured goods, for example, which now circulate throughout West Africa, move not by water but along roads in convoys called "modern caravans".

Until official trade among West African countries is released from the straitjacket of tariff policy, the region's harbor facilities will continue to facilitate the openness of each country to the world economy.

Table 10: Harbor facilities in West Africa

Country	Ports	Length of docks in meters	Number of berths	Number of terminals	Covered storage area (m ²)	Open-air storage area (m ²)	Container yards (m ²)	Cold storage (m ³)	Total capacity (m ³)	Theoretical capacity (tonnes)
MAURITANIA	Nouadhibou	1,100	2	2	7,000	55,000		5,500	57,500	-
SENEGAL	Dakar	10,000	40	11	60,000	360,000	9,000	15,000	444,000	-
GAMBIA	Banjul	1,700	-	3	30,000	17,000		5,350	28,600	-
GUINEA	Conakry	1,100	-	-	21,367	96,000		1,600	127,600	-
SIERRA LEONE	Freetown	2,000	-	-	142,257	41,805		-	63,172	-
LIBERIA	Moronvia	5,000	12	-	8,800	17,500		-	27,500	-
COTE-D'IVOIRE	Abidjan	736	29	-	22,000	361,634	65,000 *	-	568,891	-
	San Pedro	2,000	5	-	57,000			-	8,800	-
GHANA	Tema	840	14	-	148,000	400,000		-	650,000	-
TOGO	Lomé	1,910	5	-	54,000	40,000		-	62,000	-
BENIN	Cotonou	4,059	10	-	32,000	60,000	65,000 *	-	182,000	-
NIGERIA	Lag-Apapa	2,500	27	-	-	76,600		-	224,600	-
	Tide Can	229	10	-	-	125,000		-	179,000	-
	Calabar	1,380	4	-	-			-	32,000	-
	Burutu	492	1	-	61,000			-	-	2,000,000
	P Harcourt	137	2	-				-	-	-
	Warri		2	-				-	-	-
	Koko		1	-				-	-	-
		10,000								
CAMEROON	Douala		17	-		66,000	200,000	4,500	331,500	7,000,000

Source: Surveys

(*) = lumber yard

e) Airports

Although airports are expensive to build, most countries have invested heavily in them. New airports have been built, as in Yaoundé, existing ones modernized and extended, as in Accra in Ghana, and, to a lesser extent, Cotonou in Benin. In a country like Cameroon, air transport is seen as one of the most effective means of opening up regions cut off by mountains. To this end, Cameroon has extended its network of airports, which now number 46. Other countries have used aircraft to promote inland tourism, as in Senegal³³. Inland airports are served by regular flights of national companies (Camair in Cameroon, Air Ivoire in Côte d'Ivoire, Air Senegal in Senegal, etc.). Nigeria is exceptional for the density of its network of airports and the number of national private companies, making it the West African country where air transport is most used.

However, in every country the continuing rise in freight and passenger costs is increasingly restricting domestic traffic.

f) Post and telecommunications

Major investments have been made to provide main cities and regional towns with post offices for mail and money order services, in the absence of an effective banking network. However, postal services remain inadequate despite the high density of post offices in most countries. Within a country, letters and money orders take over 15 days from one place to another. From one country to another, it takes at least a week between capitals. The postal system is not accompanied, as in Europe, by an adequate transport system. Post offices still largely depend on rail services which continue to decline and bush-taxis that connect with trains.

On the other hand, considerable progress has been achieved in telecommunications, especially since 1970 now that radio links ensure a fast and efficient telephone service between capitals and regional towns, and to foreign countries. This is one of the few areas in which a regional program actually works properly. The Panaftel project, set up in 1970, was initiated by the OAU together with the Union Internationale des Télécommunications, the Union Panafricaine des Télécommunications and the African Development Bank. It was later reinforced by the Intelcom 1 project initiated by ECOWAS. Intelcom 1 is intended for capital-to-capital and border-to-border communication and is mainly funded by ECOWAS. In this way most ECOWAS countries are linked to their immediate neighbors and the project is 80% complete. For all these efforts, five countries are still not directly linked to the others. Guinea, Guinea Bissau, Liberia, Sierra Leone and Cape Verde still have to go through Paris or London to call other West African countries.

