LAW AND THE PUBLIC INTEREST
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Note: the editors of this paper are J. B. Ojwang, Advocate, Associate Professor of Law, and Chairman of the Department of Private Law, University of Nairobi; and Janet W. Kabeberi, Advocate and Lecturer in the Department of Commercial Law, University of Nairobi.

The views expressed herein are those of the authors, and should not be interpreted as reflecting the views of the Institute for Development Studies, the Faculty of Law, or the University of Nairobi.
Preface

This volume contains the proceedings of the first of a series of seminars initiated in 1985 by the Faculty of Law. The series focussed on some of the main areas of teaching, research and dissemination of legal thought. The initiative for the series sprung from the ingenuity of some scholars, particularly Dr. C. O. Okidi, Chairman of the Faculty's Research, Library and Legal Publications Committee.

In Africa, the law, especially enacted law, has been seen as the main instrument for implementing economic and political policy and for resolving stresses arising from policy decisions. This approach to societal problems prevailed even in colonial times, when the legal process was used to facilitate political and economic management programs. Partial responsibility for the chronic underdevelopment of much of Africa before independence lies with this use of the law.

That such a role for the legal process still remains was considered intriguing enough to justify new, development-based studies in the Faculty of Law. Law has a role in stabilizing social institutions, and changes wrought by development initiatives need to be founded on institutional stability. Thus, how law responds to development is an important subject.

Of the several seminar proposals prepared by the Faculty, the first to attract the interest of donors and participants was the one on "Law and the Public Interest." The purpose of the seminar was to consider, through specific examples, the role of law in promoting and safeguarding the public interest. Public interest here refers to a whole set of developmental matters set to benefit people socially, economically, culturally and in other related senses.

Development in Africa is primarily state-directed. The private sector, even when ostensibly dominant, is regulated by the state through legislated codes or administrative practices. In many third world countries, the state, through its ability to command bureaucratic, financial and technological resources, becomes the main agent in mobilizing development. Public interest then includes those expectations which the citizens entertain in exercising their civil status. The state generally intervenes in the interest of its citizens through the device of law. Thus, clear perspectives need to be developed on the interplay between the law and the public interest in the process of national development.

This concern is shown in the character, form and order of these proceedings. We hope that this volume will be useful to scholars and policy makers, as well as providing a basis for more specialized discussions on important topics such as population and resource management, the character of the law and its effectiveness in relation to policy, and resource rent and taxation.

Funding for the seminar came from the International Development Research Centre (IDRC), the National Council for Science and Technology (NCST) and the University of Nairobi. We are greatly indebted to these donors for supporting the seminar and for permitting the use of the remainder of the funds to produce this volume.

We also appreciate the role played by the participating scholars, from as far afield as Botswana, Cote d'Ivoire, Egypt, Indonesia and the United Kingdom. This kind of participation brought forth the experience of many societies, in both the industrialized and the non-industrialized world.

We acknowledge the co-operation of members of the Faculty of Law who performed a number of essential tasks during the seminar, including serving as chairmen of sessions, rapporteurs and discussants. We thank Mr. A. G. Ringer, who served as chairman of the Kisumu Seminar Committee.

Finally, we are indebted to the Institute for Development Studies for agreeing to have this work published in its Occasional Paper Series. Apart from the IDS personnel, in particular Dr. I. Riak, the Seminar Co-ordinator, we have also greatly benefited from the assistance of Alison Field-Juma of Initiatives Ltd. for editing and production, and of Dr. Calestous Juma of the African Centre for Technology Studies. Special thanks are due to Dr. John Oucho, of the Population Studies and Research Institute, who helped edit the two papers on population.

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Chapter 1
LAW AND THE PUBLIC INTEREST
Some Introductory Remarks
J. B. OIWANG

This volume covers a wide range of subjects—agrarian reform, commerce and industry, petroleum exploration, environmental management, public health, and population. It has, however, but one theme: law and its application in matters of public interest. This volume does not pretend to be the most internally coherent, focussed on a limited number of issues. Rather, it brings together the contributions of different authors, and can claim a fair degree of uniformity at the level of its main theme.

The studies contained in this volume examine the relationship of law to the problems of development and the special conditions under which law operates in developing countries.

The General Problem of Development

The seminar began with the common understanding that "the public interest" refers to "a whole set of development matters set to inure to the benefit of the people as a whole, in social, economic, cultural and other related senses." Ultimately, the guardian of such interests is the state and its public agencies. The state designs and implements relevant policy and law validates it. Not only ought the "right" policy choices be made; suitable laws must be formulated and effectively applied. The management of policy and its legal validation should thus be priority areas in order to achieve social, economic and other changes.

In practically all African countries, agriculture takes priority as an economic activity. It is fitting that this volume begins with agrarian reform, discussing its relationship to development and laying bare the relevant law.

Besides agriculture, economic development must incorporate commerce and industry. The interplay between these sectors can expand peoples' economic welfare, create conditions for self-reliance, and enhance the productivity of each sector. The laws for implementing appropriate policy in these spheres need to be fully understood.

Africa's development rests upon its natural resources—even those still unknown. Lack of technology still largely leaves the exploitation of such resources to foreign entrepreneurs and capital. Under these conditions, Africa can secure its resources only through policy and law. Hence, it is important to show the role of law in relation to natural resource utilization.

Although development is often described in quantitative economic terms, the status of health, the condition of the environment, and the mode of population management are very relevant. The three last chapters illustrate how the legal process relates to those qualitative aspects.

Special Problems of the Law in Development

Although law validates official policies, it too has inherent problems, especially in Africa. For example, the law in most African countries lacks a social equilibrium insofar as it has a foreign orientation resulting from colonialism. Prior to colonialism, law was traditional and ethnically-based. Although this ethnic law remains in force to some extent, its authority and future prospects are much compromised. This situation can be described as follows:

Western law, with the entrenchment of the modern state, became the instrument for modelling a uniform legal system which grew by legislation and judicial interpretation, invalidating and supplanting traditional law. As a result, the various indigenous legal systems have progressively declined, as application of Western law has extended to cover all spheres of life. Although traditional law (for reasons of inertia, and owing to the fact that there will be many marginal areas not directly affected by the impact of the State and its attending institutions) is certain to remain, in certain respects, operative for many more years, it is no less evident that the application of Western law must move towards universality in the years to come.

This instability in the law is deepened further by the context of change, which, in Africa, is remarkably rapid. Of this reality, President Kaunda of Zambia writes:

"We live in a changing world, and one in which the pace of change is becoming even greater. Neither the character nor the needs of any given society can remain static, and if the law is to fulfill its proper function it must keep pace with the changes. This is not to say that the law must be a straw in the wind; if law is to be an effective instrument of social order it must be a stabilizing influence, but it must be flexible and it must be progressive else it will hinder society in its progress and development . . ."  

The law is therefore handicapped, both by its internal shortcomings and by the pressures of social change. This complicates the task of designing suitable laws and applying them correctly, and in translating developmental policy in the interest of the public. Law and the public interest is thus a problem with no ready answer. This volume illustrates specific difficulties and points to possible solutions.

The different studies in this volume provide a comparative framework and emphasize the common human characteristic of public interest issues. For example, a country's approach to population or natural resource management is basically an approach to the problem of human survival; which appears to be the ultimate objective of the public domain in all countries.

Prof. Okoth-Ogendo isolates some of the main imped-
ments to effective agricultural production and the function of the law within this context. His study of agrarian reform will be found relevant for many countries. Prof. Takirambudde's paper illustrates the interplay between the law and industrial and commercial enterprises in Southern Africa, and is thus particularly relevant for developing countries.

Prof. Danusaputro, Mr. Macrory and Mr. Hunt Talmage III exemplify the delicate balance that must be struck—essentially through the legal process—between sheer economic output and the long-term national interest of planned growth and a sound environment. This is a complex subject, in which man must not only protect himself from natural dangers, but also from his own ambitions and enterprises. The examples given, from a number of countries, will serve as a reference which could influence development elsewhere. The studies on population by Profs. Azer and Sharkawy, and on health by Mr. Ogolla, will also offer valuable pointers for policy-making and legal regulation.

This work does not offer certain answers to the complex problems outlined above, but rather suggests possible solutions. The matters covered also have ramifications beyond the subject of the seminar. In the future, it would be desirable to address some of these subjects individually and subject them to a more detailed treatment and deliberation. This might lead to isolating the main elements of policy and legislation affecting the public interest.

Notes

1. J. B. Ojwang, "Legal Transplantation: Rethinking the Role and Significance of Western Law in Africa" (In P. Sack and E. Minchin, Legal Pluralism, Canberra: Australian National University, 1986), vol. 99, p. 114.
Chapter 2

AGRARIAN REFORM IN SUB-SAHARAN AFRICA

The Implications for Agricultural Development*

H. W. O. OKOTH-OGENDO

Perspectives

Sub-Saharan Africa is in the throes of an agrarian crisis. With a food sufficiency ratio of less than eighty-five per cent, it is the only region in the world which does not produce enough food for its people. Although much literature has focused on this crisis, the specific measures adopted by the states to resolve it have hardly been evaluated.

This essay discusses measures directed at the primary causes of the crisis as viewed by Eastern and Southern African states. These measures include agrarian reform policies and plans and programmes to increase agricultural productivity through better access to and control of land, production, and support services.

The Nature of the Crisis

The African agrarian crisis is a complex interaction between land availability, the productive organization of labour, the state of agricultural technology, and the resilience of social ideologies which reinforce systems of access to and control of land. The negative manifestations of this interaction—extreme population or land pressure, stagnation in agricultural productivity, severe food shortages, and deterioration in living conditions especially in the rural areas—are the most quantifiable and visible symptoms of the crisis. This condition suggests, in other words, structural contradiction, if not collapse; and a total anomie; structural contradiction, if not disintegration in African agrarian relations.

The Causes of the Crisis

Scholars are divided about how to explain this condition. Some say that it is the result of the continuing effects of colonial exploitation, excessive population growth, inefficient or obsolete production technologies, chaotic tenure regimes, market distortions, or inherent or fundamental deficiencies in African social structures. Some presume that Africans are unable to manage their own economies, or that domestic policies discriminate against the rural, food-producing sectors of the economy. Others see external social forces as the guilty party: others see the victim—African agrarian systems—as the villain. These two arguments reflect the policy positions upon which most African states founded their agrarian reform plans and programmes.

The crisis as externally induced

That the African agrarian crisis is primarily the product of external forces has been argued in different ways. Progressive scholars suggest that Sub-Saharan economies operate in an inherently exploitative international context. The way out, it is argued, is for Africa to make the "correct" ideological choices and/or insist on the establishment of a new international economic order.

This view has merit for its global, comparative and historical perspective, but also needs a micro-level analysis to yield explanations of immediate value. At that level, the most important aspect of the argument is that much of the African agrarian crisis concerns the system of resource management and exploitation erected and pursued by colonial capitalism throughout Sub-Saharan Africa for nearly a century. This system again became entrenched by the way in which decolonization occurred in the 1960s. This was most ruthlessly executed for land, including minerals, and labour resources in British Colonial Africa.

British colonial policy recognized early on that efficient exploitation required effective control of land. Control was usually achieved through various systems according to the purpose and enforced with more or less deceit and intrigue. Control was the goal; the means were often a mere rationalization. In Swaziland, South Africa, Southern Rhodesia (now Zimbabwe) and Kenya, control involved a series of military and juridical exercises of varying intensity, duration, complexity and absurdity, depending on the manner in which the colonial conquest itself was achieved.

Swaziland. Swaziland, first invaded in the mid-nineteenth century by the Boers, presents an interesting case. According to a report issued by British colonial authorities in 1907, practically the whole area of the country was [by the turn of the century] covered two, three and even four deep by concessions of all sizes, for different purposes and for greatly varying periods. In but very few cases were even the boundaries defined; many of the areas had been sub-divided and sold several times and seldom were the boundaries of the super-imposed areas even co-terminus.

When the British superseded the Boers in Swaziland after the Anglo-Boer war of 1899, and the country began to assume the style of a settler colony, the first thing
done was to confirm the validity of those concessions. The concessionaires were forced to surrender at least one-third of the land covered by their concessions for "the use and occupation" by the Swazis. The effect of this "partition"—which the Swazis never accepted—was that the Boer concessionaires retained more than sixty-three per cent of Swazi territory. A system of deeds registration enacted soon after allowed them to record their absolute estates in accordance with the Roman Dutch law which the British had extended to Swaziland.

South Africa. Land expropriation in South Africa was more brutal and protracted. The Boer invasion and settlement was based on the assumption that the land was ownerless and therefore open to acquisition by right of conquest or first occupation, as observed by a noted colonial scholar and administrator.

When towards the end of the eighteenth century the Boers advancing northwards first met the southward movement of the Bantu, neither Boer nor Bantu could justly claim to have any superior title to the land.

The superior military power enabled the Boers, by mid-nineteenth century, to dismantle most of the political and social organizations of the African peoples in that region, especially the Zulu and the Sotho, who mounted great resistance to colonization. The Boers then worked out a system of "native" control which the British later perfected and legislated in the 1910 Act of Union and the Native Land Act of 1913. The Native's Land Act was meant to settle once and for all the precise boundaries of native land. African populations were regrouped in "reserves" amid rivers or streams, or in rugged and arid regions. This exercise put approximately eighty-seven per cent of South African territory beyond the reach of Africans.

Zimbabwe and Kenya. The processes of land expropriation in Zimbabwe and Kenya were somewhat similar. They were interlaced with a juridical wrangle which ran from about 1890 to 1930 in Zimbabwe, and to 1939 in Kenya. The patterns of land distribution and settlements by the end of the wrangle in both cases resembled those developed in Swaziland and South Africa several decades earlier. In Southern Rhodesia, a land commission chaired by Morris Carter had recommended, in 1926, that the separation of Africans and Europeans was both expedient and practicable.

However desirable it may be that members of the two races should live together side by side with equal rights as regards the holding of land, we are convinced that in practice, probably for generations to come, such a policy is not practicable nor in the best interests of the two races, and that until the native has advanced much farther in the paths of civilization, it is better that points of contact between the two races should be reduced. These views were incorporated in the Land Appointment Act (1930), which became the cornerstone of land policy in Southern Rhodesia throughout the colonial period. Nearly seventy per cent of Southern Rhodesia territory was then either exclusively reserved for the colonizers or otherwise unavailable for use by Africans.

In 1934, Morris Carter recommended a similar system of legalized segregation for Kenya. The Kenya Land Commission had been appointed to review colonial land practices (including "compensation" for expropriated Africans). After affirming the expropriations, it recommended that a final and secure assurance be made to Europeans. Through two Orders-in-Council in 1939, one for the European "Highlands" and the other for the "native" areas, the land they had seized remained inviolable. About seventy-five per cent of all the high potential land in the country was thus expropriated by the colonizers.

Zambia. British land policy in other parts of Eastern and Southern Africa varied only in degree. In Northern Rhodesia (now Zambia), that difference lay—at least from the 1940s onwards—merely in the legislative language. As early as 1928, a "native reserve" had been created in the East Luangwa District. The purpose of the reserve was not to protect the rights of the indigenous peoples, but to clarify what areas could be expropriated by the North Chartered Exploration Company.

Later, the colonial government created two new categories of land, "crown land" and "native trust lands". Crown land was a mechanism to exclude Africans from land suitable for European settlement or earmarked for mining development, native trust lands gave Europeans rights over African areas whenever the colonial government thought this desirable. In either case, the land rights of Africans were clearly insecure. As colonization progressed into the 1940s and 1950s, the native trust lands were expanded to enable continued expropriation.

Nyasaland. In Nyasaland (now Malawi), the establishment of reserves was rejected early in 1921 on the ostensibly laudable grounds that it would "seriously prejudice the welfare of communities who are obliged, owing to shortage of water and other local circumstances, to live in scattered villages". However, by manipulating the concepts of "Crown" ownership and trust holding, the colonial government nonetheless excluded Africans from five per cent (if not more) of the best land.

Tanganyika and Uganda. In Tanganyika (now mainland Tanzania) and Uganda where settlement was a secondary issue, land expropriation was conducted on the basis of the supposed residual proprietary power of the colonial sovereign. The separation of the races was achieved through legislation prohibiting the sale of land to and by Africans.

In addition to agricultural settlement, the uniform land control mechanisms in Eastern and Southern Africa, controlled mineral resources as well. In all these countries, such mechanisms were buttressed by legislation that gave the colonial power control over all minerals. Reserving land for the Africans or, in Tanzania after 1923, prohibiting alienation of freehold or absolute title to land, did not detract from colonial appropriation of mineral resources. Therefore, no indigenous communities were ever immune from expropriation, relocation or physical destabilisation in colonial Africa. French, Belgian and Portuguese land policies in Africa were similar to those of the British in this respect.

Second to land, the need to secure a continuous supply of cheap and dependable labour was central to the dynamics of colonial capital. This was of particular...
At the heart of the agrarian crisis in Africa is a long history of social stagnation, resource plunder, and service deprivation, compounded by more contemporary factors.

The Victim as Culprit

An overwhelming majority of scholars readily admit that the colonial experience is a relevant factor in Africa's current predicament, but a significant number will still deny that it is the fundamental, or even major, cause. These scholars direct their attention primarily at the victim and argue that the very nature and constitution of African agrarian organizations caused their predicament. They typically assume that there must be a single normative or institutional problematique which must be isolated, diagnosed, and cured. If Africa is to extricate itself from underdevelopment, quite often, that problematique is identified a priori, and its pathology conducted within a broad spectrum of the epistemology to which the researcher subscribes. A number of such positions are examined briefly here.

The first draws together scholars or policy advisers who believe that the crisis is but a historically determined epoch. They see it as a stage in the evolution of social institutions from a pre-modern, pre-capitalist and "status" bound stratum to a fully individualized and contractarian one. Seldom are concessions made in this analysis to discrete social or cultural settings.

Colonial anthropologists—some of the earliest to propagate this argument—drew their inspiration from theories developed by a number of nineteenth century Western European scholars, such as Sir Henry Maine, Paul Vinogradoff and Max Weber, who thought such progression was inevitable.24 Having slotted Africans at the pre-modern end of the continuum, they concluded that Africans were not expected to be good agriculturists. A report issued in the 1920s in Zimbabwe commented:

An overwhelming majority of scholars, both African and Western, believed that the native of Mashonaland was not a good agriculturalist, his methods were wasteful and in a way rainless to the future interests of the country. As a rule bush country is selected for gardens, generally in the granite formation where the soil is easy to dig and cultivate. No attempt is made to manure the ground, except with wood, ash and weeds which are dug in. It takes about ten to fifteen years for gardens to recover and be again fit for cultivation.25

A mere decade or so earlier, the Shona had produced the cereals which the colonizers were expropriating for speculative resale to South African mining populations.26

Although this assessment of African agricultural behaviour was sometimes explained by a lack of "modern technology", its cultural dimensions were, and remain, distinct. Yudelman reports that this dimension was often based on "divergent attittudes [between Africans and Europeans] towards increasing productivity." Drawing on the theory of J.H. Boeke who studied economic policy in Indonesia in the 1950s, Yudelman argued, as many still do, that since the indigenous economy was not sophisticated enough to plan his own economy, only aggravated the situation.

As this analysis shows, the agrarian crisis in Africa has more than just an intimate link with the past. The policies, institutions, and practices that precipitated that crisis and facilitated its perpetuation remain in most of Sub-Saharan Africa. It is a crisis born of a long history of social stagnation, resource plunder, and service deprivation, compounded by more contemporary factors.
colonial agricultural experts sometimes added transitory tenure and had no prospect of handing it on to his son.27

In short, the crisis in Africa is often reduced to the persistence of innate forces or a total absence of economic or environmental rationality.

The second position is in the same vein, but more specific. The crisis is believed to be firmly rooted in defective tenure arrangements which have no place in twentieth century agriculture. Tenure systems were often painted in terms that not only set them apart from other social organizations but that gave them a mystique of collectivism and inflexibility that was not always easy to decipher. These systems were considered a major drawback to agriculture. A recent analysis of land tenure in Lesotho notes, a succession of overseas economic missions have without exception stated categorically that the traditional system of land tenure is quite unsuited to modern economic development and that it was a man-made obstacle whose removal was a precondition to economic growth.28

The author notes that these missions were merely echoing a large body of literature "invariably written by expatriates generally addressed to the British colonial administration, and [which] almost always, found traditional tenure practices to be an impediment.29

Two important contributions in British colonial literature, and ones which have gained much prominence—or notoriety—in African reform circles, are Kenya's Plan to intensify African Agriculture (1954), and Southern Rhodesia's What the Native Land Husbandry Act means to the Rural African in Southern Rhodesia: A Five Year Plan which will Revolutionize African Agriculture (1955).30

The defective elements in African land tenure were normally identified in the following manner. It was argued that the primary defect was that these tenure systems were "communal", meaning that all the attributes of "ownership" were thought to reside in the "tribe", the "lineage", the "clan", or similar units. Thus African tenure systems were seen to be inherently:

• incapable of providing security for land development since title could not be marketed or otherwise negotiated
• generators of land fragmentation and eventually subdivision into sub-economic parcels due to every adult member of a given unit always being entitled to some land—conditions which lead to diseconomies of time, labour utilization, and scale
• the source of incessant disputes due to diffuse rights and lack of clear title and thus lack of incentives to long-term investment
• so fraught with externalities that land deterioration was inevitable31

One study of matrilineal societies of Central Africa notes that colonial agricultural experts sometimes added another inherent problem: that a man would have no incentive to improve land over which he had tenuose and transitory tenure and had no prospect of handing it on to

These positions are only a small sample of the argument that the causes of the African agrarian crisis are fundamentally internal to, and inherent in, African agrarian systems. The basic point to remember, however, is that since this argument refutes the "dangerous heresies" of the earlier one—that the crisis is externally induced—it was, and still is, the official explanation of the crisis. Since international agencies and multi-national corporations have entered into African decision-making, this has become the only explanation. Lamonts Nyerere,
The Third world is now blamed for its own poverty. Each country is analysed separately [by the agencies]. Its problems are then explained in terms of its socialism, its corruption, the laziness of its people and such-like alleged national attributes.32

Agrarian Reform in Sub-Saharan Africa

State Responses to the Crisis

I have argued elsewhere that the basic symptoms of the current crisis—population pressure, stagnation in agriculture, food shortages—were in evidence long before decolonization started in the late 1950s.34 But when colonial authorities diagnosed the problem, they did so in terms that suggested that their own policies and exploitation mechanisms had nothing, whatsoever, to do with it. They settled instead for the view, described above, that African agrarian systems were themselves responsible for the deteriorating condition of agriculture. They then formulated reform policies and devised plans and programmes which were not only disorientating but which also tended to understate the extent and severity of the problem.

Colonial responses to the crisis

The timing of colonial responses to the deteriorating agrarian condition in the African areas throughout Eastern and Southern Africa is revealing. In most cases, concern turned to these areas either when demand for migrant labour was low—as in the depression years of the 1920s and 1930s—or when it became clear that immigrant agriculture alone could not sustain the empire—as was suddenly discovered during and after the trauma of the Second Imperialist War (1939-45). It was always in these circumstances that colonial authorities thought that improving the agrarian condition in the African areas might complement colonial agriculture and thus help to perpetuate colonial relations of production. The specific approaches taken were, however, extremely fragmentary.

Excessive population in the African areas was one of the first of the vast number of ills identified. In 1946, Philip Mitchell, then Governor of Kenya, sent a dispatch to the colonial office on the general agrarian situation as it affected the African population in Kenya. In the dispatch he argued that the primary cause of deterioration of the physical environment was over-population, compounded by bad management practices.36 As a solution, a policy paper issued the previous year prescribed land settlement schemes and re-development
Two years earlier, the Natural Resources Board had strongly warned the Southern Rhodesia government:

"The time for plain speaking has now arrived, and it is no exaggeration to say that at the moment we are heading for disaster. We have on the one hand a rapid increase taking place in the African population and on the other a rapid deterioration of the very land on which these people depend for their existence and upon which so much of the future prosperity of the country depends."

All schemes and programmes meant to resolve the population and land deterioration problems were designed to operate within the framework of existing land relations. The failure of these schemes led colonial authorities to the alternative position that those relations—and in particular tenure arrangements—were, in fact, the problem.

Only Kenya received a full dress rehearsal of the tenure reform alternative. Experimentation was carried out in Uganda and Southern Rhodesia. In Swaziland, colonial authorities were unable to progress beyond the settlement phase. A movement to expand Swazi Nation Land by buying back expropriated land had started almost immediately after the 1907 partition. Swazi suspicion of colonial intentions regarding land was, and remains, quite strong. Hence, rather than accept further experiments with Swazi Nation Land, the Nyawa Nyawa (traditional ruler) set up an organization called Tibiyo Taka Nyawa to speed up repurchase of expropriated land.

Experimentation with tenure reform in Uganda was limited to a few pilot schemes, mainly in Kigezi, Ankole and Bugisu Districts. According to a publication issued in 1955 by the government, the objectives of reform were, inter alia, to:

- encourage individual land ownership in such a manner as not to annihilate the goodwill of traditional authorities; not to prejudice good husbandry, nor to abandon such safeguards as are essential for future progress of the people.

In this respect, the Uganda government had accepted the essence of the recommendations of the East African Royal Commission (1953-1955) as did Kenya. These recommendations were vigorously opposed in Tanganyika.

Experimentation was rather different in Southern Rhodesia since their system of property law was rooted in Roman-Dutch precepts and it was not easy to shift to the Torrens systems of registration required by tenure reform according to the East Africa Royal Commission. Consequently, the colonial government came up with (Native Land Husbandry Act 1948) a "land centralization" programme. This programme involved restituting homesteads, standardizing land holdings, limiting livestock, and increasing control of husbandry. Homestead restituting and standardizing holdings involved granting farming rights to individuals, and grazing rights to specified communities. The Southern Rhodesian programme was not based on land area, but on a rated carrying capacity basis and the imposition of good husbandry practices.

Unlike the Kenya and Uganda experiments, the Southern Rhodesia programme continued much of the "conservation bias of the Natural Resources Act [but also] in one fell swoop . . . proposed to replace the tribal-communistic system of allocating land according to need with a hybrid tribal-capitalistic system of individual holdings and communal grazing.

Yudelman’s assessment of the impact of Southern Rhodesia’s programme sums up better than any the impact of tenure reform attempted under colonialism:

The implementation of [the Native Land Husbandry]
chaotic transfer of power. In Angola, for example, power last countries, independence was preceded by protracted Saharan Africa except for in Guinea, Angola, colonial structures and relations of production. On the tempting to posit a broad typology of normative parties and their liberation armies were left to fight it out was transferred to the people as a whole. The political wars of liberation, leading, in a number of them, to a change in the political environment of power, the independent government in Kenya perpetuated, with even greater zeal, both the tenure reform and settlement schemes initiated in the colonial era and for much the same reasons.

The tenure reform programme continued to draw its economic and political rationale from the 1954 Plan referred to earlier. It is currently estimated to have brought over ninety per cent of all registrable land in Nyarans, Western, Rift Valley, Central and Coast Provinces onto a Torrens register. Despite misgivings by scholars and some administrators, both during the colonial era and after independence, the programme remains a priority in the government's land policy.

An interesting variation in tenure reform—but one which is inspired by colonial theories about African tenure systems—is in progress in Malawi. There, the process of individualisation is coupled with the adjudication and registration, in appropriate cases, of "customary rights qua customary rights." As in Kenya and Zimbabwe, the programme was conceived in the early 1950s and initially took the form of land improvement or village reorganization schemes. Says a recent study:

"The project basically involved the reorganization of the land-holding pattern of an area in such a way that each household ended up with one consolidated plot equal in size and quality to the total area of its former collection of pieces and fragments. The entire village was then geared to an overall land utilization plan . . ." 53

Although village re-organization schemes had collapsed by 1960, the independent Malawi government revived and strengthened their tenure reform aspects by vesting absolute proprietorships in consolidated holdings in individuals rather than villages. The only difference between this version and that in force in Kenya is that community rights over villages, burial grounds, and grazing lands were reserved and registered as such in Malawi.

The expected broad-spectrum effect of tenure reform notwithstanding, the Kenya government could not
entirely avoid land redistribution programmes after independence. But when such programmes came, they were—as far as the peasantry was concerned—mounted essentially on the settlement principles of the colonial era. In that respect they mainly aimed, firstly, to re-establish the pressure on the reserves and, secondly, to resolve the problem of chaotic tenure arrangements in the large squatter settlements in the highlands. In the first case, a series of settlements in the Million-Acre Scheme were hived off the highlands and assigned to ethnic groups in specified reserves. In the second, a number of similar schemes were organized for the settlement of registered squatters mainly from the Central and Rift Valley province highlands.

Security of tenure was available to settlers of the first scheme only, upon full discharge of their loan and bushveld obligations. None whatsoever was contemplated for settlers of the second scheme. In either case, the argument against immediately granting tenure security was basically colonial: careful tutelage was necessary before the African could be entrusted with absolute property rights. Consequently, tenure relations were based in the first case on conditional freeholds, and in the second on temporary occupation licences (TOLS).

Thus the organization of the second settlement took the form of the post-1945 schemes, which were also maintained and extended by the Kenya government.

Malawi, Zimbabwe and Swaziland also found it necessary to build on colonial settlement principles as a basis, ostensibly, of attacking the problem of land distribution. In Malawi, the schemes—whether established on public or private land—were declared government property upon completion. Settlers on such schemes were then granted TOLS to enable them to cultivate the land, initially, for five years.

Although colonial settlements did not take off in Southern Rhodesia, the Zimbabwe government was quick to set up similar schemes to accommodate "refugees, the squatters mainly from the Central and Rift Valley province highlands. The government chose to preserve the large estates as state farms and consolidate small-holdings into co-operative enterprises to be worked by the peasants living on them. The new property structure established by the Land Law of 1979 was decidedly collective. However, limited private property rights, in the form of registered licences, were reserved to enable a certain amount of semi-capitalist investments to come in. It was made clear that such rights were subject to the overriding power of the state and the social interest of the Mozambican people. Irrespective of ownership, the law subjected all agricultural land to an overall use plan sanctioned and administered by the state.

Reforms in Ethiopia and Mozambique have been concerned mainly with changes in land tenure structures. In these countries, tenure and distribution were the most problematic elements in the agrarian system. In Tanzania and Benin, reform has been mainly in reorganizing...
production structures. In Tanzania, the land had been vested in the state, even under colonialism. Thus any tenure reforms found necessary after independence were relatively easy to accomplish. These were mainly concerned with removing residual forms of English property regimes such as leaseholds and a limited number of freeholds granted before 1921—the date the British assumed jurisdiction—and their conversion into rights of occupation, the basis of property relations after that date. Further, the new government sought to abolish a number of feudal customary tenures existing in parts of the country. Hence tenure reform per se, in Tanzania, was over by 1969.

In the 1970s attention turned to an attack on production structures. The Tanzania government sought to radicalize them through introducing collective farming based on Ujamaa or socialist villages. The primary objectives of Ujamaa villages were: equitable distribution of resources to rural communities; democratization of community leadership; self-reliant and endogenously propelled development; achievement of higher levels of productivity of land per unit factor input; and more efficient service distribution to village communities. The villages were therefore seen not only as production units but also as foci for distribution and management of basic services such as water, electricity, education, and health care.

Although the political phase of the Ujamaa programme preceded—and in most respects overshadowed—its primary legal organ, they were firmly in place by 1975. The Villages and Ujamaa Villages legislation provided for registration of villages as corporate entities. In addition, the machinery was put in place for the Commissioner of Lands to issue the villages with rights of occupancy in the same way as for individuals desiring to use agricultural land. The villages were then expected to use and manage the land as a collective asset along socialist principles. By 1982, over eighty per cent of Tanzania’s population had been resettled in such villages.

The collective farms established in Benin in the 1960s was in no way as comprehensive as the Ujamaa programme in Tanzania. “Supervised” collectives were established in which each participant was expected to contribute a certain amount of land in exchange for a proportionate share in the enterprise. The collectives were administered by an elected board in which the government had representation. The government also provided supporting services to facilitate the operations of the collectives.

Observers have pointed out that the countries which chose to try alternatives not based on colonial formulae were also experimenting with new ideologies. Latin American experiences have demonstrated that extremely conservative regimes have also been able to push through relatively radical programmes. It is not surprising, therefore, that independent regimes as conservative as those in Kenya, Nigeria, Côte d’Ivoire and Cameroon were also able, at some point, to experiment with collective farms, plantation co-operatives, and rural land banking institutions. A more important explanation is that the political exigencies of the time in those countries were clearly conducive to such reforms.

Implications for Agricultural Development

Some conceptual issues

The main intellectual and policy perspectives in the current discourse on the African agrarian crisis have been examined, as well as the responses from governments in Eastern and Southern Africa. This section evaluates the implications of those responses for agricultural development.

It was earlier indicated that one of the more important reasons for reform programmes was, in the words of the Ethiopian proclamation, to increase agricultural productivity by releasing “the productive forces of the rural economy.” It may be useful to first inquire into how that end was to be achieved. This issue, although primarily conceptual, clearly has important planning and programming implications. One would have expected policy-makers and planners to have at least some idea of how particular reform packages would trigger off the changes capable of generating increased productivity.

Agronomic experts and planners expected structural adjustments along one or more of the following lines: First, it was expected that agrarian relations would be restructured in such a way as to afford the tiller greater control over the land. In the context of the tenure reform programmes of Kenya and Malawi, that control was seen as conditional upon the emergence (or imposition) of the principle of absolute proprietorship by individual cultivators.

In Ethiopia and Tanzania, that control was thought to lie in social solidarity and basic principles of egalitarianism which kept indigenous social relations stable. In other words, appeal was being made to some concept of security in both cases, even though the tenure arrangements necessary for obtaining it were clearly different. Control, however obtained, was seen as fundamental to agricultural development. Only in this way could access to land resources be guaranteed.

Second, it was expected that with appropriate changes in land tenure, production units—the decision-making spheres defined by social cohesion, certain property rights, and a defined area of land—would operate more rationally and efficiently. Both reform strategies thought this would be an inevitable development. The one argued that their particular form of tenure reform would have removed a number of important externalities, while the other argued that equilibrium would have been restored in the agricultural enterprise. Consequently, the production process was expected to function in a manner which would ensure continuity of output and development of external management links with the larger socio-economic network of which the individual or community was a part.

The basis on which the latter argument rests should be clarified. Before colonial intrusion, production cycles in African agrarian systems were highly developed. A recent study of the effects of apartheid on poverty and malnutrition in South Africa forcefully makes the point. It explains, for example, that apart from simply enabling agrarian communities to produce enough food on a self-sustainable basis, production structures performed extremely important social functions:
As in almost all societies whose economy is based on subsistence grain-farming, social organization is dominated by the family farming system. In order to ensure the continuity of an activity of a seasonal nature, which requires, in particular, the transmission of food resources over a period of time, the organic and functional reproduction of the production units is regulated by careful management of the grain reserves, the redistribution of food supplies and the strict control of reproduction relations particularly through marriage and filiation.

The agrarian reforms in Tanzania and the movement back to traditional control of land in Swaziland were essentially fired by the need to recapture this complementarity between social needs, production efficiency, and tenure arrangements.

Third, it was expected that the support service infrastructural facilities necessary for a healthy agricultural industry would develop. The components of this infrastructure would include credit facilities, marketing arrangements and new (appropriate) technologies of production. The tenure reforms were based on the assumption that these infrastructural facilities would be automatically attracted to agriculture. However, whether they were necessary or capable of increasing production under any reform programme was never in doubt.

Technology always particularly interested policymakers, planners, and programme administrators. Some saw it as an antecedent process, possible only if structural reorganization had already paved the way. Others saw technological absorption as the variable assisting the state in restructuring agrarian relations. In many countries, infrastructural services were set up in anticipation of changes in land relations, either through tenure reform or land redistribution programmes. As an infrastructural service, the availability and absorption of new farming technologies were always seen as an important part of the agrarian reform package.

An assessment of development implications

To what extent have the expectations of agrarian reform been realized? Those who have studied agrarian transformation programmes throughout Africa are not optimistic. An assessment of Kenya's own tenure reform programme suggests that it has not progressed beyond the situation observed by Yudelman regarding Southern Rhodesia. Our own assessment notes that no evidence exists that agricultural production has increased due to the programme. To the contrary, plenty of data indicate that inequalities, both structural and political economic, have resulted within the agrarian sector. A relatively rich middle peasantry has emerged which enjoys many useful links with central bureaucracies. This elite is able to draw substantial social and production advantages from the state.

Landlessness, especially in areas of high land pressure, has been the corollary. In a country which does not have a dynamic agro-industrial sector, the "liberated" peasant has little alternative but to drift into the cities. In the pastoral/nomadic areas where tenure reform took the form of "group" registration, the problem became not one of landlessness, but of the imminent collapse of the pastoral economy itself. Finally, the expected broad-spectrum effect of tenure reform, especially in the area of credit, did not materialize. Far from generating credit for agriculture, the reforms led mainly to the impoverishment of the sector and the capitalization of industry and other service sectors at its expense.

An assessment of the Tanzanian and recent Ethiopian reforms are not encouraging either. The problem in both these countries seems to have been their excessive reliance on political rather than socio-economic tools, where conventional wisdom would have dictated a more comprehensive attack on rural underdevelopment. Failure to integrate what is politically desirable with what is economically feasible seems to run through agrarian reform programmes in these two countries. Ethiopia, in particular, might well find itself in the company of Egypt.

The Egyptian land distribution programme succeeded in removing the very large land owners, but, due to relatively high land area ceilings, consolidated the middle elites. These were able to regroup and frustrate more radical reforms. In addition, the co-operatives which were expected to help the lower peasantry by redirecting resource transfers to them did little of the kind. Many of these institutions were hijacked by the middle elites for their own purposes. Lastly, whatever absolute production increases the reform generated were wiped out by runaway population growth. Thus, Egypt relapsed into the classic food deficiency syndrome of Sub-Saharan countries.

A more obvious fault is that the engines, i.e., the institutions that were being relied on to drive reform efforts, were themselves fundamentally inappropriate. Somehow, it was always assumed that agrarian bureaucracies—particularly those inherited at independence—were fully equipped at all times to handle any programme, whatever its complexities and ideology. This may be the clue to the apparent failure of most of these programmes.

Conclusion

While the African agrarian crisis continues to deepen, the agrarian reform policies and programmes now being pursued in Sub-Saharan Africa are unlikely to provide the turn-around for which the region is desperate. Re-assessing the wisdom of investing such staggering amounts of resources in these programmes and investigating more productive alternatives is necessary. This is particularly urgent in the case of tenure reforms, per se, rather than reforms of the agrarian structures and conditions under which production relations operate. Dramatic increases in production have been recorded in a number of countries where these reforms are in process. The yeoman farmers of Kenya and Malawi, and more recently the community peasants of Zimbabwe, produce significant surpluses. This essay questions the sustainability and replicability of these experiences and their long-term social and political costs.

Notes

Chapter 3
THE ROLE OF LAW IN
COMMERCIAL AND INDUSTRIAL
EXPANSION
The Case of Botswana, Lesotho, and
Swaziland
P. N. TAKIRAMBUDDE

Introduction
The purpose of this study is to examine the role of law in the expansion of the commercial and industrial sectors of Botswana, Lesotho and Swaziland (hereinafter referred to as the BLS countries). Botswana and Lesotho obtained formal independence in 1966, and Swaziland in 1968, all having been British colonies since the turn of the century. Colonization of the BLS countries had the immediate consequence of incorporating them into the international capitalist system.

Law has had a role in designing and creating the necessary infrastructure for capitalist enterprise, particularly regarding entrepreneurial activity. This study presents the contemporary legal framework with emphasis on aspects designed to accommodate international capital. The growth and development of commerce and industry in the BLS countries is also discussed.

Commercial and industrial expansion in the BLS countries is evaluated, regarding three points in particular. First, operation of commercial and industrial concerns within the current legal framework, based on the free market, generates consequences beyond the control of the state. The "liberal" legal system creates a framework of decision-making and management without specifying priorities within some set of ends. For example, capital-intensive investments in the BLS states, have had certain consequences for employment.

Secondly, commercial and industrial activity involves actors endowed with differing capacities. This results in a disparity between local participants and the multinational firms. A rigid structure forms over time with two levels of access to organizational ability, capital and technology: low status and low technological capacity, and high status leading to favourable technological, organizational and capital opportunities.

The final point is that the legal regimes in the BLS countries fail to measure up even to the minimal regulatory tasks set for them. This can result in substantial erosion of the public interest.

Colonization and the Creation of a Market Economy

The colonization of Botswana, Lesotho and Swaziland heralded a new legal order to replace the traditional structures and ideologies. The principal concern of the British colonial power was to establish a capitalist market economy. The market system is based on the desirability of growth characterized by a rising material output of goods. In contrast to what Hyden calls the "economy of affection", the mode of life under capitalism is what Bell has called the "economizing mode". The pre-colonial systems in the BLS countries were based upon customary allocation and management of resources. For example, customary land right was the right of access to communal land. Each community member had the right to certain uses of land but did not own the land itself, and as such could not dispose of it. Such a concept of property was antithetical to capitalist enterprise. The economizing mode dictates that the market, on the basis of productivity, should be the arbiter and allocator of labour and resources among alternative uses.

One of the central institutions in the operation of a market economy is the legal system. In Weberian terms, the market economy is based upon legal domination wherein the key characteristics are a relative degree of calculability and the capacity to develop substantive legal provisions such as legal contractual freedom. Thus, at the time of colonization, the preoccupation of the colonial state was to impose a new legal system to facilitate the operation of a market economy in which land, labour and capital would be allocated through free contractual exchanges.

The colonial state used Orders-in-Council to impose legal security. The Roman-Dutch common law and statutes were in force in the Transvaal (regarding Swaziland) and in the Cape (regarding Botswana and Lesotho). Thus Roman-Dutch commercial and corporate law (some of it reproducing English and American law) was applied in the BLS countries. This law has, over time, been subjected to reforms and revisions. Currently, the law is a mixture of common law and statutes, with the latter being more significant.

With the introduction of the legal and institutional framework for capitalist enterprise, regional and international capital began to penetrate the BLS countries. When the three states achieved formal independence, additional legal measures were enacted to encourage further involvement of international capital and technology.

Legal and Institutional Infrastructures

Some of the main legal and institutional aspects of capitalist enterprise in the BLS countries include forms of doing business, investment rules, international trade, foreign exchange, and tax law.

Overview

Law has key a role in the expansion of industrial and commercial activities by creating new forms of business organization to channel and aggregate capital. Business in the BLS countries may be organised in two forms: incorporated or unincorporated.

Incorporated forms of business include public compa-
agencies. The National Development Bank (established through branch facilities. Any two or more persons may form an incorporated private company and any seven or more persons may form a publicly held company. Any company, association, syndicate or partnership consisting of more than twenty persons must be registered as a company. The main legal instruments that apply are the Companies Acts. These acts have limited application to building societies, friendly societies, trade unions or cooperative agricultural societies. Special sections of the Companies Acts apply to foreign companies which are, in general, free to create branches in the BLS countries and to engage agents.

The most widely used unincorporated forms are "sole proprietorship" and "partnership". These are principally used in petty business in such sectors as transport and retail trade, and by professionals, such as in law and accounting. The main laws that apply are the Registration of Business Names Acts and the Trading Licenses Acts. Registration requirements are minimal.