³³ Tourism earns Senegal roughly FCFA 42 billion a year.

4.2.5. Major agricultural developments

Agriculture is an area in which a large number of projects have actually been implemented with a view to developing both cash and food crops.

Cash crop development continues as in the past. The largest plantations are rubber in Liberia, cocoa and coffee in Ghana, Côte d'Ivoire, Cameroon and Nigeria. There are also oil-palm plantations in almost all coastal countries. The groundnut areas of Senegal and Nigeria also play an important role in the economy of these countries. These developments not only bring wealth to the economy but also act as a powerful integrator of local communities in West Africa. There would certainly not have been as many Burkinabè and Niger migrants in Ghana and Côte d'Ivoire without the attraction of the cocoa and coffee plantations.

Food crop development has seen more recent investment, often on a large scale. Unfortunately, the result has not been a "green revolution" as in Southeast Asia. Often the projects have been ill-suited to technical skills in African countries, and they are now under-used and dilapidated. The most blatant failures have been those of the Semry (Société d'Expansion et de Modernisation de la Riziculture de Yagoua), which was set up in 1946 and accounted for 92% of Cameroon's rice production until 1963; it is now virtually inactive. Then there are the projects of the Office du Niger in Mali, where local people are now growing cotton. A final example is the ineffectiveness of the Société d'Aménagement et d'Exploitation des terres du Delta (SAED) in Senegal, which now boasts a vast farm implement graveyard. Because SAED's projects could not grow rice at a competitive price, they have been reduced to producing out-of-season crops.

The cruellest failure of these agricultural developments is that they did not even teach local people the irrigation management skills that has been one of the keys to success in Asia.

4.2.6. Industry

The industrial sector is without doubt one of the areas where land use planning policies have come up against most structural obstacles. At independence, most countries decided separately that, following the conventional wisdom of the times, they could make industry the engine of their development. Simultaneously with agricultural development, therefore, governments began to build a supporting industrial fabric. A number of processing plants were built in production areas: cotton gins and small oil mills for palm-nuts and groundnuts. The limitations of these plants soon became apparent: both the poor quality of the machines and the lack of markets for their output. Except for cotton gins, which in most countries are still operating properly and even increasing volumes processed, the other plants are derelict. At independence, Benin had 6 palm-oil processing plants; at present only two are working, and at less than 25% capacity.

However, the greatest boom in industrialization in West Africa began in the 1970s. It was based on the opportunities provided by commodity earnings. Nigeria and Cameroon took the chance to launch major industrial projects. Nigeria even went in for heavy industry: oil refineries, chemical fertilizer production and an ambitious steelworks at

Ajaokuta. Together with the enthusiasm in each country, there were joint ventures and multilateral cooperation projects. Benin and Nigeria, for example, began, with Danish assistance, to build a cement-works and a sugar refinery in Benin. At the regional level, there was the West African cement-works run jointly by Côte d'Ivoire, Ghana and Togo. But the most successful projects were in textiles and brewing. These two industries can be found in every country, sometimes with more than one plant. But only the breweries can compete with foreign products. The textile industry, despite its achievements, is threatened with closure like the oil-mills because of competition from Asia.

These failures have reduced the industrial fabric to a shadow; nor has industry had any success in contributing to more rational land use. The factories were soon seen as foreign bodies in their environment. Only rarely did they give any impetus to other sectors and were consequently perceived as more refined tools for extracting money from the economy. For that reason they did not last long.

4.3. Conclusion

The results of land use planning policies in West Africa raise doubts as to the ability of these governments to create internal engines of development. The various initiatives taken can be seen, on closer examination, to have been motivated by sectoral concerns rather than any strategy of national integration. But without a proper policy of national integration, there can be no land use planning with the aim of correcting territorial imbalances. The purpose of land use planning is to create centers of development around regional cities and transform the national territory into a sort of cellular structure that is as complex and vital as that of a living creature: in this structure the regional centers would be the active nuclei.