With the exception of Lesotho, there are no minimum requirements as to issued capital for unincorporated businesses. Any invitation to the public to apply or subscribe for shares in a company must take place through publication of a prospectus complying with the disclosure and publication requirements of the Acts. Allotment of shares cannot take place unless the minimum amount, as stated in the prospectus, has been subscribed and the sum payable on application is received by the company.

Companies are required to have professional auditors to examine the accounts and to make a report in accordance with the Act. Every company is required to produce narrative accounting statements of its activities, the requirements in Botswana and Lesotho being more demanding than in Swaziland.

There is no legal requirement for companies to have certain minimum reserves. However directors may set aside out of the profits such sums as they think proper as a reserve. They may also carry forward any profits which they think prudent not to distribute.

Dividends may only be paid out of profits, and are declared by the general meeting within the maximum amount recommended by the directors. There are no legally fixed workers' or directors' shares in annual profits.

In general, foreign companies are treated in the same manner as local companies. They therefore have the same obligations regarding reporting as described above for local companies. However a few additional obligations are imposed upon them in connection with capitalization procedures. Let us examine these aspects in detail.

Botswana

Investment rules

Botswana has an open door policy towards private investment whether from local or foreign sources. The state plays a minimal role in the economy and private investment is encouraged through three development agencies. The National Development Bank (established in 1963) is a development agency which mainly assists traditional agriculture. The Botswana Enterprises Development Unit (established in 1974) encourages Botswana-owned and managed industries. The Botswana Development Corporation identifies viable investment opportunities and develops them either on its own or in partnership with local or foreign investors.

There is no specific investment law which provides for protection and incentives but relevant rules exist in various laws and programmes. The Industrial Development Act (1968) provides for a general system of industrial licensing and the Income Tax Act (1973) provides for incentives in the form of generous allowances. The "Financial Assistance Policy" (1982) provides financial assistance to productive activities.

Restrictions and priority areas

Until recently there were no restrictions on foreign investment in Botswana nor was there government control of certain relevant economic sectors. The major instruments of government influence are still the three development agencies cited above.

A restriction on foreign contractors existed in the form of a 12.5 per cent price preference for local businesses. A few additional obligations regarding reporting are imposed upon them in connection with capitalization procedures. Let us examine these aspects in detail.

Application and approval procedures

Although foreign investors do not need approval from the Central Bank of Botswana, it is wise for them to notify the Bank of investments in order to ensure that capital and dividends can be repatriated. In mining, all licence for reconnaissance and prospecting for minerals are processed by the Minister for Mining. Mineral concessions can be acquired from the Minister but only by citizens of Botswana or persons ordinarily resident in Botswana for at least four years, and by companies established and incorporated in Botswana. All applications must include extensive information on the project and the applicant in accordance with the Mines and Minerals Act (1976).

For industry, a system of licensing was instituted by the Industrial Development Act (1968). Any manufacturing enterprise employing more than ten persons or using machinery above 25 horse power must apply to the Minister for Commerce and Industry for a manufacturing licence. The license must be renewed annually.

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A license may be refused if the minister deems the technical, technical skill or raw materials available to be inadequate for successfully establishing the enterprise or if he deems the location to be inadequate. The minister may also refuse a license if he considers it not to be in the economic interest of the country or the sector concerned, or if an exclusive manufacturing license has been granted previously to another manufacturer. On refusal of a license the applicant may appeal to the Botswana president.

There is also a general system of licensing for trading and many professions in the tertiary sector. Licenses are issued under the Trading Act. Exclusive licenses to manufacture may be granted by the president. Any manufacturer may, under the Industrial Development Act (1968), apply to the minister for an exclusive license to manufacture a certain product in a certain area. The minister may conduct an inquiry into the application or into any representations made by third parties regarding the application.

The exclusive license is granted if the president is satisfied that it is in the interest of the public and the efficient development of the industry concerned. The license may be granted conditionally and for a maximum period of four years. After expiration of this period renewal is possible. If a manufacturer fails to implement the project or ceases to manufacture the product the president may cancel the license.

Development Approval Order applications are processed by the Permanent Secretary to the Ministry of Finance. The application must be accompanied by extensive information concerning the applicant and the project.

For small-scale projects, applications for assistance are made under the Financial Assistance Policy. These are submitted to Rural Industries Officers in the Districts and to Town Council Planning Officers in towns. Evaluations are made by Production Development Committees. For medium- and large-scale projects, applications should be submitted to the relevant ministries where evaluations are made by inter-ministerial committees and permanent secretaries. Applications must be made as early as possible before project implementation.

**Investors eligible for incentives**

As mentioned in the previous section, investors may apply for an exclusive manufacturing license if they can convince the president that it is in the interest of the public and of the sector concerned. Extra tax relief may be granted—under a Development Approval Order—to any project which is beneficial to the development of the Botswana economy or to the economic advancement of its citizens. The application will be evaluated according to:

- the anticipated effect on stimulating development of other economic, industrial or commercial activities
- the amount and type of training of Botswana citizens by the project
- the area of the proposed development
- the anticipated effect on stimulating development of Botswana economy or to the economic advancement of its citizens
- amount and type of training of Botswana citizens by the project
- the anticipated effect on stimulating development of other economic, industrial or commercial activities
- reducing prices of consumer goods or services Botswana.

Under the Financial Assistance Policy "productive activities" (activities that produce goods for export or to replace imports) are eligible for financial assistance. Specifically excluded are the cattle industry and large-scale mining. Both citizens and non-citizens are favoured but aid for small-scale projects (below 10,000 P.) is only available to citizens.

**Investment incentives**

Investment incentives in Botswana take three forms: fiscal incentives, competitive incentives, and investment assistance. Fiscal incentives include generous allowances for new buildings, plant and machinery, for employees' housing and training programmes. They are granted under the Income Tax Act. Extra tax relief can be granted under a Development Approval Order, specifying the types and rates of relief. Relief is provided to any project which is shown to be beneficial to the development of the Botswana economy or the advancement of its citizens.

As mentioned earlier, it is also possible to obtain an exclusive manufacturing license for a specific project under Development Act (1968). This restricts competition from other producers, and is renewable for a period of four years.

Investment assistance is granted under the government's Financial Assistance Policy (1982). A number of incentives are available to businesses involved in manufacturing, small and medium-scale mining, and agriculture (other than livestock farming). Such incentives include income tax holidays, grants towards training to create jobs and boost sales, and direct financial aid.

The Financial Assistance Policy makes a distinction between small-scale projects (investment of less than 10,000 P.), medium-scale projects (investment between 10,000 P. and 750,000 P.) and large-scale projects (investment over 750,000 P.). Small-scale industries which have a reasonable expectation of being financially viable can obtain grants based on a percentage of total investment up to 2,000 P. per job created. Female entrepreneurs and projects in rural areas have priority.

Medium-scale projects and large-scale projects are divided into new manufacturing industries on one hand, and the expansion of existing industries and new investments in sectors other than manufacturing on the other. New manufacturing industries receive a number of incentives automatically. They are granted a five-year tax holiday for 100 per cent in the first two years and 75, 50 and 25 per cent in the subsequent three years. Instead of the tax holiday, an investor may opt for a capital grant and a sales augmentation grant of maximum 8 per cent of sales revenue in the first two years, and 6, 4 and 2 per cent in the subsequent three years. Reimbursement of unskilled labour costs of 80 per cent is automatically received in the first two years and 60, 40 and 20 per cent in the subsequent three years. In addition, a training grant is given of 50 per cent of off-the-job training costs for the first five years.

Financial assistance to investments other than in manufacturing, mining, or agriculture industries is examined on a case-by-case basis. There also, incentives may be awarded. Incentives may include a capital grant of...
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higher. No information is available on the remittance of half their annual salaries or 6,000 P., whichever is authorized. Personnel can apply for remittance abroad of capital investment, depending on the location. A sales augmentation grant to a maximum of 8 per cent of sales revenue in the first two years and 6, 4 and 2 per cent in the subsequent three years may be received. In addition, reimbursement of unskilled labour costs and training grants may be awarded, as outlined above. Large-scale projects may deviate to adapt the incentives to the specific nature of the project. Other forms of assistance are available on the request of the prospective investor.

Investment protection, expropriation and dispute settlement

The 1966 Botswana Constitution (Section 8) prohibits the compulsory acquisition of property unless in the public interest and against the prompt payment of full compensation. Every person having a right over property which has been so acquired, has direct access to the High Court for determination of the legality of the expropriation and the amount of compensation. The compensation is freely remittable within a "reasonable" time. Exceptions to these rules exist, for example where property is expropriated to satisfy taxes due, or as penalty or execution of a judgement.

In terms of international provisions, Botswana has signed and ratified the 1965 World Bank convention on settlement of investment disputes between states and nationals of other states. The convention entered into force for Botswana on 14 February 1970, enacted by the 1970 Settlement of Investment Disputes (Convention) Act.

International trade and foreign exchange

The 1976 Exchange Control Regulations are administered by the Central Bank under powers delegated to it by the Ministry of Finance and Development Planning. Authorized dealers are appointed by the Central Bank and are empowered to provide exchange for current transactions. There are three types of banking accounts: Resident Account, Temporary Resident Account and Non-Resident Account.

Botswana is a member of the Southern Africa Customs Union (SACU) with Lesotho, South Africa and Swaziland. No licenses are required for imports from the SACU countries. For most other imports, however, a licence is necessary in order to obtain the necessary foreign exchange. This can be done easily by producing evidence from the Department of Customs and Excise, with no delays in payment.

Outward capital transfers are approved on a case-by-case basis but are generally allowed without problems. Profits and dividends up to 10,000 P. per year can be remitted freely to foreign shareholders provided that income tax has been paid. Dividends and profits due to non-residents up to 25,000 P. per annum per organization may be approved by authorized dealers if proper documentation is provided.

There is a 15 per cent withholding tax on dividends, which is deducted before the remittance is effected. Authorized personnel can apply for remittance abroad of half their annual salaries or 6,000 P., whichever is higher. No information is available on the remittance of royalties and fees. Export proceeds must be received in foreign currency or from a non-resident Pula account.

There are no internal barriers to trade within the SACU area. Licenses are required for most other imports but are easily obtained. Only a few export items, such as precious stones, are subject to licensing for revenue reasons.

Botswana is party to a number of international agreements regarding trade. For the SACU area a common external tariff is determined by South Africa in consultation with the other members.

Botswana is also a member of the 1980 Lome Convention between the European Economic Community and more than sixty African, Caribbean, and Pacific (ACP) states. Under the trade chapter of the convention, industrial exports from ACP countries can enter the EEC duty-free and a preferential import regime is applied to most agricultural exports from Botswana. In addition, loans and grants are provided to ACP countries in order to stabilize export receipts from certain agricultural goods (Stabex) and to stabilize production of certain minerals (Minex).

Botswana participates in the Southern African Development Co-ordination Council (SADCC) together with Angola, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe. Aspects of trade and finance are discussed at annual summits and solutions worked out. There is political co-operation between the members and co-ordination of national policies regarding external debts.

Botswana is considering accession to the Preferential Trade Area (PTA) which groups fourteen states of Central and East Africa. Member states were to apply reductions in customs duties or dismantle such tariffs between themselves from 1 July 1984. Moreover, the participants use local currency or barter in reciprocal trade in an attempt to save foreign exchange reserves. In addition, Botswana has concluded individual trade agreements with Malawi, Zambia and Zimbabwe.

Botswana has entered into international tax agreements with three of its major trading partners—South Africa, United Kingdom and Sweden—in order to avoid double taxation. A 15 per cent relief on dividends, interest, and royalties is granted under the agreement between Botswana and the United Kingdom and South Africa. Between Botswana and Sweden there is only a 10 per cent relief on dividends.

Swaziland

Investment rules

Swaziland has a positive attitude towards private investment whether from local or foreign sources. The government participates in the economy through the National Industrial Development Corporation of Swaziland (NIDCS), an autonomous statutory body with both government and private shareholders. As with Botswana, there is no single investment law providing for protection and incentives but relevant rules are scattered over various legal instruments.

Restrictions and priority areas

There are still no restrictions on foreign investment in
the Swazi economy nor is there government control of any economic sectors. Government influence is primarily through the NIDCS. The NIDCS considers giving assistance to all investment which contributes to the growth of the Swazi economy. However priority is given to projects which will contribute to increasing employment, training citizens, and increasing the use of raw materials.

Priority projects should also contribute to improving the country’s balance of trade, whether through import substitution or promoting exports (especially to outside Southern Africa). In addition, increasing linkages with other local enterprises, locating projects outside the Mbabane-Manzini area, and contributing to rural and mineral development are NIDCS priorities.

Application and approval procedures

In contrast to Botswana, foreign investors require approval from the Central Bank to facilitate the repatriation of capital and dividends under the Exchange Control Regulations (1975). In mining, all applications for prospecting licenses or mining rights must be filed with the Commissioner of Mines in the Department of Geological Survey and Mines, to be transmitted to the Minerals Committee. Special exclusive prospecting licenses may be granted by the king.

For industry, there is no general system of licensing, and training licenses are generally not required by manufacturing concerns unless they sell retail goods. Applications for NIDCS assistance in establishing industrial projects are handled by its managing director. To enable NIDCS to make a proper evaluation of the project, extensive information on the project and the applicant should be submitted with the application.

Applications for special incentives for regional development under the Income Tax (Consolidation) Order (1975) are processed by the Permanent Secretary of the Ministry of Finance.

Applications for external tariff protection are made to the Swaziland Ministry of Commerce, Industry, Mines, and Tourism, which in turn makes representations to the South African government. For the Swazi government to impose protective duties against imports from within the SACU area is more complicated because all the governments involved must be consulted.

Investors eligible for incentives

All investors are eligible for fiscal incentives available under the income tax law. All industries locating in specially designated development areas are also eligible for special incentives for regional development. In these areas certain industries may be granted “pioneer” status and may thus qualify for additional concessions. Pioneer status, however, has yet to granted to any industry.

All new or expanding investors are eligible for assistance from NIDCS but priority is given to those contributing to the six objectives described above. NIDCS will not normally invest in any project with a capital cost of less than E.50,000. Industries that have the capacity to supply at least 60 per cent of the quantity required from the whole SACU area for a particular project are eligible for tariff protection against non-SACU imports. Industry that qualifies as an “infant industry” under the Customs Union Agreement is also eligible for tariff protection against SACU imports. However, in practice it is very difficult to qualify if the protection had not been granted up to 1984.

Investment incentives

As in Botswana, there are fiscal and competitive incentives and investment assistance. Fiscal incentives include depreciation, training, investment and initial allowances, and regional and pioneer incentives. Investment assistance by NIDCS is available for feasibility research, local co-ordination, factory construction, and finance. In order to assist the investor in preparing a project proposal NIDCS undertakes background research concerning markets, labour supply, and procurement of raw materials. Also specific investment opportunities are identified and feasibility studies prepared. Copies of these studies are then made available to prospective investors.

As local liaison, the NIDCS assists in speeding up procedures for registration, import licenses and resident licenses, in procuring local consultants and in making special arrangements with the government to provide infrastructure. In order to lower initial investment costs, NIDCS is prepared to invest in the construction of factory premises and to lease the premises to the investor. An option is usually granted to the investor to purchase the property.

NIDCS also provides financial assistance to projects. The maximum financial involvement by NIDCS in any one project whether it is through loan, equity, construction or guarantees is limited to 60 per cent of the project’s total capital cost (including buildings and permanent working capital).

Customs incentives include rebates and drawbacks of import duties and increased duties to protect local producers against foreign competition. Rebates of import duty are available for over 1,500 tariff items for 146 separately specified industries. With few exceptions, the rebates granted are 100 per cent of the common external tariff of the Customs Union. Drawbacks or refunds of import duty are available for certain materials which are imported, processed in the Customs Union and re-exported. Tariff protection by increase import duties on similar products is granted on a case-by-case basis.

Investment protection, expropriation and dispute settlement

As in Botswana, the 1968 Swaziland Constitution prohibits the expropriation of property except in the public interest and against the prompt payment of full compensation. Direct access to the High Court for determination of the legality of the compulsory acquisition and the amount of compensation is also assured. Compensation is freely remittable within a “reasonable” time. Like in Botswana, exceptions to these rules exist where property is expropriated to satisfy taxes due or as penalty or execution of a judgment.

Regarding international provisions for investment protection, Swaziland has also signed and ratified the 1965 World Bank convention on disputes. The convention entered into force for Swaziland on 14 July 1971.
Swaziland is a member of the Rand Monetary Area (RMA), together with Lesotho and South Africa, within which there is no exchange control on the transfer of funds. Exchange control for transactions outside the RMA is administered by the Central Bank of Swaziland in co-operation with authorized dealers. People who reside outside the RMA may open non-residents accounts, financial rand accounts or blocked accounts. Special accounts exist for residents of Botswana and Zimbabwe.

Non-resident accounts may be credited with all authorized payments from RMA residents, with proceeds of sales to authorized dealers and with payments from other non-residents accounts. They may be debited with all payments to residents, to other non-resident accounts, to accounts in any country outside the RMA and for purchases of foreign exchange.

Swaziland has also concluded bilateral trade agreements with Egypt, Ghana, Kenya, Malawi, Malta, Mozambique, Nigeria, Tanzania, Uganda and Zambia. It has concluded international tax agreements with its principal trading partners, the United Kingdom and South Africa, to avoid double taxation. A 15 per cent relief is provided for dividends, 10 per cent for interest, and royalties and fees are exempt if taxed in the other country.

Lesotho

Investment rules

Lesotho, in concert with the other two states, has adopted a positive attitude towards commercial and industrial expansion through private investment. To this end several rules and instruments have been adopted to facilitate private investment in commerce and industry. One example is the Industrial Licensing Act under which the Lesotho National Development Corporation (LNDC) is empowered to issue exclusive manufacturing licenses.

The Pioneer Industries Act of 1969 (as amended in 1972 and 1978) is another example, in which fiscal incentives are granted for new industries. The Casino Act, the Liquor Act, the Lesotho National Development Act and the Deeds Registry Act, also facilitate and support private investment.

Investment incentives

Both fiscal and investment assistance incentives are available under Lesotho law. In addition to incentives granted to companies under the Income Tax Act (deductions and allowances), further tax incentives are provided under the Pioneer Industries Act of 1967 for approved manufacturers, hotel keepers, casino operators and building companies. Investment assistance is provided in the form of free land for industrial development.

International trade and foreign exchange rules

Since Lesotho is a member of the Rand Monetary Area, the foreign exchange procedures and rules in Lesotho are similar to those applied in Swaziland. Foreign exchange control is administered by the Central Bank of Lesotho. The applicable import-export rules are similar to those adopted by Botswana and Swaziland.

Lesotho participates in three major international agreements. It is a member of SADC, with the same terms of membership as Botswana and Swaziland. Lesotho is also a member of SADCC and a member of the PTA.

Commercial and Industrial Expansion

Though the industrial sectors of Botswana, Lesotho and Swaziland are still relatively small, they have undergone significant expansion in the last several decades, especially since independence. The accelerated development has, to a large extent, been aided by a significant inflow of international and regional capital which has been attracted by the generous legal and institutional framework. Recent trends are illustrated by the proportionate contribution of the manufacturing sector to the Gross Domestic Product (GDP) from the years 1980 to 1984 (see Table 1).
TABLE 1
Contribution of the Manufacturing Sector to the GDP

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>MVA (mill. P.)</td>
<td>49.3</td>
<td>71.2</td>
<td>81.7</td>
<td>91.6</td>
</tr>
<tr>
<td></td>
<td>share of MVA in GDP (%)</td>
<td>4.1</td>
<td>3.7</td>
<td>4.0</td>
<td>7.7</td>
</tr>
<tr>
<td></td>
<td>MVA (mill. US$)</td>
<td>63.5</td>
<td>85.5</td>
<td>80.0</td>
<td>83.5</td>
</tr>
<tr>
<td>Lesotho</td>
<td>MVA (mill. M.)</td>
<td>11.9</td>
<td>14.7</td>
<td>17.9</td>
<td>21.1</td>
</tr>
<tr>
<td></td>
<td>share of MVA in GDP (%)</td>
<td>4.5</td>
<td>4.6</td>
<td>5.1</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td>MVA (mill. M$)</td>
<td>15.3</td>
<td>16.9</td>
<td>16.5</td>
<td>18.9</td>
</tr>
<tr>
<td>Swaziland</td>
<td>MVA (mill. E.)</td>
<td>79.6</td>
<td>88.4</td>
<td>92.6</td>
<td>94.0</td>
</tr>
<tr>
<td></td>
<td>share of MVA in GDP (%)</td>
<td>21.8</td>
<td>22.3</td>
<td>22.8</td>
<td>23.5</td>
</tr>
<tr>
<td></td>
<td>MVA (mill. US$)</td>
<td>102.3</td>
<td>101.6</td>
<td>89.3</td>
<td>84.5</td>
</tr>
</tbody>
</table>

a. Figures for 1984 are provisional; na = figures not available.

b. MVA = manufacturing value added.
c. The currency of Lesotho is the Metot (M.).
d. 1980 prices.


Botswana

Until the 1970s, the economy of Botswana was largely made up of cattle-farming and associated activities. Commercial and industrial activity was minimal. Since 1980 there has been a significant expansion of manufacturing capacity as shown by the establishment of manufacturing units between 1966 and 1984 (see Table 2).

TABLE 2
Development of the Formal Manufacturing Sector, 1966-84

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat and Dairy</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Dairy and Agro-based Products</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Beverages</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Textiles</td>
<td>15</td>
<td>7</td>
<td>13</td>
<td>9</td>
<td>7</td>
<td>31</td>
</tr>
<tr>
<td>Tanning and Leather Products</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Chemical and Rubber Products</td>
<td>7</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Wood and Wooden Products</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Paper and Paper Products</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Metal Products</td>
<td>19</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td>6</td>
<td>37</td>
</tr>
<tr>
<td>Building Materials</td>
<td>13</td>
<td>2</td>
<td>7</td>
<td>3</td>
<td>3</td>
<td>32</td>
</tr>
<tr>
<td>Plastics</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Electrical Products</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>Handicrafts</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>87</td>
<td>17</td>
<td>51</td>
<td>51</td>
<td>53</td>
<td>259</td>
</tr>
</tbody>
</table>

Source: Ministry of Commerce and Industry, Gaborone, Botswana.