Within the programs that have so far been carried out, there are three types of regional organization:

- administrative regions;
- planning regions,
- city regions.

Administrative regions were created to establish and strengthen the links between the governors and the governed, i.e. to enable those with any authority to control an area and the people living there. These regions have indeed played an essential part in the lives of individuals and communities, creating administrative jobs and providing basic social facilities, such as schools, health centers, post offices, power and drinking water networks. However, they have often hampered natural movements and disrupted historic social networks, and in many cases restricted production and trade. The increasing number of these units (regions, *départements*, *sous-préfectures*, *arrondissements*, etc.) is a negative factor in that fragmentation is an almost insurmountable obstacle to the formation of regions large enough to organize themselves for development.

Regional development planning is based on an area for which plans can be made and in which they can be carried out. But this type of division does not correspond to a minimum of natural and human features or the need to keep people living on the chosen

site. A range of infrastructure is built to support the main purpose of the regional plan, which may be cash crops (as in the big coffee, cocoa, rubber and oil-palm plantations) or water management under river basin authorities. Examples are the Senegal valley, the Office du Niger in Mali, the Volta valley in Ghana and the Niger valley in Nigeria.

The planning regions in mainly rural areas had two objectives: to make farming the basis of development and to solve food security problems by encouraging local production.

The results were disappointing. Rural development actually increased dependence on world markets by mainly producing crops which could only be sold outside the producing country. Similarly, this development created farming enclaves in various parts of a country, without ensuring the balance required between those parts. Often only one or two crops were grown, creating productive oases in the wilderness of traditional farming. The crisis caused by falling prices threatens the future of these operations if new development options are considered. The issue is an urgent one, since the scenarios of economic recovery -- liberalization, devaluation, etc. -- are based on there being markets for these products.

The development of city regions is the consequence of the ambitious urban policies followed by governments immediately after independence.

Thirty years later, each country has an urban network with good and bad features. From 1960 to 1990, towns sprang up like mushrooms. In each country over 30% of the population now lives in towns. This creates enormous opportunities for local farming by providing a reliable market, that is, if town-dwellers can afford to buy. However, in some countries towns are potential obstacles to development. They have not managed, as elsewhere in the world, especially in Europe and America, to act as centers of development.

There are great obstacles in the way of developing a proper urban network: the basic structure of the economy means that urban life is based on fairly rudimentary activities providing only casual jobs. Furthermore, the advanced sector of the economy is firmly connected to world markets and this prevents the largest cities in West Africa from acting as effective relays in town-village relations. So the biggest city regions, from Ghana to the Niger delta, have little real connection with the life of their nations. The city of Abidjan is only linked to its hinterland for 20% of its productive capacity.

Furthermore, the attraction exerted by these coastal cities on the rest of the region, drawing in resources, large numbers of migrants in particular, prevents the expansion of secondary towns and rural areas and the emergence of an effective urban network. These city regions do not provide a sufficient framework for life in their regions, and thus for national integration. Consequently they consume all the country's wealth, and prevent it from being spread evenly to structure the national territory.

The experience of regional planning as part of land use planning in Africa has moved a long way from the theoretical model that has been proposed³⁴. This weakness may be explained by the lack of coordinated action by government teams around a clearly defined common purpose. In most African countries, ministries operate like little states within the state, fighting turf wars that paralyze coherent government action and destroy any overall vision of national development. This lack of vision is also due to the negative influence of foreign consultants on African policymakers. They are more concerned with selling their technology than with solving local problems. The price and the commission are often so attractive that everyone is hooked. West Africa suffers from the absence of an independent reference against which to assess attempts at organizing the national territory. This reference would need to begin with an in-depth audit before making suggestions for programs to be implemented. International consultants do not usually have the time to operate in this way, since the funding for a given technology must usually be spent quickly or be lost altogether. What is to be done so that Africa can give more consistent substance to development issues, and land use planning policies can be more effective?

The answer does not appear to be simple.