The relatively low level of pre-independence industrial and commercial expansion is further illustrated by statistics on company registration. As of 1982, there was a total of 3,884 registered companies in Botswana. Prior to independence in 1966, there were only 270 (8 per cent of the current total). The overwhelming majority of the post-independence registrations have occurred in the last ten years.

The last decade has been characterized by major international capital participation in the mineral sector, for example the Selebi-Phikwe copper/nickel mine, and the diamond mines at Orapa and Jwaneng are operated by the Bamangwato Concessions Limited (BCL). The Botswana Government owns 15 per cent of the equity in BCL. Botswana Roan Selection Trust (BRST) owns 85 per cent. American Metal Climax (AMAX) and Anglo-American Corporation/Charter Consolidated Group—London (AAC) each own 30 per cent of equity in BRST.12

The above three mining operation have contributed to formal employment in Botswana as shown below, and this trend is projected to continue.
TABLE 3
Employment and Localisation in Mining, 1984-87

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>E</td>
<td>B</td>
<td>E</td>
</tr>
<tr>
<td>Jwaneng</td>
<td>1,674</td>
<td>246</td>
<td>1,705</td>
<td>215</td>
</tr>
<tr>
<td>Orapa/Letlhakane</td>
<td>2,421</td>
<td>229</td>
<td>2,437</td>
<td>213</td>
</tr>
<tr>
<td>BCL</td>
<td>4,320</td>
<td>292</td>
<td>4,333</td>
<td>279</td>
</tr>
<tr>
<td>Total</td>
<td>8,415</td>
<td>767</td>
<td>8,475</td>
<td>707</td>
</tr>
<tr>
<td>Percentage</td>
<td>91.6</td>
<td>8.4</td>
<td>92.3</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Note: B = Batswana; E = Expatriate.

Source: Department of Mines, Botswana.

Until the 1980s manufacturing activity was synonymous with, and limited to, the Botswana Meat Commission (BMC) and Kgalagadi Breweries Ltd. However, the country's manufacturing capacity has recently undergone an expansion and in consequence has become an important source of formal employment.

Thus the share of formal employment in the manufacturing sector has risen from 64 per cent in 1979 to 82 per cent in 1984, as indicated below:

TABLE 4
Employment in the Formal Manufacturing Sector, 1979-1984

<table>
<thead>
<tr>
<th></th>
<th>1979</th>
<th>1984</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>BMC</td>
<td>1,652</td>
<td>36</td>
<td>1,970</td>
</tr>
<tr>
<td>Other</td>
<td>3,073</td>
<td>64</td>
<td>8,926</td>
</tr>
<tr>
<td>Total Jobs</td>
<td>4,625</td>
<td>100</td>
<td>10,896</td>
</tr>
</tbody>
</table>

Number of Companies 88 — 276 — —  
Jobs per Company including BMC 53 — 40 — —  
Jobs per Company excluding BMC 35 — 33 — —  

Note: The above data are based on data reported on manufacturing license applications held by the Ministry of Commerce and Industry. These statistics do not compare directly with data collected by the Central Statistics Office due to different reference periods and differences in industry classification.

Source: Ministry of Commerce and Industry, Botswana.
TABLE 5
Investment in Manufacturing, 1984

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Number of Companies</th>
<th>Average Investment (P' 000)</th>
<th>Investment Per Company (P' 000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat and Meat Products</td>
<td>2</td>
<td>19,151</td>
<td>9,576</td>
</tr>
<tr>
<td>Dairy and Agro-based Products</td>
<td>8</td>
<td>7,327</td>
<td>916</td>
</tr>
<tr>
<td>Beverages</td>
<td>13</td>
<td>16,287</td>
<td>1,258</td>
</tr>
<tr>
<td>Bakery Products</td>
<td>13</td>
<td>2,104</td>
<td>162</td>
</tr>
<tr>
<td>Textiles</td>
<td>48</td>
<td>21,541</td>
<td>449</td>
</tr>
<tr>
<td>Tanning and Leather Products</td>
<td>7</td>
<td>3,793</td>
<td>542</td>
</tr>
<tr>
<td>Chemical and Rubber Products</td>
<td>16</td>
<td>15,702</td>
<td>981</td>
</tr>
<tr>
<td>Wood and Wooden Products</td>
<td>12</td>
<td>1,954</td>
<td>161</td>
</tr>
<tr>
<td>Paper and Paper Products</td>
<td>6</td>
<td>2,022</td>
<td>337</td>
</tr>
<tr>
<td>Metal Products</td>
<td>37</td>
<td>10,912</td>
<td>299</td>
</tr>
<tr>
<td>Building Materials</td>
<td>26</td>
<td>4,803</td>
<td>262</td>
</tr>
<tr>
<td>Plastics</td>
<td>8</td>
<td>4,623</td>
<td>578</td>
</tr>
<tr>
<td>Electrical Products</td>
<td>10</td>
<td>2,464</td>
<td>244</td>
</tr>
<tr>
<td>Handicrafts</td>
<td>3</td>
<td>399</td>
<td>133</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>209</td>
<td><strong>115,132</strong></td>
<td><strong>551</strong></td>
</tr>
</tbody>
</table>

Note: Investment includes capital outlay in both fixed and current assets.

Source: Ministry of Commerce and Industry, Gaborone, Botswana.

Investment in manufacturing has been relatively high reaching a value of 511.3 million P. The highest levels of per company investment have been in the meat, beverages and chemical sectors. In terms of total investment the textile sector showed the highest investment level (see Table 5).

Investment in manufacturing is likely to expand with further international capital flowing in to exploit the “favourable investment climate”. Foreign capital will be supplemented by the Botswana Development Corporation (BDC) which is projected to invest a total of 110 million P. between 1985 and 1990 (see Table 6).

TABLE 6
Company Projected BDC Investment (million P.)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculturea</td>
<td>2.4</td>
<td>2.3</td>
<td>2.8</td>
<td>3.0</td>
<td>3.7</td>
<td>14.2</td>
</tr>
<tr>
<td>Major Industries</td>
<td>3.8</td>
<td>2.6</td>
<td>3.2</td>
<td>4.6</td>
<td>5.8</td>
<td>20.0</td>
</tr>
<tr>
<td>Other Industries</td>
<td>1.3</td>
<td>2.1</td>
<td>2.9</td>
<td>4.0</td>
<td>5.8</td>
<td>16.7</td>
</tr>
<tr>
<td>Hotels, Tourism, Transportb</td>
<td>1.0</td>
<td>2.9</td>
<td>3.5</td>
<td>1.9</td>
<td>2.4</td>
<td>11.7</td>
</tr>
<tr>
<td>Industrial Property</td>
<td>4.7</td>
<td>5.8</td>
<td>6.4</td>
<td>8.5</td>
<td>9.6</td>
<td>35.0</td>
</tr>
<tr>
<td>Commercial and Residential Property</td>
<td>1.3</td>
<td>1.8</td>
<td>2.4</td>
<td>3.1</td>
<td>3.7</td>
<td>12.3</td>
</tr>
</tbody>
</table>

Notes: a. Excludes large-scale irrigation.
b. Excludes purchase of new aircraft.

Source: Botswana Development Corporation.
The location and ownership patterns of manufacturing activity for 1984 indicate that foreign capital is dominant and that most manufacturing activities are in urban areas (see Tables 7 and 8). Between 1979 and 1984 the percentage share of local capital has dropped slightly while that of international capital has expanded.

The above data are based on data reported on manufacturing license applications held by the Ministry of Commerce and Industry. These statistics do not compare directly with data collected by the Central Statistics Office due to different reference periods and differences in industry classification.

Source: Ministry of Commerce and Industry, Gaborone, Botswana.

<table>
<thead>
<tr>
<th>Table 7</th>
<th>Profile of Formal Manufacturing Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishment Operating</td>
<td>Location</td>
</tr>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>Meat, Meat Prod.</td>
<td>1</td>
</tr>
<tr>
<td>Dairy, Agro-based Prod.</td>
<td>1</td>
</tr>
<tr>
<td>Beverages</td>
<td>1</td>
</tr>
<tr>
<td>Bakery Products</td>
<td>3</td>
</tr>
<tr>
<td>Textiles</td>
<td>8</td>
</tr>
<tr>
<td>Tanning, Leather Prod.</td>
<td>4</td>
</tr>
<tr>
<td>Chemical, Rubber Prod.</td>
<td>1</td>
</tr>
<tr>
<td>Wood, Wooden Prod.</td>
<td>2</td>
</tr>
<tr>
<td>Paper, Paper Prod.</td>
<td>9</td>
</tr>
<tr>
<td>Building Materials</td>
<td>7</td>
</tr>
<tr>
<td>Plastics</td>
<td>1</td>
</tr>
<tr>
<td>Electrical Products</td>
<td>1</td>
</tr>
<tr>
<td>Handicrafts</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
</tr>
</tbody>
</table>


The above data are based on data reported on manufacturing license applications held by the Ministry of Commerce and Industry. These statistics do not compare directly with data collected by the Central Statistics Office due to different reference periods and differences in industry classification.

Source: Ministry of Commerce and Industry, Gaborone, Botswana.

The location and ownership patterns of manufacturing activity for 1984 indicate that foreign capital is dominant and that most manufacturing activities are in urban areas (see Tables 7 and 8). Between 1979 and 1984 the percentage share of local capital has dropped slightly while that of international capital has expanded.

The above data are based on data reported on manufacturing license applications held by the Ministry of Commerce and Industry. These statistics do not compare directly with data collected by the Central Statistics Office due to different reference periods and differences in industry classification.

Source: Ministry of Commerce and Industry, Gaborone, Botswana.

In commerce there has been a noticeable expansion in the establishment of retail and wholesale businesses. In 1984 alone a total of 2,616 establishments were licensed under the Trading Act and 749 establishments were initiated under the Liquor Act. In contrast to ownership patterns in the manufacturing sector, 85 percent of the retail and wholesale business and 96 per cent of liquor establishments were controlled by local capital.

<table>
<thead>
<tr>
<th>Table 8</th>
<th>Ownership Trends in Manufacturing, 1979-84</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>1979</td>
</tr>
<tr>
<td></td>
<td>Firms</td>
</tr>
<tr>
<td>Batswana</td>
<td>15</td>
</tr>
<tr>
<td>Joint Venture</td>
<td>26</td>
</tr>
<tr>
<td>Foreign</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
</tr>
</tbody>
</table>

Note: The above data are based on data reported on manufacturing license applications held by the Ministry of Commerce and Industry. These statistics do not compare directly with data collected by the Central Statistics Office due to different reference periods and differences in industry classification.

Source: Ministry of Commerce and Industry, Gaborone, Botswana.

<table>
<thead>
<tr>
<th>Table 9</th>
<th>Ownership in Botswana Commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td>License Type</td>
<td>Foreign-owned</td>
</tr>
<tr>
<td>General Trading</td>
<td>190</td>
</tr>
<tr>
<td>Small General</td>
<td>7</td>
</tr>
<tr>
<td>Fresh Produce</td>
<td>27</td>
</tr>
<tr>
<td>Restaurant</td>
<td>18</td>
</tr>
<tr>
<td>Specialty</td>
<td>87</td>
</tr>
<tr>
<td>Petrol Station</td>
<td>26</td>
</tr>
<tr>
<td>Wholesale</td>
<td>47</td>
</tr>
<tr>
<td>Chemists</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>466</td>
</tr>
</tbody>
</table>

Source: Ministry of Commerce and Industry, Gaborone, Botswana.
TABLE 10

Company Registration in Lesotho

<table>
<thead>
<tr>
<th>Period</th>
<th>Total Number Registered</th>
<th>Private Number</th>
<th>Public Number</th>
<th>Struck Off Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1967-71</td>
<td>230</td>
<td>170</td>
<td>60</td>
<td>26</td>
</tr>
<tr>
<td>1972-76</td>
<td>306</td>
<td>268</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>1977-81</td>
<td>665</td>
<td>638</td>
<td>27</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>1,201</td>
<td>1,076</td>
<td>125</td>
<td>76</td>
</tr>
</tbody>
</table>

Source: Companies Registry, Lesotho Law Office.

Lesotho

The industrial sector in Lesotho expanded significantly during the 1970s. This was due to generous investment incentives, increased diamond exports, external and flows, customs union receipts and migrant workers' remittances. At the time of independence, manufacturing activity accounted for less than 1 per cent of the GDP.

However, by 1984 the manufacturing value added was 5.5 per cent of the gross domestic product as a result of the drive to industrialize aided by investment incentives and instruments. The bulk of investment was accounted for by international capital in manufacturing industries, prospecting and mining, banking, insurance, retail wholesale and tourism. The post-independence expansion is illustrated by company registration figures (see Table 10).

Swaziland

The Swazi economy as a whole has been more diversified than the economies of Botswana or Lesotho. Until the recent expansion of commercial and industrial activity in Botswana, Swaziland had experienced a faster pace of development. Statistics on company registration date from 1922. The total number of companies registered in Swaziland between 1922 and 1980 was 3,525, of which 32 per cent were registered before independence in 1968. This was a much higher rate of pre-independence registration than in Botswana or Lesotho.

In the 45-year period before independence 1,131 companies had been registered. However the 12-year post-independence period saw 2,394 companies registered. New company flotation has thus more than doubled since independence (see Table 11).

TABLE 11

Company Registration in Swaziland

<table>
<thead>
<tr>
<th>Period</th>
<th>Total Number Registered</th>
<th>Private Number</th>
<th>Public Number</th>
<th>Struck Off Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1922-67</td>
<td>1,131</td>
<td>606</td>
<td>525</td>
<td>532</td>
</tr>
<tr>
<td>1968-80</td>
<td>2,394</td>
<td>2,047</td>
<td>347</td>
<td>497</td>
</tr>
<tr>
<td>Total</td>
<td>3,525</td>
<td>2,053</td>
<td>872</td>
<td>1,029</td>
</tr>
</tbody>
</table>

Source: Swaziland Registrar General's Office.
Of the companies registered during the period under discussion, 236 were foreign companies. The majority of these were controlled by local and foreign European capital (South African and British).

Of the companies on the register 76 per cent were private companies. An examination of the capital structure of the companies on the register revealed that approximately 60 per cent of the registered companies had nominal capital ranging between 100 E. to 2,000 E., and the issued share capital was mostly foreign-owned. There were also less than twenty companies with a share capital of more than 1.0 million E. The biggest company in terms of nominal capital was Swaziland Collieries Ltd. This company had an authorized share capital of 12.63 million E. Most of the shareholders and the directors in the large companies were foreign-based.

Although there are only a few large companies within the Kingdom, their economic role is relatively significant. According to the Third National Development Plan, ten major companies contributed approximately 15 per cent of the GNP and employed 6,160 people within the manufacturing and processing sector. This is approximately 12 per cent of the resident population. The manufacturing and processing turnover accounted for by the ten largest enterprises was approximately 108 million E. during 1976. This amounted to roughly 80 per cent of the national turnover.

In 1976, the largest company in the manufacturing and processing sector of the economy was the Usutu Pulp Company. This company employed 2,500 people in 1976, making a pre-tax profit of 2,9 million E. However, with the completion of the Third Sugar Mill, the Royal Swaziland Sugar Corporation has emerged as the largest and economically perhaps the most significant corporate entity. At 1977 prices, the Third Sugar Mill was estimated to be capable of creating export revenue in 1982 of about 29 million E. and able to employ 3,400 people.

The sectors which have experienced relatively fast growth include footwear, textile and clothing. However, the rapid expansion in manufacturing capacity has recently been arrested leading to a decrease in the manufacturing value added as a percentage of the gross domestic product. The recent decline was caused in part by the closure of the fertilizer industry and a drop in productivity in the meat, wood, and cotton sectors due to drought.

Furthermore, the industrial capacity has been negatively affected by the drastic fall in world sugar prices coupled with damage to the agricultural sector by drought and cyclones. The economic recession in South Africa, a principal trading partner, can only have made matters worse. For these reasons, in 1982 the manufacturing value added began to fall (although increasing marginally in 1984) in sharp contrast to the growth rate of 7.9 per cent per annum during the boom years of 1977-81.

Evaluation of Commercial and Industrial Expansion

Both colonial and post-colonial states in the BLS countries have adopted the strategy of commercial and industrial growth and diversification through investment by private enterprise with occasional state participation. Policy instruments utilized have included the corporate form (both public and private), financial institutions and legislation granting generous investment incentives.

In terms of conventional measurement of economic growth, one could conclude that the BLS countries have succeeded in their development efforts. Conventional measurement under the economizing system concerns itself with profitability and productivity. The indices of profitability and productivity which Swaziland has attracted have matched the demands of the marketplace and the efficient allocation of resources have been satisfied.

Economic indicators from the three states point to a substantial expansion of their industrial capacity. Compared to the other SADCC countries, the BLS countries have recorded some of the fastest rates of industrialization and commercialization.

However when the developments of the past decade are viewed in broader perspective one can recognize problems and shortcomings which have been generated by the strategies adopted by the BLS countries.

First, in responding to the incentives provided by the investment and corporate regimes private investment has tended to concentrate on technologies which save labour. As a result such investment has had minimal impact on the huge unemployment problem of the BLS countries. This is in part due to the limited possibilities for making existing techniques more labour intensive. In Botswana additional formal employment was created by the mining, manufacturing and commercial sectors. However, the early 1980s the economy's capacity to provide jobs to match the expanding labour force worsened. In Swaziland, the situation does not appear any more optimistic despite having a more diversified industrial base, thriving tourist industry and a smaller population.

The investment which Swaziland has attracted has not made it possible to absorb more than one quarter of the country's domestic labour in the formal employment sector.

In Lesotho the employment situation is even more bleak. Among the three states, Lesotho is most dependent upon the South African labour migrant system. Lesotho had, through its investment regime, hoped to significantly reduce such dependence. Employment in South Africa was more than six times the amount of formal employment inside Lesotho and receipts from such employment provided about half of the value of the GNP. Though the industrial sector had recorded a high rate of growth, the outcome in terms of formal sector employment was predictable in light of the country's unemployment problem.

Overall, the performance of the manufacturing sectors in response to the investment regimes in the BLS countries has not been surprising. The legal regimes may have secured greater capital inflows by providing incentives, protection and certainty and thereby benefiting investors—but this is not sufficient. In addition to furthering the goals of economic growth and large national incomes, the legal order is also supposed to guarantee the host populations, apart from the individual investors, benefit from investment.

Given the nature of liberal theory upon which the legal
regimes are founded, one is sceptical of the extent to which the scope of achievements could have been broader. Investment regimes have been designed which use the market as a device for making investment and other choices. Given the availability of the requisite information, resources will be diverted into those areas where demand is brisk and diverted from sectors where demand is slack.

Under these conditions the function of law is facilitative and enabling, leaving the economic actors free to design such procedures and structures they deem necessary for the pursuit of their goals. The state adopts a non-interventionist attitude and private management is allowed maximum freedom of operation. The legal system, and the BLS investment regimes are no exception, seeks to fix specific rules within which economic operators may act. It abstains from laying down criteria for decision-making.

The inability of the BLS states to deal with their unemployment problems is only one symptom of the failure of the legal order to declare criteria for decision-making and incorporate ideals of substantive justice. A further symptom is that of disproportionate foreign control of the economy and the local enterprise as being crucial to underpinning its operation. The Governments of the three states appear to be concerned about this problem and have made public statements which have been critical of this state of affairs. In Botswana, a Presidential Commission on Economic Opportunities was appointed to study the problem and devise strategies for overcoming it. The Commission identified insufficient credit as one of the principal causes of the poor performance by local entrepreneurs.

In Swaziland, despite the rapid increase in the establishment of industrial and commercial enterprises, the Third National Development Plan estimated that only 39 per cent of the existing enterprises were locally owned. The balance were foreign-owned enterprises (33 per cent) and joint ventures (28 per cent). Even in regard to the locally-owned enterprises, local entrepreneurship was restricted mainly to service industries, small and medium-size manufacturing, and trading operations. Against this background the Government of Swaziland committed itself to an accelerated development of local entrepreneurship.

The Swazi government perceived the development of local entrepreneurship as being crucial to underpinning its own legitimacy. However, the government itself and members of Parliament identified under-capitalization in general, and lack of access to risk capital in particular, as the key problems impeding the localization of entrepreneurship. As a result, it has been suggested that legislation should be enacted to provide closer control over commercial bank lending to ensure sufficient lending to Swazi entrepreneurs. Should government decide to do so, it would mark a major departure from the current conceptualization of the role of law whereby law merely facilitates the operation of economic actors through contractual arrangements.¹⁹

As stated earlier, under the legal order of capitalist enterprise the legal system creates a framework of decisions-making without specifying the criteria. The banking industry operates within such a framework and is largely an area of self-regulation. If a more interventionist approach was adopted, success would depend upon legal changes facilitating the articulation of state regulations and the requirements of profit-seeking bankers.

A recent study on the problems of African entrepreneurship³⁰ elaborated the view that in seeking to improve access to credit by disadvantaged groups, the legislator has to internalize the incentive factor. The legislator thereby mediates between the needs of the disadvantaged citizens and those of the bankers.

Finally, an argument can be advanced that even the minimal regulatory goal of the current investment and corporate regime is no longer appropriate to the circumstances of the BLS countries. This has particularly been highlighted by the events surrounding the insolvency of BENCO International's subsidiaries in Botswana and Lesotho (the holding company is based in Luxembourg), and Swaziland Chemical Industries Ltd.

When the Botswana Engineering and Construction Company (BENCO's subsidiary in Botswana) collapsed in 1981 it was indebted to the tune of 3 million P. and it left 430 employees jobless and without terminal benefits. As regards the subsidiary in Lesotho, the company was operated with minimal accounts and collapsed into a state of insolvency because of a shortage of working capital, inadequate management and lack of progress on contracts.

The liquidator of the Botswana subsidiary found evidence of massive mismanagement. The company had not published accounts for two years and the last audited balance sheet was for 1979. There were reports of large-scale misuse of the company's financial and material resources by its directors including the construction of luxurious residences in South Africa and Botswana.

A study on the effectiveness of corporate regulation in Botswana³¹ observed that it might not be necessary to have complicated corporate and investment regimes. However, it suggests that with the arrival of multinational companies which operate in strategic sectors (as they do in the BLS states) there is a need for greater safeguards.

The BENCO crash in Lesotho and Botswana and that of Swaziland Chemical Industries may be a mere tip of the iceberg, thus indicating the need to adopt corrective measures to protect the public interest more effectively. While it is difficult to state the precise nature of the required changes, the minimum content of a reform package should include the recognition that the traditional open-ended fiduciary duties of directors are insufficient to adequately police entrepreneurial activity.

Conclusion

Law can be said to have made a major contribution to the expansion of the industrial and commercial sectors in Botswana, Lesotho and Swaziland in terms of laissez-faire accounting. The legal regimes in the BLS countries have included legislation which has sought to internalize the incentive factor, thereby servicing the interest of local and international capital. There has been a significant response to such incentives schemes.

Over the last decade, commercial and industrial activity has expanded appreciably. This expansion has, however, left the unemployment problem largely untouched.
Commercial and industrial expansion might have raised national incomes but the same cannot be said about personal incomes. This consequence underlines the inadequacy of corporate law and its lack of concern with the externalities created by entrepreneurial activity. Public interest therefore dictates that criteria for decision-making and setting goals within which entrepreneurial activity should be conducted should be considered.

Notes

1. G. Hyden, No Shortcuts to Progress.
2. According to Bell: "Economizing is the science of the best allocation of scarce resources among competing ends; it is the essential technique for the reduction of 'waste'—or this is measured by the calculus stipulated by the regnant accounting techniques. The conditions of economizing are a market mechanism as the arbiter of allocation, and a fixed price system, which is responsive to the shifting patterns of supply and demand... With economics, comes a rational division of labour, specialization of function, complementarity of relations, the use of production functions... The words we associate with economizing are 'maximization', 'optimization', 'least cost'—in short, the components of a concept of rationality..." Bell, The Coming of Post Industrial Society.
4. Weber posited that: "The rationalization and systematization of the law in general, and the increasing calculability of the functioning of the legal process in particular, constitute one of the most important conditions for the existence of capitalist enterprise, which cannot do without legal security." Weber, Economy and Society.
5. The need for legal security based on certainty of title and calculability in the functioning of the legal process was pointed out by Allister Miller, then Manager of the Swaziland Corporation, the largest corporate body at the beginning of the colonial period. He stated: "... a native had the right of grazing his cattle with the herds of the European, the European used the same grazing land as the native. The farmer might run his flocks up to the gate of a native kraal and round a native garden, and the native might cultivate a new plot on any unfilled land. The native had free passage over the white man's farm, the European fenced and built where and how he pleased." Editorial Times of Swaziland, 7 October 1905.
7. The currency of Botswana is the Pula (P). In 1988, 1 P = US$1.68.
8. The PTA countries are: Burundi, Comoros, Djibouti, Ethiopia, Kenya, Lesotho, Malawi, Mauritius, Rwanda, Somalia, Swaziland, Uganda, Zambia and Zimbabwe.
9. The currency of Swaziland is the Lilangeni, plural Emalangeni (E). The Shashe Nickel—Copper Project.
10. Authorized banks include Barclays Bank, Standard Bank, Swaziland Commercial and Savings Bank, and the Bank of Commerce and Credit International.
11. For example, an approved manufacturer can choose either (a) complete exemption from company income tax for the first six years of operation, or (b) deduction of specific capital and other allowances for purposes of taxation. A manufacturer is allowed to deduct from his taxable income 145 per cent of the cost of machinery and equipment and an immediate deduction of 75 per cent of new building costs plus an additional 5 per cent deduction during the next twenty years of operation.

References


 corporates bodies which do not have registered offices within Swaziland are considered to be foreign companies.
16. This development was highlighted by Lipton in his report on employment and labour use in Botswana. Lipton observed that the situation might be made worse by the deteriorating international economic situation and the long-term reduction in the recruitment of Batswana to work in South Africa. Lipton saw informal sector and rural development as the principal sources of formal employment. Lipton, Employment and Labour Use in Botswana.
18. Ghai, "Law and Public Interest in Developing Countries."
19. "In the simplest form of formal order, the only areas of law needed are contract and property law. Contract law allows parties freedom of bargaining, subject to certain constraints, but then enforces the agreements that result form bargaining. Property law defines the relationship between individuals and groups on the one hand and economic assets on the other. It specifies with precision what resources a unit controls, and protects the fruits of economic activity from degradations by others." Trubeck, "Law, Planning and the Development of the Brazilian Capital Market." p. 55.
Takirambudde, P. N. 1980. Technology Transfer and International Law.


Chapter 4

NATURAL RESOURCES, RENT AND TAXATION
An Indonesian Case Study
S. MUNADIAT DANUSAPUTRO

Introduction
This paper examines the role of law in environmental and natural resource management in Indonesia. It will show that the current legislation and regulations on environment and natural resources are based on the 1945 constitution.

This paper is divided into four sections. The first section will provide the institutional setting within which environmental legislation and policies operate. The second part will present an overview of the state of the environment in Indonesia. The third section will outline the natural resource policies and legislation applied in Indonesia and the last section will review the rent and taxation laws and regulations applied to natural resource utilization.

The Institutional Setting
The principles guiding the Indonesian state are embodied in the constitution proclaimed in 1945 on the basis of the "nation's spirit and outlook on life." The sovereignty of the state is vested in the people and is exercised through the People's Consultative Assembly, or the Majelis Permusyawaratan Rakyat (MPR). The MPR comes into session every five years to promulgate the Broad Outlines of the State Policy (BOSP) for purposes of implementing the constitution.

In order to execute the BOSP, the MPR elects the president of the state who also serves concurrently as the chief executive of the government for a five-year term. The president is advised by the Supreme Advisory Council, and he appoints ministers to run the various ministries. In addition, there is the need to protect and develop the living environment, and the natural resources therein shall be controlled by the State and utilized for the greatest welfare of the people.

Matters pertaining to environment and natural resources are dealt with by the Ministry of Population and Environment. The minister is supported in his activities by a team of experts and a secretary general who manages an administrative unit of thirty-seven people. There are four assistant ministers who are in charge of the natural environment, man-made environment, integration of population and environment, and population issues. There are about one hundred professionals under the four assistant ministers.

Environmental matters are dealt with by another eighteen ministries, agencies and inter-agency committees. These include the Ministries of Agriculture; Forestry; Mining and Energy; Industry; Public Works; Transport and Communication; Telecommunication and Tourism; Manpower; Transmigration; Commerce; Research and Technology; Education and Culture; Justice; and Interior.

The National Atomic Agency as well as the Centres for Environmental Studies at thirty-two universities and high schools throughout the country also deal with environmental issues. In addition, there is the Environmental Legislation and Institution Inter-agency Committee, and the Pollution Inter-agency Committees.

The legislative basis of the country's environmental policy is provided for in the 1945 constitution which stipulates that "each law must be ratified by the House of People's Representatives" and that "[l]and and water and the natural resources therein shall be controlled by the State and utilized for the greatest welfare of the people."

A 1973 decree on the BOSP elucidated the environmental policy thus: "In the execution of the national development, the natural resources of Indonesia must be used in a rational way. The exploitation of natural resources must be so executed as not to harm the eco-system. It must be implemented on the strength of an overall policy, paying due consideration to the needs of the coming generation."

These broad policies have since then guided Indonesian environmental law, especially as reflected in previous five-year development plans. Act No. 4 of 1982 concerning Basic Provisions for the Management of the Environment was promulgated to take into consideration the advancement of the welfare of the Indonesian people, the need to protect and develop the living environment, and the natural characteristics of the Indonesian environment.

This act is simple and yet it includes possibilities for future development. It was designed with the specific needs of Indonesia, especially in view of the fact that the country is an archipelago. The act contains basic provisions for further regulations on its implementation and covers all aspects of the environment.

The State of the Environment
The environment is conceived in Indonesia as "the spatial entity with all objects, potentials, conditions, and living organisms including man and his behaviour, which
influence the continuance of the life and welfare of man and other living organisms. The management of the environment is thus understood as "an integrated effort in the utilization, regulation, conservation, supervision, control, restoration, and development of the environment." Since the utilization of natural resources affects the integrity of ecosystems, development planning in Indonesia must be interconnected and integrated with the concerned ecosystem. The ecosystem approach to development is therefore condicio sine qua non in order to prevent the rise of detrimental side-effects, a burden that is usually carried by the local communities. It is this ecosystem-approach (or ecodevelopment) that guides Indonesia's development activities and policies as well as legislation pertaining to natural resource management.

Indonesia's environmental problems result largely from underdevelopment and the development process itself. Basically, environmental problems can be classified into four broad categories: poverty, population, pollution, and politics (the four Ps), which are closely linked to each other. High population density is one of the problems associated with underdevelopment. In Java, for example, high population density has resulted in excessive pressure on living resources, which has further worsened the environmental situation. The high population density in Java has forced the people to over-exploit the forests. This has resulted in land degradation, followed by the danger of recurrent floods. The nomadic people have also caused damage to the forests, especially through slash and burn agricultural practices. And in the urban areas, the high population density is associated with poor housing, inadequate supply of clean drinking water, insufficient health care, uncontrolled growth of slums and lack of public transportation. These problems can easily degenerate into political unrest. On the other hand, the development process has also resulted in a number of environmental problems related to agriculture, irrigation, river development, fisheries, industry and mining. The use of agricultural chemicals such as pesticides and fertilizers has led to various health problems and damage to fisheries resources.

Indonesia faces a number of environmental problems whose solutions will lie in an overall policy that ensures that natural resources are utilized without undermining the needs of future generations. Some of these concerns have been reflected in the government's Third Five-Year Development Plan of 1978/79-1983/84 (REPELITA III). The plan operates on the principle that "environmental development is part of an integral strategy of development to improve the welfare and quality of life of the people. For this reason the policies and steps in various fields and sectors of development should reflect the considerations and efforts connected with the management of the natural resources and environment."

The broad themes contained in the policy and programmes for the management of natural resources and environment included population and settlement, developing infrastructure, developing coastal regions and the seas, environmental development cost control, education, science and technology, and developing legal apparatus for natural resource and environmental management.

**Natural Resource Management**

Environmental policy is emerging in Indonesia, but not along the lines pursued by the western countries. There are strong pressures from both the executive and legislative arms of the government to include the environmental impact statement (EIS) as part of the standing project evaluation procedures (PEP). These pressures are accompanied by the growing realization that the development process needs to be re-assessed so as to incorporate notions such as ecodevelopment.

Other features that need to be incorporated into development planning include the need to help local populations to educate and assist themselves in developing the specific natural resources of each ecosystem to meet their basic needs. This includes indigenous, demand-oriented and self-reliant development strategies, awareness of the local ecological dimensions, and the need to achieve "symbiosis" between man and nature.

Actual environmental decision-making in Indonesia is closely linked to budget planning and approval interchanges between the executing ministry and the National Planning Board (NPP). The NPB is not a single agency for decision-making and it does not require a formal EIS before it can intervene in development projects. However, for most vital projects, an EIS would be required. The government is currently working out ways of providing technical support for EIS preparation for those smaller groups or firms whose activities are likely to affect the environment.

**Land-use Planning**

Another area of environmental concern is land-use planning which is currently controlled by legislation and regulations dealing with agrarian issues, town building, regional administration, village administration, forestry, mining, public works, and defence and security. The most important piece of legislation is Act No. 5 of 1960 concerning the Fundamentals of Agrarian Law which brought into force uniform legislation based on Indonesian customary law principles. This law replaced the dual land system (Indonesian and Western) introduced by the Dutch.

Indonesian customary land law reduces the prevalence of absentee landlords. Under the West Sumatra land law (hat ulayat), for example, it is the right of the communal or village groups to dispose of the land to individuals. This includes forests, ponds, unclered land and commons. When an individual cultivates previously unclered land, the community relinquishes the land to him. But if he misuses the land, the community repossesses it.
Under *hut alayat*, land can only be transferred to outsiders with the consent of the whole community and has to be preceded by payment, which acknowledges the community’s right to the land. This right expires after one planting season and the outsider cannot acquire any permanent right to the land. This customary law ensures that absentee landlordism does not take hold.

It should be noted that Act No. 5 was promulgated on the basis of the 1945 constitutional provisions governing natural resources. The right of the state to control land-use includes the right to determine the various rights relating to land and also to the power to regulate the legal relationship between individuals and their transactions involving land, water and air. Although the state itself does not own land, it has the right to determine everything of importance regarding land. This ensures that land-use is always under state control.

**Water Quality**

The legal instruments for water quality management are deposited in the Act No. 11 of 1974 concerning Water Resource Development. The act covers water uses for drinking, domestic application, religious purposes, agriculture, horticulture, stock-raising, power generation, industry, mining, transport, and recreation. It is also supplemented by other regulations and pieces of legislation pertaining to water-related issues.

A number of problems related to water use have arisen in areas such as Jakarta, Samarang and Surabaya. In these areas, the water pumped into the treatment plant for human consumption is drawn and discharged downstream while water for industrial and agricultural uses is drawn and discharged from upstream. This means that the discharge from industry and agriculture will flow to areas where it will be used for human consumption.

In this case it is difficult to determine criteria for the economic use of the water and effluent standards. This is because on the one hand, the drinking water supply needs fresh water of high quality, while on the other hand it would not be economical to cleanse the waste water upstream well enough to meet the criteria for fresh drinking water downstream.

Similar problems prevail in the rural areas where the farmers rely on water from wells and canals. In the northern part of Java, for example, rivers and irrigation canals are major sources of water during the dry season. Most of the water in this region is used for agriculture, which does not require high quality standards. In such areas, it is difficult to determine the permissible load of pollutants that can be discharged into the canals although people use the water without treatment or boiling. The water is usually intended for agriculture.

Water quality criteria in Indonesia are regulated on the basis of the principles and stipulations contained in the Act No. 11 of 1974 which have been drafted into the Regulations for Water Pollution Control. The draft regulations provide four water quality categories based on end-use:

Category A covers water which can be used as potable water without any prior treatment while category B covers water which can be treated for domestic and other purposes, except for uses described under category A. Water suitable for fish and cattle and other uses except those described under categories A and B is covered by category C. Category D covers water which can be used for agricultural purposes and for municipal services, industries, electricity generation, waterways and other purposes except those described in all the previous categories.

**Marine Pollution and Coastal Zone Management**

Marine pollution in Indonesia is controlled under various specific laws and others raising international laws. The most important laws governing marine pollution are the Act No. 4/Prd. of 1960 concerning the Indonesian Waters, Act No. 1 of 1973 concerning the Indonesian Continental Shelf, and Act No. 5 of 1983 concerning the Indonesian Exclusive Economic Zone. The actual implementation of these laws and other related legislation, takes into consideration the source of the pollution.

For example, for the control of land-based sources of pollution, Act No. 11 is implemented in conjunction with the appropriate pieces of legislation dealing with land-based sources of pollution. This kind of pollution is dealt with through the Ministry of Public Works in cooperation with the Ministries of Industry, Agriculture, and Forestry. Marine pollution arising from sea-borne sources is dealt with by the Ministries of Communication and Mining and Energy. The Ministry of Communication has established a permanent task force to control and combat pollution.

Marine pollution caused by offshore operations is controlled by the Ministry of Mining and Energy which has issued a number of regulations dealing with the subject. The implementation of these regulations is entrusted in the hands of the State Enterprise for Oil and Natural Gas Mining (PERTAMINA). In turn, PERTAMINA has issued its own regulations and set up a pollution control task force, in addition to other institutional arrangements made to ensure that the act is implemented.

Being an "archipelagic state" consisting of over 13,667 islands, Indonesia has a number of laws dealing with coastal zone management. There are four specific regulations dealing with off-shore refuse dumping, oil and natural gas refuse dumping, offshore mineral development, and fishing and aquaculture. In addition, the environmental management law has provided for policies which aim at ensuring that the coastal resources of the country are used on a sustainable basis.

In recent years, resource management programmes have been launched to protect the mangrove ecosystem. Not only is the mangrove a source of wood, but it also provides a suitable habitat for the prawn, crab, shrimp, fish and other marine fauna. Other products of mangrove include tannin which is used in the leather industry. The mangrove ecosystems also sustain the yield of fish which is caught under the *tamuks* system, a brackish-water fishpond aquaculture method.
in reducing noise pollution. This has also been helped by tree-planting campaigns in towns and near industrial complexes and airports.

### Solid Wastes and Specified Substances

Although Indonesia does not have any specific legislation dealing with solid wastes, the matter is handled through the nuisance ordinance in conjunction with other pieces of legislation covering regional and village administration, and environmental management. Disposal is generally in sanitary landfill sites operated by local and municipal governments. This solid waste is usually discharged at remote dumping areas. However, due to lack of transport facilities, the disposal of solid waste meets many obstacles. In cities the removal and disposal is organized by the municipality supported by the municipal Health Services.

Only in a few densely populated areas, such as large towns, have volume-reducing processes been practiced. The responsibility for industrial waste in Jakarta lies with the enterprise releasing it. The enterprise is required to try to decrease the amount by regeneration or re-using the waste. Households have similar requirements. Since 1973, inhabitants are expected to provide waste disposal facilities for their houses.

Specific substances such as pesticides, fertilizers, toxic substances, and radioactive materials are covered by specific legislation. There are at least 12 pieces of legislation and regulations dealing specifically with such substances. Most of these laws address the control, storage, use, packaging and labelling, distribution and registration of pesticides.

### Mineral Development

Indonesia has an advanced mining industry and has therefore developed a sophisticated legal framework for controlling the industry. There are at least 14 pieces of legislation and regulations that relate directly to mining of which Act No. 11 of 1967, concerning Basic Provisions on Mining, is the most important. The other laws deal inter alia with natural gas and oil, the continental shelf and other aspects of mining. These laws are complemented by provincial and local implementation regulations as well as implementation regulations in other sectors.

The body of laws applied to the control of marine pollution caused by offshore operations are representative of those found in every sector of activities relating to mining.

### Conservation of Nature and Culture

The conservation of nature (including forests, soil, parks and wildlife) is covered by legislation and regulations dealing with land-use planning, water quality, and marine pollution. This is complemented by over 40 diverse pieces of legislation and regulations which have a bearing on the conservation of nature. The range of legislation covering this sphere of conservation illustrates how extensively and intensively the government approaches the subject.

The various pieces of legislation and regulations cover wildlife protection, hunting, nature protection, forest exploitation and restriction, forest planning, export of

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### Table 1: Major Areas of Mangrove Ecosystem (hectares)

<table>
<thead>
<tr>
<th>Province</th>
<th>Estimated Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aceh</td>
<td>50,000</td>
</tr>
<tr>
<td>North Sumatra</td>
<td>60,000</td>
</tr>
<tr>
<td>Riau</td>
<td>95,000</td>
</tr>
<tr>
<td>Jambi</td>
<td>195,000</td>
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<tr>
<td>South Sumatra</td>
<td>17,000</td>
</tr>
<tr>
<td>Lampung</td>
<td>20,000</td>
</tr>
<tr>
<td>West Java</td>
<td>14,041</td>
</tr>
<tr>
<td>East Java</td>
<td>6,000</td>
</tr>
<tr>
<td>West Kalimantan</td>
<td>10,000</td>
</tr>
<tr>
<td>Central Kalimantan</td>
<td>75,000</td>
</tr>
<tr>
<td>South Kalimantan</td>
<td>150,000</td>
</tr>
<tr>
<td>South Sulawesi</td>
<td>24,000</td>
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<tr>
<td>Southeast Sulawesi</td>
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<tr>
<td>Nusa Tenggar</td>
<td>7,638</td>
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<td>Moluku</td>
<td>100,000</td>
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<tr>
<td>Iran Java</td>
<td>2,934,000</td>
</tr>
<tr>
<td>Total</td>
<td>3,443,119</td>
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</tbody>
</table>

seeds and seedlings, internal movement of seeds and seedlings, export of protected wildlife, assignment of forest areas to production, export of fish species, conservation of fisheries resources, soil conservation, protection of coral reefs, and environmental cleanliness.

In order to protect the cultural heritage of the country, Indonesia has introduced a number of legal instruments. The most important of these is the Monument Ordinance of 1931 which is complemented by six ministerial orders. The orders deal with ministerial co-operation in protecting the monuments, safeguarding and protecting cultural reserves, and controlling and combating trade and export of protected cultural goods.

In addition to these regulations and pieces of legislation, the government has introduced other measures which help to protect the cultural objects resulting from excavations. Such items are usually kept in museums. In order to control trade in such items, the Police Department and the Ministries of Commerce and Finance have also issued separate regulations.

These regulations conform with the recommendations of the Means of Prohibiting and Preventing the Implicit Export, Import, and Transfer of Ownership of Cultural Nations Educational, Scientific and Cultural Organization Property Endangered by Public or Private Works which was adopted by the General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1964. They are also in conformity with the recommendations of the Preservation of Cultural Property Endangered by Public or Private Works adopted by the General Conference of UNESCO in 1968.