GENERAL CONCLUSION

5.1. Prospects for land use planning

The path towards rational land use planning is a long one, to put it mildly, despite all the attempts made in the past. But any view of the future must take account of citizens' visions of their region's development. Some interesting contributions have been made on the role of traditional societies in land use planning³⁵. On the basis of these studies, we may recall two relatively advanced types of land organization: village land systems and ethnic areas.

Village land systems (*terroirs*) were extensively studied between 1970 and 1980³⁶. The conclusion of the research was that village areas are well organized, divided into rotation plots arranged efficiently in rings around the village. The care with which these areas are improved and managed, with a detailed division of farming tasks between men and women, reflects the effective use of land by local communities. Within these village land systems, the most advanced of which have only a rudimentary political structure, land is cleverly divided up so that goods and services can be traded and relations rationally managed between villages of the same clan and between neighboring clans. However, this

³⁴ De Laversin, Jacques. *La région et l'aménagement du territoire - ITEC, March 1979, 430 p.* Laborié, Jean-Paul et al. *La politique française d'aménagement du territoire. La documentation française. Paris, 1985, 176 p.*

³⁵ Claval, Paul. *Initiation à la géographie régionale. Nathan Université, Paris, 1993. 288 p. Ch. 10, pp 203-16.*

³⁶ Pelissier, E. and Sautter, G. eds. *Atlas des terroirs africains. ORSTOM. Grove, A.T. and Klein, F.M.G. Rural Africa. Cambridge University Press, 1977.*

clever arrangement, which deserves to be emulated in land use planning experiments, has been largely ruined by recent attempts at modernizing farming practices, particularly the development of cotton-growing. But the traditional arrangement is now being quoted when modernization fails, with negative effects on the environment. The need is once more being recognized to take advantage of the traditional management of African village land systems, so as to protect the environment by careful use of crop rotation.

Attempts by ethnic groups to organize land use apply to areas larger than the village. In an ethnic area, social relations link a number of villages. The most advanced forms of land use management of this type have been achieved by the societies with the greatest political organization, like the Yoruba of southwest Nigeria. Yoruba land use practices have been well analyzed by British geographers such as Pugh and Morgan, and French ones such as Pierre Gounou and Camille Camara³⁷. They gave rise to the pre-colonial Yoruba cities described by Professor Akin L. Mabogunje. The Yoruba cities are still the best example of land patterning in black Africa. As Camille Camara puts it, "in the western state (of Nigeria) we find the densest town network in tropical Africa. Travelling a few dozen kilometers in any direction reveals this fact. From south to north, there is first Lagos, the federal capital, the great port on the Bight of Benin (...). At a distance of some 65 km lies Shagamu; 65 km further on is Ibadan, (...) straight ahead is Oyo and then Ogbomosho (...). Ogbomosho is roughly 50 km from Oyo, which is the same distance from Ibadan. Travelling from west to east, you come across Ilaro and Abeokuta, roughly 60 km apart, the same as between Abeokuta and Ibadan, from which Iwo is 40 km, and Ifè 80 km. Then 55 km driving brings you to Ondo, then Akurè and Owo, every 55 km or so. In general the towns are 45-90 km apart, most often 45-50 km. This short distance between towns is quite exceptional for tropical Africa." This text reveals how perfectly the Yoruba have organized their lands and how clearly the towns form a network. The Yoruba urban model played a crucial role in ethnic polarization and the development of a common language among 25 million people.

These two types of traditional land use management are the result of deep cultural patterns which, even after the birth of the existing nation-states, local communities have maintained despite government action. Spontaneous forms of organization have arisen, of which two are particularly interesting.

The network of periodic markets in both rural and urban areas affects some polarization of land use. These markets, in which the authorities only intervene to levy taxes, are forms of land organization. With their division of roles into collection, wholesale and distribution, the markets use space and human effort efficiently. No action taken by the authorities has come anywhere near this efficiency. Although modern life in the form of large stores is appearing in a few towns, the markets supply most of people's needs for all types of goods and are a prime example of a sound relationship between people and space.