Rent and Taxation

The government’s efforts to reduce the deterioration of the welfare of the people are reflected in development plans. The development plans provide the instruments to control and manage society’s economic life. The main tools of the government for this purpose are fiscal instruments which consist of taxation and other government revenue-yielding measures, government spending, and the balance between government revenue and spending.

With these instruments the government can influence society’s economic life for purposes of its development and improvement, especially through the implementation of the development plan. This process also includes the measures provided for the exploitation of natural resources.

Taxation is one of the measures applied by the government to meet its development objectives, especially in mobilizing financial resources for government spending. The term “tax” has been variously defined but we shall use the definition provided by Seligman in which “a tax is a compulsory contribution from the person to the government to defray the expenses incurred in the common interest of all, without reference to special benefits conferred.” A tax is distinguished from a special assessment on the grounds that the latter is paid once and for all to defray the costs of a special improvement to property and is levied according to the particular benefits accruing to each property owner.

In defining the development plan, the government and the Indonesian people decided that the financial resources required must be sourced locally. This means that domestic sources of financing must be mobilized to the maximum and foreign resources are only required to fill the gap between requirements and domestic sources. It must, however, be recognised that the deterioration of financial conditions inherited from the past has resulted in a very limited saving potential in the country. This has meant that in the initial stages part of the investment must be financed by foreign capital.

The government intends to maintain proper balance between government savings through taxation and the fiscal system on the one hand, and increased voluntary savings through financial institutions on the other. This balance is necessary in order to achieve maximum potential growth in total domestic savings.

This is largely because the financial resources of the government’s development budget include public savings, counter-value of programme aid, project aid and technical assistance. Public savings are usually drawn from the surplus resulting from government recurrent expenditure. Thus, this amount depends on efforts to increase revenues and to minimize government recurrent expenditure. Over the years, the government has introduced new taxation guidelines and incentives to enable the country to attract foreign investment while at the same time earning revenue from taxation.

For example, the Instruction of the President No. 18 of 1968 on Tax Relief to Foreign Investment in Mining laid down new taxation guidelines for the sector. The central and provincial governments earned revenue from mining enterprises through corporate, dividend, sales, stamp, and motor vehicle and vessel registration taxes. Import, excise and export duties were also imposed in addition to levies relating to mining rights.

<table>
<thead>
<tr>
<th>Mineral</th>
<th>1st-10th Year</th>
<th>11th-30th Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>Asbestos</td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>Chromite</td>
<td>35.0%</td>
</tr>
<tr>
<td>Zinc</td>
<td>Manganese</td>
<td>42.0%</td>
</tr>
<tr>
<td>Iron</td>
<td>Natural Asphalt</td>
<td>30.0%</td>
</tr>
<tr>
<td>Titanium</td>
<td>Diamonds</td>
<td></td>
</tr>
<tr>
<td>Iodine</td>
<td>Sulphur</td>
<td></td>
</tr>
<tr>
<td>Mercury</td>
<td>Molybdeneum</td>
<td></td>
</tr>
<tr>
<td>Kaolin</td>
<td>Janoite</td>
<td>45.0%</td>
</tr>
<tr>
<td>Antimony</td>
<td></td>
<td>48.0%</td>
</tr>
<tr>
<td>Nickel</td>
<td>Cobalt</td>
<td>37.5%</td>
</tr>
<tr>
<td>Bauxite</td>
<td></td>
<td>40.0%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>48.0%</td>
</tr>
</tbody>
</table>

Note: Mining firms are not exempted from corporate tax referred to in Article 15 (a), paragraph 1 and 3, of Law No. 1, 1967. Interests and/or dividends received by and from bodies which are affiliated to the firm are exempted from corporate tax. Additional tax concessions may be granted to the firm in cases of large investments with significant influences upon the economic development and growth of the region.

The policy of developing and improving rent and tax to increase national revenue is implemented through the provisions of Law No. 1 of 1967 concerning Foreign
Investment. The aim of the law was to attract foreign investors and bring the incentives in line with those of other Asian countries. The specific incentives granted included full authority to select management and to hire or use foreign experts for positions which Indonesians are not capable of filling, offer of land at advantageous terms (with rights of building and exploitation formerly denied to foreigners), exemption from import duties on equipment, machinery, tools and initial plant supplies, and exemption from the capital stamp tax on the introduction of foreign capital for investment.

The investment law introduced in Indonesia made changes in the land rights, especially as they related to foreign investors. For foreign investors, four categories of land rights became relevant: ownership, exploitation, building, and use. The right of exploitation was valid for 25 to 35 years, depending on the type of enterprise and could be extended for another 25 years if deemed necessary. The right of building was granted for 30 years and could be renewed for a maximum of 20 years, and the right of use could either cover a fixed period or be granted according to requirements. The first two categories could be mortgaged. Foreign investors who obtain mining rights from the Minister of Mining, or forestry exploitation rights from the Minister of Agriculture, also automatically obtain the land within their concession borders, if the land is used for purposes directly related to the operations of the firm. If the uses are different from the operations of the firm, then a special application must be made. The government also ensures that Indonesian citizens do not sell off their land to foreigners. Before the sale is made, the property must first revert to state land.

Conclusions

The policies for the utilization and management of natural resources in the country have their basis in the 1945 constitution, which stipulates that the land, water and natural resources shall be controlled by the state and utilized for the public welfare. The constitutional provisions are further elucidated in state policy (BOSP). On the basis of these two instruments, the government has promulgated Law No. 4 concerning Basic Provisions for the Management of the Environment. The law emphasizes the "interlocking relationships between man, his community and his living environment...which must continue to be in harmonious and dynamic balance." It has been used to formulate specific policy measures which are contained in the five-year development plans. The implementation of the plans will require a willingness on the part of everyone to reduce consumption in order to increase savings, to permit the accumulation of capital and to pay taxes.

The government primarily relies on taxation to mobilize the financial resources needed to implement the development plans, and has instituted a number of taxation measures. These measures also affect the utilization of natural resources, especially mining and land. In addition to taxes, the government earns revenue from rent on land and other natural resources. Since the country has limited capacity to provide working capital, the government has opened channels for foreign investment on favourable terms. To this end, laws have been promulgated to utilize foreign credits and investments to the maximum.

Notes

3. The Act provides for the right of fee simple ownership, building, expropriation, use, lodging, water, and air space.
4. By implementing Act No. 5, in conjunction with the Ordinance No. 168 of 1948, every province and city is expected to have a planning pattern.

References

Chapter 2
FISCAL ASPECTS OF PETROLEUM EXPLORATION AND PRODUCTION AGREEMENTS
West and Central Africa
E. T. HUNT TALMAGE III

Introduction
Exploration and development of hydrocarbon resources requires an effective fiscal regime. Such a regime should be flexible, sensitive to a variety of economic factors and should provide the investor with a rate of return commensurate with the investment risk. Also, it should ensure that the host country receives a proper share of revenues and other benefits from the depletion of its non-renewable natural resources.

An insensitive fiscal regime may either preclude the economic development of economically marginal petroleum fields, or result in a very high economic return to the investor—to the host government's financial detriment—in the event of a very profitable discovery. An inflexible system may lead to circumstances under which one party demands renegotiation of the terms of an agreement, thus impairing the stability of the contract. The increase in crude oil prices in the 1970s led to substantial revision of contract terms due to what many governments perceived as windfall profits to the petroleum companies. The recent steep decline in petroleum prices may lead to another revision. Alternatively, investors may refuse to explore or develop fields where they consider the economic return inadequate.

This paper discusses issues of importance to the investor and the host country, petroleum agreements and their fiscal regimes, and, finally, contrasts the fiscal regimes of petroleum agreements in several West and Central African countries.

Investor and Host Country Viewpoints

Investor Viewpoint
Investors view each potential exploration commitment from a world-wide perspective; balancing geographical diversity of resources, existing production needs, and development of reserves. They know the contractual terms available in different countries and that governments compete to attract investors. Investors analyze each potential investment on its economic rate of return, speculating on projected costs and revenues and discounting for the time value of money and likely inflation. The rate of return acceptable to an investor depends on:

• geological knowledge of the area
• perceptions of contractual and political stability
• how quickly the investment is repaid
• security of petroleum supply, once discovered

Government Viewpoint
Governments seek to attract financially and technologically qualified investors to develop their petroleum resources. They must offer attractive financial terms to investors, while ensuring they receive an adequate portion of revenues from the project. The government then must formulate a flexible fiscal regime, sufficiently sensitive to cost, revenue, and profit to be applied in different economic situations.

In addition to fiscal matters, the government will also be concerned with a number of other important items, not discussed in this paper. These are:

• prompt and efficient exploration, development, and production
• relinquishing unproductive explored areas
• access to a portion of the petroleum produced
• transfer of technology
• training and employment of nationals
• using local goods and services
• access to technical data and a voice in the technical and administrative management of the project

Fiscal Regimes of Petroleum Agreements
Types of Petroleum Agreements
Historically, exploration and production have been done under a variety of contractual structures. The earliest agreements were referred to as concessions, pursuant to which the investor took title to the natural resources and paid royalties, rents and taxes to the government. Recent petroleum agreements have been production sharing contracts, under which the government retains title to the hydrocarbons, and the investor receives a portion of the production as reimbursement of costs and as profit.

Most recently, service or work contracts under which the investor is granted a fee have been used. The fee is often through an entitlement to a portion of the petroleum produced for the services rendered. An alternative is the government participating in the investor's contract rights, thereby granting itself a portion of the project's "equity" revenues, in addition to fiscal levies. In almost all the contractual arrangements, the investor bears the financial risk.

Despite the contractual framework used, the economic return to the investor and the potential revenues to the government must be examined. All fiscal levies to be
imposed, the basis and timing of their imposition, and the extent of government participation should be considered. Usually, an investor prefers levies sensitive to costs and revenues to fixed levies. The government may, however, wish to receive at least a minimum fixed revenue, regardless of the project's profitability.

**Fiscal Levies**

Fiscal levies insensitive to project profitability include surface rents, licensing fees, signature and production bonuses and royalties. Income taxes, surtaxes, production sharing and government participation may be partially sensitive to project profitability, particularly if they are determined on the basis of economic rate of return. The most accurate way to determine overall project profitability is to compute an investor's net total cash flow and hence, the rate of return (including discounting for inflation and time values).

**Rents and licensing fees.** Surface rents are often calculated as a fixed amount per area, increasing during the exploration production periods—hence serving as an inducement to relinquish unneeded area. Licensing fees are nominal and partly reflect administrative charges; they have diminished or have been eliminated under the more recent contracts. Neither of these levies substantially deter the investor, nor are they a major revenue source for the government.

**Bonuses.** A bonus payable upon the signature of a petroleum agreement is completely insensitive to project profitability. It may either be a nominal charge which reflects reimbursement to the government for developing geological data, or it may be a higher amount by which the government seeks a substantial one-time payment. A very high signature bonus would deter any potential investor. Production bonuses are fixed payments which may be imposed upon the discovery of petroleum or upon production at certain specified levels. They are likewise generally insensitive to project profitability, and unless very high, do not deter investment.

**Royalties.** Royalties are payments or petroleum entitlements based on a percentage of petroleum production. They may be fixed or may vary with the level of production, offshore water depth or otherwise. If fixed, they are insensitive to project profitability. Even when they are variable, they are not entirely sensitive to project costs or petroleum prices, and thus are unrelated to profitability. While a high royalty assures a substantial fixed revenue to the government, it can also be a significant deterrent to project development, particularly in developing marginal fields which are highly cost sensitive.

The basis on which the royalty is imposed may also be a deterrent. This will occur if, for example, the price used for valuation of petroleum is above the actual realized price. Other contractual provisions—such as the mandatory supply of a certain percentage of production at a discounted price to the government for its national or domestic needs—may also result in a de facto royalty.

**Income taxes.** Tax on net income is slightly sensitive to project profitability, and both the rate of the tax and its basis of imposition will affect the investor's rate of return. The tax rate is usually fixed, but may vary with offshore water depth. Accounting provisions regarding treatment of expenses, depreciation and credits also affect the investor's return. For example, depreciation of capital costs on an accelerated basis will assure a faster investment payback, but will diminish the government's tax revenues during the early years of the project.

A very high tax rate may result in a rate of return which would discourage marginal field development or investment in secondary recovery. A low tax rate will deprive the government of revenues, and indeed may serve as a subsidy to the investor's home country to the extent that the investor's tax rate exceeds that of the host country. A government needs to be informed about the fiscal provisions of the investor's home country, such as tax credits.

**Income surtax.** A supplementary or additional profit, windfall profits, or resource rent tax may also be imposed. This income surtax is usually levied where the investor has achieved a specified threshold rate(s) of return on the investment and thus, is highly sensitive to project profitability. However, if it is based on another factor, such as production levels or price, it is less sensitive.

While investors are reluctant to relinquish the potential high side return which may be realized with a substantial discovery, they generally recognize that the government should also benefit. If the threshold rate of return is adequate, an income surtax, either at fixed or progressive rates which increase proportionally with higher rates of return, need not be a major disincentive to the investor.

**Production sharing.** Under production sharing agreements, the investor maintains an account of the project costs; which are then reimbursed from petroleum production, often with an annual limit on the percentage of total production which can be so recovered. After deduction of this cost oil from total production, the balance, or profit oil, is shared between the investor and the government.

The percentage of total production allowed as cost oil will determine the speed at which the investment is repaid. No limit on cost oil would assure fast repayment, although it would defer the government's revenues from its production share until all project costs were recovered. Alternatively, if the cost oil percentage is low, the investor may never recover all his costs. Such a provision may discourage investment, particularly with marginal fields.

The percentage of profit oil allocated to the investor and government may be fixed, or may vary depending upon production rates, offshore water depths or the investor's rate of return. A fixed percentage is the least flexible, as it does not take cost or revenue factors into account. If the government's share of profit oil is determined by production levels or the investor's rate of return, the effect is essentially the same as with the income surtax already discussed. Percentages which vary according to water depth or production levels are somewhat economically sensitive, since certain assumptions regarding costs and oil prices (and thus revenues) may be made in determining the allocable split. Such a determination is, however, sensitive in cases where these assumptions prove incorrect. An allocation based on the investor's rate of return is most sensitive to economic factors.

The investor's profit oil entitlement may also be determined before or after tax. If before tax, the investor is subject to income tax on net profit, taking into account
all revenues from cost and profit oil. In such cases, depreciation and loss carry-forward provisions will affect the timing and amount of government tax revenues. If the investor's profit oil share is after income tax, the government receives its income tax revenues from its profit oil share at the time of receipt. While this arrangement may simplify revenue allocation, it may complicate the calculation of the tax deemed paid and impair the investor's ability to obtain a foreign tax credit in his home country.

Participation. The government may increase its revenues by participating in the investor's contract interest. Either the government or its parastatal may participate as a member of the petroleum consortium, or as an equity participant in the joint venture company developing the petroleum rights. The government's participation would also give it access to information and permit it to participate in decision-making regarding petroleum operations, although both of these might be achieved by other means.

Government participation may either be fixed or proportional, depending on levels of production, offshore water depth or otherwise. It may also be either on a producing field-by-field basis, or may apply to the entire contract area interest. Government participation may also be from the beginning of operations or at the time of a discovery. If the participation is without cost to the government, it effectively constitutes a production sharing arrangement. If the interest is carried, the extent of the carry (whether through exploration or development), and the interest imposed thereon, may vary and will affect the investor's economic return. The method of eventual payment (whether out of production or in cash, with or without annual or other limitations) may also vary.

Consolidation. Whether the application of fiscal provisions is limited to a producing field, the entire contract area, the exploration and production activity, or the entire country it will have an impact on the investor's economic return. An investor limited by field would not be allowed to offset exploration expenses incurred outside the producing deposit against revenues from that deposit. This would be a deterrent to further exploration.

In contrast, fiscal consolidation limited to the contract area would allow subsequent exploration expenses to be offset against production revenues from within the contract area, thus encouraging exploration. Broader fiscal consolidation covering other contract areas or activities would allow the contractor, in effect, to offset all exploration or other costs in the country against all production or other revenues (for example, from refining or pipeline activities). This would be even more economically attractive to the investor, but could cause the government to lose revenues.

Pricing. The price of petroleum used to determine royalty, tax, and sales to or on behalf of the government may also have a substantial impact on economic return. Pricing may be be realized, reference, posted or preferential basis. Realized or actual prices are often used when the government is assured that sales are on an arm's-length basis. Otherwise, a reference price based on an international market rate, perhaps adjusted for transportation and other costs, may be used.

Alternatively, a posted price determined by the government or jointly with the investor may apply. If a posted price exceeds the price received by the investor, the government's revenues may be inflated and the investor's return reduced. A preferential or discounted price may also apply, for example, regarding petroleum supplied by the investor to meet domestic needs of the country. The discount constitutes a de facto royalty, since it would otherwise be received by the investor.

Currency. The currency used for accounting, cost recovery, tax and other purposes may also vary widely. The reference currency of the international petroleum industry is US dollars. All crude oil sales other than those to the host country are likely to be made in that currency. A large percentage of expenses will also probably be incurred in dollars. Thus, if another currency is specified in the petroleum agreement, substantial anomalies may arise due to exchange rate fluctuations between the two currencies. This is particularly true in production sharing contracts.

If the exchange rate between the contract currency and the dollar changes between the dates that costs are incurred and recovered, these amounts may be either inflated or deflated, a risk that neither of the contracting parties foresees, nor would wish to bear. The only way to minimize this risk would be to designate US dollars as the currency of the agreement. However, this may lead to accounting and tax complications which may be unacceptable to the government. This problem may be aggravated if the host country currency is not freely convertible at a rate which represents actual market value.

Work Obligations. Minimum work obligations, often coupled with minimum expenditure requirements, may be imposed for each part of the exploration period. These may influence the investor's economic return, particularly if substantial drilling obligations are imposed. No fixed similar obligations are imposed regarding development, production or secondary recovery. However, investors analyze their return in light of potential financial commitments required to develop or prolong field life.

Miscellaneous levies. A variety of other levies exist, although their impact on the economic feasibility of a project is usually nominal. These include interest, import and export customs duties and taxes, registration and real estate taxes, withholding taxes on dividends, royalties and technical services, personal income and payroll taxes and social security contributions. The government often grants exemptions or reduces some of these, particularly import and export levies. Export levies are of special concern to the investor who will wish to be assured that the right to export his allocable share of production is unrestricted.

Selected Individual Fiscal Regimes

A variety of contractual and fiscal regimes are used by West and Central African countries. Very few now use the traditional concession, although some combine it with government participation. Many countries use a production sharing contract, some including royalty and government participation. Several countries also impose an income surtax or determine production sharing on the basis of the investor's rate of return.
The fiscal terms summarized below have been taken from various sources, including legislation, model agreements and actual contracts with investors. They indicate the range of terms offered rather than the exact rates and other conditions currently granted by the countries surveyed. The terms refer only to petroleum and exclude any reference to natural gas, as its economics are different, and such projects are usually subject to case-by-case agreement.

Angola. Angola has a pre-tax production sharing—participation regime, and a negotiable signature bonus of around one million dollars with no production bonuses. Surface rents of a few hundred US dollars per square kilometre are imposed. No royalties are imposed, and income tax is the general rate of 50 per cent. There is an income surtax in the form of a 100 per cent excise tax for all petroleum revenues exceeding an inflation-indexed per barrel amount, currently around thirteen US dollars. There is a 50 per cent cost oil limit, and the government share of profit oil varies from 40 to 90 per cent, based on production levels.

A recent government decree provides for a minimum of 51 per cent government participation. Consolidation is by field, and pricing is on a realized basis. Some investor relief is given through a 25 per cent depreciation provision with a 33.3 per cent capital cost uplift. Periodic revision of production sharing terms is provided. The contract currencies are the US dollar and the local currency, the kwanza.

Cameroon. Cameroon has a production sharing—participation regime, called an association contract. Signature and production bonuses and surface rents are provided pursuant to the Mining Code. Surface rents vary, but are around one hundred CFA francs per square kilometre. A royalty of 12.5 per cent is imposed, and the income tax is 57.5 per cent. There is no income surtax. The cost oil is apparently computed based on 25.31 per cent of a mining interest and double depreciation. The government share of profit oil varies from 60 to 70 per cent, based on production. Government participation is 50 per cent. Consolidation is by field, and prices are posted by the government by reference to export sales. Contract terms may be re-negotiated ten years after production.

Congo. The Congo has a concession—participation regime. There are no signature or production bonuses nor any surface rents. Royalties are negotiable, and income tax rates are negotiable. Royalties are usually from 14 to 16 per cent, and the tax rate between 50 and 55 per cent, although reductions may be granted for deep offshore waters. There is neither income surtax nor production sharing. Government participation is negotiated and is usually between 45 and 55 per cent. Consolidation is by contract area, and pricing is on a realized or a reference basis. The contract currency is usually the CFA franc.

Equatorial Guinea. Equatorial Guinea has a production sharing regime. Signature and production bonuses and surface rents are negotiable. Royalties are negotiable with a minimum rate of 10 per cent, and income tax is imposed at the general rate imposed by the Tax Code. There is no income surtax, but production sharing is based on rate of return. There is no limit on cost oil.

After the investor has achieved a 30 per cent before-tax rate of return, the government profit oil share is 40 per cent. This share increases to 60 per cent of the profit oil above a 40 per cent return, and 80 per cent of profit oil above a 50 per cent return. There is no government participation. As in Congo, consolidation is by contract area, and pricing is on a realized or a reference basis. However, the contract currency is US dollars.

Gabon. Gabon has a production sharing—participation regime. Signature and production bonuses and surface rents are negotiable, although a 1974 law provides for production bonuses ranging between two hundred and eight hundred million CFA francs depending upon production levels. Surface rents during exploration are between one hundred and fifty and fifteen hundred CFA francs per square kilometre, rising progressively by contract year. These are reduced by four-fifths if water depth exceeds two hundred meters. Surface rents during production are seven hundred CFA francs per hectare. Royalty in some proposed contracts is 20 per cent, while it varies in the 1974 law between 12 and 16.7 per cent.