³⁷ Pugh et al. *Land and People in Nigeria*. University of London Press. Gourou, P. *Les plantations de cacaoyers en pays yoruba: un exemple d'expansion économique spontanée*. *Annales (économie, sociétés...)* 160 p. pp. 60-82. Camara, C. *L'organisation de l'espace géographique par les villes yoruba*. *Annales de géographie* n° 439. pp 257-287, 1971. Mabogunje, A.L. *Yoruba Towns*. Ibadan University Press. 1962.

The development of border areas expresses the rejection by local communities of the colonial division of their historic lands. Some of them are thriving, but they are all persecuted by the political authorities. Central governments want to reduce these border areas to mere transit corridors and often disregard bilateral cooperation agreements. Repression and shifts in economic policy in one country or another keep these areas unstable although their inhabitants want to make them the basis of a *de facto* integration founded on community solidarity.

Nowhere has a balance been achieved between the various regions in a country. Regional devolution is not working. Governments use the administrative framework not for land use planning policy but for infrastructure projects which are intended less to make rational use of space than to satisfy the ambitions of the men at the top.

5.2. What is to be done?

Land use planning must be based on the proper management of the spatial aspect of each country. This is essential if the country's security is to be guaranteed. To cope with this, some countries have gone in for regional devolution. Two forms of regional devolution have been used in those countries that have been most successful in this field: Austria, France, Germany, Spain, and Switzerland.

One is to use **natural regions** and develop their potential:

- population (cultural values and the development of production using appropriate technology);
- agricultural and mineral resources (industrial farming, mining);
- geographical location (roads, communications, tourism);
- landscape (mountains, forests, beaches, spas);
- historic heritage (tourist spots).

The reason natural regions have not been used for land use planning in Africa is the ethnic question. A natural region corresponds to lands whose dominant feature is the way local people maintain their cultural and historic heritage, so it includes the idea of a civilization. Few nation-states in Africa stress the idea of local lands and native civilization for fear of rousing tribalism. Artificial colonial borders prevent any real use of natural regions as a basis for a land use plan. In the colonial period, however, some attempts were made. They include the development of the Senegal River valley at Richard-Toll, the inner Niger delta with the Office du Niger, and the lower Ouémé valley. These experiments were all abandoned at independence for a theoretical national development plan.

When a region contains natural resources such as oil or minerals it is over-exploited with no sustainable infrastructure, unfortunately. The money goes on the lavish upkeep of the State, with no returns.

The other is **planning regions** designed as part of a rigorous land use or infrastructure plan. These planning regions are used in developing existing potential such as communications, or outlets for raw materials (harbor facilities), or in deliberately reducing

natural inequalities in national development. Consequently, plans are implemented for decentralization. This makes it possible to define a land use plan leading to the creation of planning regions that are artificially defined, but firmly based on political decisions and the availability of human and financial resources.

Natural and planning regions are quite different from administrative units intended more to govern than develop. This is why in the developed European countries regions are so varied. In Africa, there are as yet no proper development regions based either on natural assets or government decisions to give priority to some part of the territory in allocating development funds.

The absence of planning regions may be explained by the lack of a vision of the future in the running of public affairs. It may also be explained by the insufficient means allotted to development.

Land use planning in West Africa is an issue that has yet to be properly addressed. What has been done up to now in various countries resembles infrastructure programs more than land use policy.

Real land use planning will also depend on:

- a change in the nature of the states born of colonialism, states which have persisted with the colonial mentality of confiscating for the center the advantages of development;
- the development of local resources by a proper decentralization of power, giving greater weight to natural regions and mobilizing local communities to protect their interests;
- a change in development requirements, which should not involve raising outside funds from international aid, but a vigorous program of production in the vital interest of African people.

Unfortunately, faced with these alternatives, African leaders and their advisers are still psychologically inhibited by their education and the gulf that education has often opened up between them and the real Africa.

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- to improve dialogue between Sahelian countries, coastal countries along the Gulf of Guinea, and donor agencies,
- to highlight obstacles to trade,
- to assist African leaders and policy-makers in taking the realities of regional cooperation into account in their decisions.

On the basis of the findings of the WALTPS study, CINERGIE will draw up a **joint action program** in West Africa, incorporating a series of recommendations for the region's governments and for donor agencies.

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