The tax rate in the 1974 law is 56.25 per cent, but production sharing in some proposed contracts is deemed to be after income tax. No income surtax is imposed. There is a 50 per cent cost oil limit, and the government has a 10 per cent participation option, which may be exercised upon production. Fiscal consolidation is apparently by contract area, and prices are posted by the government. The contract currency is CFA francs, but bonuses are paid in US dollars.

Guinea-Bissau. Guinea-Bissau also has a production sharing—participation regime. Signature and production bonuses are negotiable, although there are no surface rents. Royalties are negotiable between 12.5 and 20 per cent, based on production levels. The tax rate is 50 per cent. There is an income surtax, essentially a negotiated production sharing split based on a three-tiered investor rate of return. There is no limit on cost oil. Government participation is 51 per cent, carried until discovery. Repayment of carried costs is limited to 40 per cent of annual government revenues from production. Consolidation is by contract area, and prices are on a realized basis. The contract currencies are US dollars and the local currency, the peso.

Cote d'Ivoire. Cote d'Ivoire too has a production sharing—participation regime. Signature bonuses are usually between five and ten million US dollars, and production bonuses may vary from eight to one hundred million US dollars. There are no surface rents or royalties, although sale of petroleum for national needs is at an 85 per cent discount, thus constituting a royalty. The income tax rate is 50 per cent, but production sharing is deemed to be after tax. There is no income surtax. There is a 40 per cent cost oil limit. The government profit oil share is between 75 and 85 per cent, based on production levels and water depth.

Participation is negotiable, but is between 10 and 15 per cent initially with an option of up to 60 per cent of each field. Consolidation is uncertain, and prices are posted by mutual agreement between the government and the investor. The contract currency is the CFA franc, although some relief regarding cost recovery has been
given due to fluctuations in the exchange rate with US dollars.

Liberia. Liberia has a production sharing—participation regime. Signature bonuses and surface rents vary, the latter from ten to thirty US dollars per square kilometre, increasing progressively during the contract term. The royalty varies but is usually 12.5 per cent and the income tax rate is 50 per cent; although the government’s profit oil may be deemed to be after tax. There is neither income surtax nor cost oil limit, but profit oil is split on a rate of return basis. After the investor achieves a 30 per cent before-tax or 15 per cent after-tax rate of return, the government profit oil share is 40 per cent. This share increases up to 65 and 80 per cent after the investor achieves a 50 per cent before-tax or 25 per cent after-tax rate of return, respectively. Participation is up to 30 per cent. Consolidation is by contract area, and prices are on a realized basis. The contract currency is US dollars.

Nigeria. Nigeria has a concession—participation regime. Signature bonuses are negotiable, and surface rents are nominal. Royalty is 12.5 per cent, and the income tax rate is 85 per cent. There is no income surtax, or production sharing. Participation is generally 60 per cent, and consolidation is by field. In the past, prices were on a posted basis which exceeded the realized price. Prices are now being fixed on a net-back basis, based on the value of the products produced from the petroleum. A tax credit for new capital investment may also be allowed, ranging from 5 to 20 per cent depending on the investment. The contract currency is the US dollar and the local currency, the naira.

Zaire. Zaire has a concession—participation regime. There are generally no bonuses or surface rents, although a signature bonus may be negotiable. The Mining and Petroleum Code provides, in principle, for a surface rent payable to villages, although none has ever been imposed. Royalties are negotiable, usually at a rate of 12.5 per cent, but are omitted under some agreements. The income tax rate is negotiable and varies between 45 to 50 per cent. There is no income surtax and generally, no production sharing. Government participation is usually 20 per cent and is carried, with reimbursement from the government’s share of production. Consolidation is by contract area, and prices are generally on a realized or a reference basis. The contract currency is normally US dollars.

Overview

In general, the countries with developed geological knowledge, substantial production, and contractual and political stability have fiscal terms which result in a high percentage of government revenues from petroleum projects. Nigeria and Angola’s fiscal regimes are somewhat insensitive to costs and revenues, although Angola gives some investor relief by depreciation and the capital cost uplift. Nigeria also provides some relief with the tax credit and net-back pricing arrangements.

The fiscal provisions of Gabon and Congo are also somewhat inflexible. The Gabonese royalty, production sharing, and posted price terms are less attractive than the Congolese royalty, participation and pricing arrangements. The fiscal terms of Cameroon are also favourable to the government with regard to the tax, pricing, and participation, although its lower royalty would be more attractive to investors.

Among the countries with little if any production, and a short history of contractual dealings, Zaire has attractive royalty, income tax, participation and pricing terms. However, the Côte d’Ivoire terms—with very high bonuses and low cost recovery, high government production share and potentially high participation—are a substantial deterrent to investors. The fiscal provisions of both countries are relatively insensitive to economic variables.

Countries with little if any production, and a short history of contractual dealings offer the most attractive and most sensitive economic terms. The production sharing regimes of Equatorial Guinea, Guinea Bissau and Liberia guarantee the investor a minimum rate of return. In addition, their royalties, bonuses, taxes, participation and pricing terms are favourable to the investor.

Conclusion

All the fiscal provisions of a petroleum agreement must be taken as whole to determine the timing and extent of revenues to the government and the investor’s rate of return. The government must make policy choices regarding the elements for the fiscal structure. The result, regardless of the components, should assure a sufficient rate of return to attract the investor while protecting the host country. It should also be sufficiently sensitive to cost and revenue to permit the economic development of the broadest range of fields possible.

The above comparative survey of petroleum fiscal regimes shows that an investor is usually willing to accept a less sensitive fiscal structure which provides high revenues to the government in areas where geological prospects are relatively known and favourable, at least in an era of high petroleum prices. Conversely, countries with less developed geological information or prospects must offer investors a more secure and often greater rate of return based on a generally more sensitive fiscal regime. Whether investors will continue accepting the relative insensitivity of certain fiscal regimes utilized by the established petroleum producing countries when petroleum prices are sharply reduced remains to be seen.
Chapter 5
ENVIRONMENTAL MANAGEMENT AND AGRICULTURAL PRODUCTION
The United Kingdom
RICHARD MACRORY

Introduction
The relationship between agricultural production systems and natural resource management is an environmental issue high on the political agenda in the United Kingdom. This issue has raised complex legal, administrative, and economic questions. The debate is by no means over, and this paper explores, from a legal perspective, some mechanisms that have been proposed or adopted to provide an acceptable policy base. Although about the United Kingdom, many of the issues will have wider application.

The debate has shaped government policies and integrated environmental perspectives into all areas of administration. It has also resulted in regulatory decision-making—sometimes evoking emotive and irrational issues—and using economic incentives for environmental management. In this context, two fundamental legal questions arise: Is law an effective or appropriate instrument for achieving the policy objectives? If so, how should the legislation be designed?

The Context
The United Kingdom is densely populated. It has an average of 358 persons per square kilometre with about seventy-five per cent of the land used for agriculture and nine per cent for forestry. Less than two per cent of the working population is employed in agriculture and forestry. About two-thirds of agricultural holdings are wholly or mainly owner-occupied.

Since World War II, food self-sufficiency has been considered strategically important, and government policies have succeeded in increasing productivity. The proportion of national food requirements grown domestically rose from about half in 1960 to two-thirds at present. Between 1972 and 1983, the average yield per hectare of wheat increased by around forty-six per cent. Membership of the European Economic Community (EEC), which Britain joined in 1973, and participation in the EEC’s Common Agricultural Policy has reinforced the increases in production.

Environmental issues in Britain are often associated with problems of urban growth and industrialization (e.g., water sanitation, urban sprawl, and smogs caused by domestic coal burning). Various legal forms have attempted to control this. The system of controls over new developments introduced by the Town and Country Planning Acts (1971) has been used to regulate removal of agricultural land for non-agricultural developments. The amount of land removed from agricultural production has been reduced to around nine thousand hectares per year since 1975, almost one half of the amount removed in the previous decade. Protecting agricultural land from industrial development remains a dominant environmental issue affecting rural areas.

Agricultural Practice and Landscape Changes
The effect of intensive agriculture on the landscape is critical to the relationship between agriculture and the environment. It is difficult to know precisely when the changes in landscape patterns due to agricultural developments became of general concern. Marion Shoard’s The Theft of the Countryside—perhaps mirroring the role of Rachel Carson’s Silent Spring two decades earlier—played a significant role. Since then, there have been a range of inquiries, official reports, and intensive campaigns by non-governmental organizations.

The Nature Conservancy Council, a government agency, has made some dramatic estimates of losses of certain types of landscapes and habitats since 1949, mainly as a result of agricultural intensification or afforestation. These include, 95% of lowland herb-rich hay meadows, 30 to 50% of ancient lowland woods, 50 to 60% of lowland heaths on acidic soils, and 50% of lowland fens, valley and fen mires.

From an environmental perspective, the rate of change that has occurred is significant in two ways. Species preservation is intimately bound to habitat protection. For example, significant losses of butterflies and dragonflies have resulted from habitat changes. We are familiar with using legislation to define and categorize types of species to be protected for their rarity or potential rarity. Protecting habitats for sustaining such species is often a later development, but again recognizable as appropriate for legal control. However, the preservation of landscapes for their own sake potentially has more political power.

This concern over loss or change to “traditional” rural landscapes springs from deep-seated aesthetic sensibilities traceable to the eighteenth century Romantic movement and the style and popularity of English landscape painting. Public perceptions on this issue can be seen as the British counterpart to the passions aroused in Germany over forest damage caused by air pollution. These passions reflected the importance of forests in German cultural tradition.

There are two other important features of agriculture in Britain in the current policy debate. Little, if any, totally uncultivated “wild” land exists in the country. As a result, Britain’s policy on national parks has not been based...
Thus, the highly valued qualities of rural landscape did not result from natural phenomena but from historical agricultural practice. The challenge is to devise a system of regulating an industry in order to preserve environmental qualities, themselves a product of that industry, which are largely aesthetic and not susceptible to scientific analysis. The activities of the industry perceived to put these qualities at risk are not examples of bad professional practice on the periphery which can be identified and isolated, but are integral to modern practice, and indeed encouraged by government policy.

The past few years have seen intense national debate over how best to resolve these issues. Rather than attempt to analyse the nature of the problems in detail, or suggest solutions, I want to draw attention to certain legal issues in the field of public policy.

<table>
<thead>
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<th>TABLE I</th>
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<td>Other navigable waterways (km.)</td>
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Note: These figures are derived from various sources and are based on the latest evidence available.


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on large-scale public ownership or acquisition of wilderness, as in many other countries. Ten national parks currently cover around 9 per cent of England and Wales. Land ownership does not change within a declared national park. Existing patterns of landuse continue, especially agriculture, subject to more stringent controls over new developments and greater financial support for recreational facilities.

Secondly, the visual appeal of national parks and other rural landscapes has in fact largely depended on agricultural practices. In 1942 the seminal Scott Report concluded that countryside patterns would not radically alter as a result of changes in agricultural methods. This conclusion was supported by the equally important Dower Report on National Parks. These assumptions about agriculture being the guardian of traditional landscapes have dominated policy thinking until recently.
Shaping Government Policies

The post-war government policy of encouraging greater agricultural productivity has been seen as important in the current landscape and habitat loss. The Ministry of Agriculture, Fisheries, and Food, established in 1919, has been operating the various schemes for financial support to agriculture (such as capital grants for farm drainage) with too little concern for the environmental effects of its policies. The policy priorities for central government have traditionally been established by executive discretion rather than legislative design (the executive constitutionally has a controlling majority of the legislature). However, during the passage of the Wildlife and Countryside (Amendment) Act of 1985, various attempts were made by non-governmental sources to introduce a clause requiring the Minister of Agriculture, Fisheries and Food to take environmental concerns into account in his department's decision-making.

In regard to those functions of the Minister of Agriculture, Fisheries, and Food which may affect the physical environment the Minister shall, so far as may be consistent with the proper discharge of such functions, further the conservation and the enhancement of the natural beauty and amenity of the countryside.

The proposed requirement could be regarded as an extension of the more general and less onerous duty under the Countryside Act (1968) which requires all government departments "to have regard to the desirability of conserving the natural beauty and amenity of the countryside" in the exercise of any functions relating to land. In both cases, the terms are broad enough to suggest they are not enforceable legal duties. Rather, they express policy and intention with greater commitment to that policy than if they were expressed in a more traditional form, such as in a White Paper.

Such a general duty can be made more precise, e.g., it was proposed that the priority areas where the general approach should be applied should be specified. The proposed clause provided that, without prejudice to its generality, the duty was to apply in particular to three functions of the minister:

- formulating and operating capital grant schemes
- providing advice to farmers
- implementing EEC obligations concerning the common agricultural policy

These specifications do not threaten the flexibility which the generalized duty allows, although they may make the chance of judicial review more likely. They originally proposed that the minister make an annual report to Parliament on how he had exercised his conservation duties, providing some yardstick on policy advances made in the area. However, by explicitly involving a parliamentary role, it would have encouraged a non-interventionist approach by the judiciary in the interpretation of the duty. For example, a recent case held that where the exercise of a minister's power required the approval of Parliament the courts would not review the reasonableness of his actions unless he and parliament had misconstrued the statute, or he had deceived parliament.  

The government opposed the proposed duties partly because they appeared to be cynical about the government's efforts towards further integrating environmental and agricultural policies. A modified version of the clause requiring the agricultural minister to maintain a "reasonable balance" between agricultural productivity and environmental conservation was proposed. The government opposed this too, arguing that imposing such duties on an individual government department would represent "a dangerous precedent" and threaten the constitutional notion of collective responsibility.

Explicit legal duties are seldom required of ministers, as opposed to public bodies or local authorities. The distinction between duties and powers (which are far more common) is not necessarily clear (Padfield v. Min. of Agriculture 1968). The main objection to the clause—apart from not having been proposed by the government—was its interference with the responsibilities and boundaries of two government departments (Agriculture and Environment).

Such a clause explicitly recognizes the overlap in many areas of government decision-making and rejects the concept of discrete departmental areas of duties and responsibility. However, this recognition may be self-defeating since the conventional techniques of legal control over administrative discretion (through the definition of powers and duties and the doctrine of ultra vires) is ill-suited to this style of decision-making.  

During Parliamentary debate on the clause, the Minister for Environment scorned the notion of the proposal, stating that "it would be a good parlour game to invent the statutory duties that should be laid on each Department." Debate on the issue continues. The government has now announced its intention to table a clause in the current agriculture bill requiring the Minister of Agriculture to maintain a balance between agriculture, conservation and recreation, and economic and social interests of rural areas.

This vigorous debate raises questions concerning the implications of introducing this legal duty into legislation. Historically, British drafting style has shied away from the exhortatory duties found in some jurisdictions, but the formulation of broad and unspecific duties appears to be on the increase. The ambiguity inherent in such clauses, particularly in a controversial area, invites parties aggrieved at a political interpretation to seek judicial intervention and review. This legislative style might be welcomed by those wishing to encourage more "purposive" statutory interpretation, but increases the problems of clearly delineating form for policy making and judicial intervention.

Perhaps it should now be considered appropriate for legislation to incorporate symbolic political or moral duties which can not be legally enforced. In the proposed Electricity Bill of 1978, the non-legal nature of such duties was recognized. The bill applied several general duties on a proposed Electricity Corporation, including "to promote economy and efficiency in the use of electricity" and "to promote industrial democracy in a strong and organic form in its undertakings." These duties were then qualified by a subsection which declared that "nothing in this section shall be construed as imposing on the Corporation, directly or indirectly, any form of duty or liability enforceable by proceedings before any court." At least, this approach clarifies such general duties, but the
Formulating Aesthetic Controls

Much current concern regards protecting landscapes for aesthetic reasons. That the formulation and application of legal standards or rules that depend on individual taste is particularly difficult is arguable. For example, in the development of the common law of private nuisance, British courts have long held that the concept of nuisance—despite its great flexibility—should not be applied to the protection of views. This recognizes that legal standards are inappropriate in this field. Whether controls over development of land under the Town and Country Planning Acts should be used to apply aesthetic judgements is debatable. Current government policy discourages that role for planning: “Planning authorities should recognize that aesthetics is an extremely subjective matter. They should not therefore impose their tastes on development simply because they believe them to be superior.” Independent appeal tribunals to make aesthetic determinations involved in planning decisions, were envisaged in the Town and Country Planning Act (1971) but the provision was repealed in 1980.

These arguments against using planning controls as an aesthetic tool have mainly been made in the context of urban or industrial development. Legal controls dependent on aesthetic judgements appear to have been less closely questioned when applied in nature protection or rural areas. For instance, Tree Preservation Orders (Town and Country Act) have been applied on grounds of “amenity”. Similarly, the Countryside Commission has designated thirty-three areas of “outstanding natural beauty”.

In contrast, agricultural developments have rarely been subject to planning controls. The change of landuse for agricultural purposes (e.g., from grazing to oil-seed production) has been expressly excluded from the statutory and broadly based definition of “development” in the Town and Country Planning Act. Other forms of agricultural development such as drainage schemes and constructing buildings have been exempted under current secondary legislation.

Extending current planning controls to a wider class of agricultural developments has been advocated. The arguments go beyond the need to tighten controls over new agricultural buildings. In 1985, the Department of the Environment used statutory powers to require an application for planning permission for proposed drainage operations. In the same year, the Countryside Commission argued that afforestation schemes for bare land should be defined as “development”, thus requiring planning permission, though exemptions should be made for schemes of less than 124 acres. In a political climate that has favoured deregulation and loosening planning controls, any major extension of the development control system is unlikely to be welcomed.

One of the difficulties in devising legal instruments concerning landscapes is finding accepted criteria on which to base decisions. Decisions concerning species and habitat protection are more firmly rooted in what are apparently scientific judgments, and can be expected to command public confidence. The Nature Conservancy Council (NCC), for example, has the power (under s. 28 of the Wildlife and Countryside Act 1981) to designate areas of land which in its opinion are “of special interest” by reason of “flora, fauna, or geological or physiographical features.” The words of the section appear sufficiently broad (there is no judicial interpretation yet) to encompass areas of aesthetic interest. However, the statutory side-note in the section uses the term “Areas of Special Scientific Interest”, and the NCC has confined its attention to the designation of areas on nature conservation grounds.

The NCC has been viewed as having a scientific role, one reason why the legislation provides no grounds of appeal to a third party by a landowner whose land is so designated: “...the decision to notify is essentially a scientific one which should be protected from external pressure.” It is not clear how many decisions truly rest on a scientific judgment even in this narrowly interpreted field of nature conservation. The distance from scientific decision-making is all the greater when it comes to determining which landscapes should be preserved or subject to special legal protection. The government is currently considering introducing a new power to make “landscape conservation orders” (LCOs). Its scope, decision-making procedure, and implications are not yet known, and a consultation paper is expected in 1986.

If it is not possible to devise scientific or other criteria to guide the administrator and gain general consensus, then legislation must incorporate other methods to legitimize decision-making. Three possible methods which may be used in combination are: decision-making procedures, decision-making bodies, and incentives for acceptance of decisions.

In the first method, legislation elaborates the procedure for decision-making rather than the criteria that influence the decisions. One method is to ensure that decision-making incorporates some public participation and an adjudicatory forum, such as the public inquiry involved in the designation of an “area of outstanding natural beauty” (AONB). However, the five-week public inquiry held in 1985 concerning the Countryside Commission’s designation of the North Pennines as an AONB demonstrates the administrative costs involved in such an exercise, and the difficulties of containing arguments. “Although the inquiry’s terms of reference were based on the landscape merit of the area, most of the objects introduced economic and development arguments against designation.”

The second method relies upon the nature of the decision-making institution to secure legitimacy. For example, the power to determine may be delegated to locally-elected authorities. These may rely—where controversial decision-making is involved—upon elected representation and local accountability to counteract a lack of consensus on the principles involved. This is the current position with Tree Preservation Orders “in the interests of amenity,” where the powers rest with local authorities, but with a right of appeal to central government. In a new area, central government may wish to take initial responsibility, delegating to other levels of government once familiarity and experience is gained.

In the final method, incentives—usually financial—are
provided to those who might otherwise be aggrieved at or resist decision-making. These financial incentives raise a number of questions which will be discussed in the next section. Such schemes can be readily devised to encourage acceptance of a positive determination by owner or occupier of land designated for landscape conservation. They do not, however, assist those who feel aggrieved at a decision not to so designate—who may be a majority.

Economic Incentives: A Basis for Environmental Management

Introducing legal measures which inhibit or restrict land uses from improving their land as they wish (such as the proposed Landscape Conservation Order) raises the question of the role of the financial incentives. A general constitutional right in Britain against the taking of property rights without fair compensation does not exist. Entitlement to compensation is dependent on individual statutory provisions. Thus, the policy-maker may pragmatically determine both the merits or otherwise of incorporating provisions for financial compensation in any particular scheme, and the basis for such compensation if so introduced.

The national landuse planning controls introduced by the Town and Country Planning Act (1947) incorporated the general principle that individual owners or occupiers would not be financially compensated by the state for planning restrictions on their land. Some exceptions exist, particularly for restrictions imposed upon existing uses of land. The basic philosophy has, however, held true, and market values in land have adjusted accordingly. The agricultural activities now being debated have largely remained unregulated by planning controls. New legislative control measures to cover previously unregulated activities have thus permitted a fresh appraisal of using fiscal measures in these areas.

The measures introduced by the Wildlife and Countryside Act (1981), which largely concerned National Parks and Sites of Special Scientific Interest, rested on the voluntary approach to conservation. The Act allowed for regulatory agencies (mainly the Nature Conservancy Council) to impose temporary restrictions on potentially damaging operations. During this time, management agreements could be negotiated to compensate the owner or occupier of the land for being deprived of potential profits. If no such agreement is reached, enforced compensation could be achieved by compulsory purchase of the land.

Compensation arrangements would be incorporated into a scheme for environmental management for the following reasons:

• Fairness. Ethical reasons are related to compensation for removing property rights (largely denied under the system for planning restrictions), the novelty of the proposed restricted area, or that the need for imposing restrictions upon a particular landowner is due to the activities of others. The penalty for not improving or changing one's land is to impose a potential scarcity value on it which is not currently reflected in market land values. Expectations of equal treatment are also held by other land users—for example, industries—who receive no compensation for restricted development of their land.

• Legitimacy of decision-making. Financial incentives may be a tool to secure legitimacy or acceptance of decision-making where its rationale is based on criteria not subject to scientific analysis or not generally supported.

• Functional efficiency. Whatever the philosophical justifications for compensation, it may be decided that fiscal measures will best achieve the policy aims of the legislation, rather than regulatory control.

• Resource base and extent of application. Available public funding and the likely scope of application of the controls determines the effectiveness of financial incentives. Pre-World War II planning controls in the United Kingdom—based on compensation provisions—were largely paralysed by inadequate provisions. The Nature Conservancy Council's budget for negotiating financial agreements concerning Sites of Special Scientific Interest, operating in a specialized area, had to be increased four-fold from 1979 to 1987, to take into account the rising costs of such arrangements. Local authorities, who have the discretionary powers to arrange management agreements with landowners, are reluctant to use them because of the resource implications.

• Effect on discretionary regulation. Where voluntary compensatory measures are used, their effect on the activities with which the legislation is concerned should be considered. Do they encourage farmers to propose development schemes in order to receive compensation? How far does a limited budget inhibit the regulatory agency from establishing satisfactory factory control measures? What are the implications of the negotiation tactics employed in the process?

In the last forty years land prices have had to adjust to the absence of compensation for planning restrictions under the Town and Country Planning Act. Similarly, where particular buildings of historical or architectural interest receive special protection (further controlling the owner's use) because of their scarcity value, market values adjust accordingly, without the need for compensation. Currently, the environmental qualities of rural landscapes are not yet reflected in the marketplace. Until that happens, some form of fiscal measures are likely to continue playing a part in a regulatory system concerned with preserving those qualities. It is difficult to formulate a basis for determining compensation seen to be equitable by both the person suffering restrictions and by the general public (who pay for the compensation). Should this be based on the potential value of the land as developed? Given that much government support in capital investment (such as land drainage and price support for products) has long been available, should amounts awarded take this into account? This has formed the basis of compensation calculation under management agreements under the Wildlife and Countryside Act (1981), and given rise to bitter controversy.

A preferable approach may be to examine and modify
the fundamental market mechanisms that determine the nature of agricultural development. Such examination is emerging in the British and EEC agricultural policies. This shift in approach raises complex questions, not least because of the supra-national arrangements involved in the agricultural market mechanisms. Nevertheless, the design and operation of effective legislation in this area will increasingly demand analysis of such issues, however difficult.

Notes
3. W. Waldegrave, 'Speech to the Oxford Farming Conference, 7 January 1986. However, it should also be noted that agriculture has frequently been given a privileged position in national pollution regulation. For example, slurry run-off from intensive agriculture practices is currently posing a threat to river quality in a number of areas. See: Macrory, "Water Law, 1975.
7. Haigh, "Public Perceptions and International Affairs."
13. Jowell, "The Legal Control of Administrative Discretion."
16. In the context of planning law, see: Grant, Urban Planning Law, pp. 36-7.
17. Scarman, lecture in Harlon and Rawlings, Law and Administration.
19. Macrory, "Water Law, p. 64.
20. United Kingdom, Department of the Environment, Development Control, para 19.

References
Closely linked to a nation’s economic and social development, capital goods and the development of a country’s natural resources all ultimately depend on the health of its population. The health of the population is, in turn, the health of the work force. Thus the quality of life, economy, and development of a country’s society depend on the health of the population. The health of the population may be impeded due to public health problems, such as disease, in areas otherwise suitable for settlement.

The primary objective of development is to enhance the quality of life. Ultimately, development denotes sufficient food, basic health care, clean water, shelter and education for all. Socio-economic development thus requires promoting public health, i.e., providing sanitary conditions and preventing and curing disease.

### Law and Public Health

Understanding the sources of health problems is necessary to formulate laws which will promote public health. Morbidity and mortality in developing countries result from poor sanitation and the concomitant communicable diseases. These conditions are caused by inadequate water supplies (both in quality and quantity), poor or non-existent waste disposal systems, abundant insect and animal disease vectors, and insufficient health education. A second source of health hazards is the very process of socio-economic transformation, such as the importation of industrial and agricultural technologies which have a negative impact on human health and the environment.

This implies that poor health in the developing countries arises out of their grinding poverty, a hostile physical environment and certain social and economic activities. Measures to improve public health should therefore include:

- eliminating environmental health hazards
- suppressing, controlling and preventing communicable diseases
- providing health education
- providing medical services and adequate health facilities for early diagnosis and treatment of disease
- providing the public with standards of living adequate to maintain good health.

Some of these measures entail transforming and regulating social behaviour. For instance, diseases such as typhoid, dysentery and cholera which arise from food, water and soil contaminated with human and industrial waste could be avoided if public health measures were strictly adhered to. Proper food sanitation standards should be enforced during processing and sale, as should water quality and effluent discharge standards. Adequate waste disposal facilities should be constructed.

Law is a coercive instrument for regulating social behaviour. The compulsion inherent in the legal norm enables law to achieve broad social goals. In public health, law translates public health objectives into specific enforceable norms. The state defines the public standard necessary to maintain and promote health, and compels their observance. It also arms public officials with basic guidelines for promoting public health. In this way the law articulates public health policies and programs, and defines the necessary standards of social behaviour.

Public health measures may interfere with private property and personal liberty. For instance, suppressing and controlling communicable diseases may require isolation and quarantine of the infected person. Controlling and eliminating environmental health hazards—polluted water supplies, improperly planned settlements, inadequate waste disposal—may violate certain private property rights. The state empowers the police to restrain citizens or limit their property rights to maintain public safety, morals, health and order.

Kenya’s Constitution provides that qualifying personal liberty and property rights in the interest of public health shall not constitute a violation of the constitutional guarantee of those rights. Thus, before action in the public interest is undertaken, the extent to which personal liberty and property rights may be compromised in the interests of public health must be defined. Subsequently, the appropriate health agencies may be given the power to act. In this way, the law conforms both legitimacy and jurisdiction.

### The Legislative Framework

There are several statutes in Kenya which provide the framework for public health administration. The primary statute is the Public Health Act (Cap. 242, The Laws of Kenya). Its provisions, rules and regulations form the basis of this discussion. Other important statutes also examined include the Local Government Act (Cap. 265), Food, Drugs and Chemical Substances Act (Cap. 254), Land Planning Act (Cap. 303), Water Act (Cap. 372), Factories Act (Cap. 514), and Pest Control Products Act (Act. no. 4 of 1982).

### Institutional Framework

The Public Health Act has established two kinds of health authorities: Municipal Councils, and the Ministry for Health. The ministry covers all areas under section 2 of the act other than municipalities. Their primary duties under the act include taking measures to prevent...
and contain the outbreak or prevalence of an infectious disease, promoting public health, and exercising the powers and performing the duties conferred by the act or any other law.

Local authorities have broad powers to deal with matters affecting public health (although only municipalities are health authorities within the meaning of the Public Health Act). Under the Public Health Act (ss. 116, 126, 129 and 135) and the Local Government Act (ss. 160-176 and 178-180) local authorities are required to prevent and suppress statutory nuisances within their districts, ensure proper sanitation of food during processing and sale, establish and maintain cemeteries, mortuaries and crematoria, regulate the conveyance and disposal of dead bodies, establish and maintain sanitary services, and establish, acquire and maintain works to supply water within their areas. They may also make by-laws to enforce public health requirements under the Local Government Act.

The Public Health Act (section 3) also established a Central Board of Health and a Medical Department. The board consists of the director of medical services (chairman), a sanitary engineer, a secretary and six other persons appointed by the minister, three of whom must be medical practitioners. The board advises the minister on all matters concerning public health. The medical department, under the director of medical services, is responsible for preventing the introduction of infectious diseases into Kenya, advising and directing local authorities on health matters, and promoting and implementing research on preventing and treating human diseases.

Other public health institutions are the Public Health (Standards) Board, established under the Food, Drugs and Chemical Substances Act, and the Pest Control Products Board, established by the Pest Control Products Act. The Food, Drugs and Chemical Substances Act regulates importation, manufacture and sale of food, drugs and chemicals. Under ss. 27 and 28, the board advises the minister for health on formulating regulations and standards for protecting the consumer. The Pest Control Products Act controls the importation and use of pesticides, while its board ensures that pesticide importation and use does not create an "unacceptable risk or harm to public health, plants, animals or the environment." 9

**Normative Structure**

Public health administration's normative structure is analysed here in the context of communicable diseases, environmental sanitation and industrial and agricultural technology transfer.

**Communicable diseases**

The high incidence of infectious diseases in Kenya is illustrated in Ministry of Health data. Infectious and parasitic diseases accounted for thirty per cent of reported mortality cases in 1977, and sixty-eight per cent of the overall diseases incidence in 1980. The five major causes of mortality and morbidity are malaria, acute respiratory infections, skin diseases, diarrhoea and intestinal worms. In 1980, 16.8 million cases were reported for these diseases alone, a case rate of 113,389 per 100,000 population. 10 It is clear that appropriate measures should be designed to control these diseases.

Four basic legal mechanisms to control and suppress infectious diseases exist: notification to the relevant health authorities when cases are detected; isolation, detention and quarantine of infected persons, ships and other vessels; entry, inspection and destruction of infected premises and property; and legal coercion of infected persons and their relatives to get treatment.

The Public Health Act declares smallpox, cholera, plague, typhoid, leprosy, anthrax, sleeping sickness and tuberculosis to be notifiable infectious diseases. The act compels family members and the attending doctor of an infected person to notify the relevant health authority of the case. The attending doctor must also inform those in daily contact with the patient of the nature of the disease and the precautions necessary to avoid infection.

Once notified, health authorities may inspect premises and examine persons therein, ensure that the premises are cleansed and disinfected, and destroy any infected clothing, bedding, building or other article. They may remove infected persons to a hospital, and, on the orders of a magistrate, isolate and detain any person who has been exposed to infection. The act prohibits exposing infected persons and articles, leaving infected premises, and requires that public conveyances which have been used by infected persons be disinfected.

Special provisions to deal with formidable epidemic, endemic or infectious diseases exist. 11 The act provides that whenever any part of Kenya is threatened by any such disease, the minister may make rules providing for, among other things, the speedy interment of the dead, sealing off the infected area, compulsory examination, disinfection, inoculation and vaccination of persons intending to leave the area, disinfection or destruction of buildings, furniture and articles which have been used by infected persons, and the establishment of hospitals, observation camps and stations and placing infected persons therein. Medical health officers are required to promptly notify the director of medical services of any outbreaks of such diseases. The director may requisition buildings, equipment, drugs, food and any other private property where necessary for dealing with the outbreak.

Smallpox, leprosy and venereal diseases have also received special attention, probably because of the social stigma attached to them. 12 The Public Health Act requires (with penalties for non-compliance) infected persons to submit themselves to treatment and for those in charge of such persons to arrange medical treatment for them. Health authorities can compel infected persons to secure treatment, detain persons in hospitals, forcibly examine the inhabitants of an infected area, establish leper asylums and intern patients therein, cleanse and disinfect residences of infected persons, and vaccinate children and threatened populations against smallpox.

The foregoing provisions deal with communicable disease occurring within Kenya. It is also imperative to guard against such diseases being introduced into Kenya from foreign territories. In this respect, the Public Health Act (Part VI) confers wide powers on health authorities regarding admitting vessels into ports, examining their passengers, isolating and treating infected passengers and removing vessels.

In addition, the minister may regulate, restrict or prohibit entry into Kenya, and restrict importation of animals and articles. The minister may impose conditions
regarding medical examination, detention, quarantine, disinfection, vaccination or isolation of persons entering the country from foreign territories, if such measures are necessary to prevent the introduction of infectious diseases into Kenya. The minister may also negotiate with other governments on reciprocal notification of outbreaks of formidable epidemics and endemic or infectious diseases.

Law is not the only critical factor in preventing, suppressing and controlling communicable diseases. Effective control will ultimately depend on the people's standard of living, the adequacy and accessibility of health facilities and medical services, and the quality of health education.

**Environmental sanitation**

Environmental sanitation measures are designed to eliminate any external physical, chemical, biological and social influences which affect a people's health. Complete elimination of environmental health hazards ultimately depends on achieving a standard of living adequate to maintain health, i.e., eradicating poverty. In the interim, large-scale preventative measures can be adopted. Under the existing legislation, the primary means of control is to formulate and enforce appropriate environmental health standards. This part of this paper will focus on human settlements, water and air pollution and food sanitation.

**Human settlement.** Landuse regulation and properly planned settlements are necessary to promote public health. In common law, landuse is unrestricted only so long as it does not injure another person or his property. If an individual's use of his property threatens or succeeds in harming a neighbour, this constitutes a nuisance and the law provides an appropriate remedy. The Public Health Act (sec. 118) defines statutory nuisances to enable enforcement of environmental health.

Owners and occupiers of land and premises have a duty to ensure that such land or premises are free from dangerous nuisances. Health authorities can enter land or premises, remove nuisances and recover expenses from authors of the nuisances and owners or occupiers of the property. The authorities may apply to the courts for orders to close premises, factories, businesses and workshops which are sources of danger to health. They may also take legal action against the authors, owners and occupiers.

Under section 116 of the act, local authorities have a duty to maintain cleanliness and sanitary conditions in their districts and prevent nuisances which are health hazards. However, one of the most common complaints by personnel of the Medical Department is that local authorities are unable to meet the demands of this provision. This is attributed to lack of personnel and serviceable equipment. One visible result is the refuse and waste matter which litters most local authorities' districts, posing a serious health hazard.

The minister of health may make rules for environmental sanitation and require local authorities to enforce them. Such rules may relate to: inspecting land, trade premises and factories; building construction; land, building and street drainage; refuse, waste matter and offensive liquids disposal; and many other matters. The Public Health (Drainage and Latrine) Rules made under this provision empower local authorities to provide for and regulate drainage and sewerage within their districts.

The Development and Use of Land (Planning) Regulations, made under the Land Planning Act, give local authorities (as interim planning authorities) and the Department of Physical Planning (the central authority) power of town planning in their jurisdictions. All developments are required to take place within the framework of the relevant plans in order to ensure proper planning and development of human settlements.

Local authorities can make by-laws specifying sanitation and building standards to be observed by developers, to ensure (at least in the urban areas) a human settlement environment conducive to health. Previously, landuse in towns has varied considerably from the approved town plans. As of 1979, approximately thirty-five per cent of all urban households existed in squatter settlements and slums. Such settlements are characterized by miserable shelter and lack of basic infrastructure—clean water, sewerage and drainage systems and adequate waste disposal facilities. Thus epidemics are likely to be frequent.

People in rural areas are no better off, and the problems are even more intractable. Waste disposal systems are non-existent, water is scarce and of poor quality, and shelter is miserable. The implications for the health of the rural population are obvious.

**Control of water and air pollution.** Approximately eighty-five per cent of Kenya's rural population depends exclusively on rivers and lakes for water, and is thus highly susceptible to water-borne diseases. These water sources should therefore be protected from pollutants. Many industries in the country abstract water from rivers and lakes while sewage works and factories discharge their effluent into these sources.

In addition, various agricultural chemicals have been imported into Kenya and used to improve agricultural yields. Apart from the direct hazard to the user who is exposed to the substance, there is the danger of residues on food and in water intended for human consumption, and the negative impact on the environment. To control pollution, we must formulate ambient (quality) standards and constantly monitor the levels of toxic substances in the nation's waters.

The Health Authorities and the Water Apportionment Board (WAB)—established under the Water Act—share the responsibility for preventing and controlling water pollution. The Water Act requires an applicant for a water abstraction permit to indicate the industrial process in which the water is to be used, the characteristics of the anticipated water wastes, the proposed waste disposal methods, the potential to pollute water and the steps to be taken to avoid such pollution.

In approving the application, the WAB may require that additional measures be taken to avoid or remove potential pollution. The Water (General) Regulations specify the conditions, and make provisions for the WAB to formulate standards for effluent and waste-water discharge into a body of water (Rules 71-80). The WAB formulates effluent discharge standards for each industrial undertaking and makes them part of the license conditions when abstraction applications are approved. Failure to comply
with the relevant conditions may lead the WAB to cancel the license (s.49, Water Act), which is rarely done since it entails closing down the offending industrial works.

These provisions are reinforced by the Public Health Act which regulates the discharge of waste water and noxious matter into water supplies meant for human consumption or domestic use. Local authorities are enjoined to take all lawful, necessary and reasonably practicable measures to prevent the pollution of water supplies within their districts, and to purify polluted water and prosecute offenders (s.129). However, both the WAB and the health authorities have been unable to secure adequate control of all pollution sources.

Although the relevant agencies claim to use the World Health Organisation ambient standards, there is very little monitoring of water resource quality.25 Pollution problems are handled on an ad hoc basis, despite the wide powers conferred on enforcement agencies not only to enter premises to investigate infringements of the law, but also to revoke licenses, close down works and prosecute offenders. Thus, the regular outbreaks of waterborne diseases in areas where people rely on natural sources of water for domestic consumption is not surprising.

Air pollution is supposedly a relatively minor problem in developing countries.26 Increasing urbanization and industrialization, however, come hand in hand with atmospheric degradation. Dust, fumes, gases and particulates from industrial activities and vehicular traffic characterize the atmosphere of major towns in Kenya. This may have a debilitating impact on human health. At present, there is very little monitoring of atmospheric pollution in these towns. At the regulatory level the Public Health Act (s.118) and the Traffic Act lay down a statutory machinery that makes no provision for emission standards, making implementation difficult and ineffective.

The working environment is another area of concern. In numerous industries, workers must handle hazardous and toxic chemicals and work with processes involving chemical reactions in which toxic or hazardous substances are created. Major hazards arise from fumes, dusts, mists, vapours and solvents. However, the risk to a worker's health depends on the magnitude and duration of exposure—there are certain levels of exposure which entail no significant threat to health.28 In this case, the most effective method of control and regulation should be to define acceptable levels of contact for each substance (e.g., maximum allowable concentration).29

The Factories Act contains the legal framework for controlling and eliminating occupational health hazards. The act does not define permissible levels of toxins in the workplace, but requires that employers provide protective equipment to workers and install appropriate ventilation equipment to prevent the accumulation of dust, fumes, gases or smoke in the workroom (s.51). Appropriate standards and constant monitoring to determine the extent of hazardous materials present within the working environment are urgently needed.

Food sanitation. In the interest of public health, society should exercise some control over production and handling of food. Also, public health officials should have some power to monitor food contamination and take appropriate measures to protect the health of the population. Both the Public Health Act and the Food, Drugs and Chemical Substances Act provide a legal regime for securing proper and adequate food sanitation. The Public Health Act prohibits collection, preparation, manufacture, keeping, transmitting or exposing for sale any food without taking adequate measures to guard against or prevent any infection or contamination (s.131). Health authorities can enter, inspect, seize and examine samples of food suspected to be unwholesome (s.132-133).

The Minister for Health is empowered to make rules regarding the inspection of animals intended for human consumption, dairies, milkshops, slaughterhouses and other food processing plants, stores and shops. The minister may also regulate the taking and examination of food samples, seizure, destruction or disposal of food-stuffs which may endanger health, standards of sanitation in relation to the sale or exposure of foodstuffs, prescribing standards of composition, strength and quality of various foods, and make rules to prevent adulteration, misbranding or misdescription of food intended for sale or export (s.134).

The Food, Drugs and Chemical Substances Act has established the Public Health (Standards) Board to advise the minister on some of these matters. The minister has made three sets of regulations under this act:

1. The Food, Drugs and Chemical Substances (General) Regulations provide for:
   - proper labeling of foods, drugs and chemical substances
   - procedures for the taking of samples and their analysis
   - control of food, drug and chemical substances importation

2. The Food, Drugs and Chemical Substances (Food Hygiene) Regulations provide for:
   - licensing of food premises
   - construction, layout and sanitation of food plants and facilities
   - health measures to be taken by food handlers

3. The Food, Drugs and Chemical Substances (Food Labeling, Additives and Standards) Regulations have detailed requirements and standards regarding:
   - quality and composition
   - packaging
   - labeling

The legal regime in Kenya adequately protects the public from health hazards associated with food supplies. Health authorities regularly inspect food processing plants, serving premises and markets. They also take and examine food samples to monitor contamination, and prosecute those who contravene the relevant regulations. However, the shortage of qualified public health officers and technicians makes it impossible for health authorities to secure control over all foods and foodstuffs offered to the consumer.33 The enforcement of the relevant regulations is therefore confined to the urban areas and major country markets.

Transfer of technology. The quest for economic transformation in the Third World has increased the number of
development projects and programmes and brought a massive infusion of industrial and agricultural technology from the industrialized countries. The precise impact of these developments on Third World ecosystems and public health has not been appreciated by most of the recipients.

Little concern had ever been given to anticipating ecological costs and side-effects, to say nothing of having such factors serve as inputs in decision-making in development projects. In example after example, we found that a wide variety of programs were being promoted throughout the world with little or no attention to their environmental consequences. Industrial production generates deleterious by-products with direct and long-term impacts on public health and the environment. As noted earlier, agricultural chemicals used to increase food production are not only a direct hazard to the user but also pose a hazard to the general public due to residues in food and water, and to the entire ecosystem.

The only effective method of dealing with these dangers inherent in international exchanges in industrial and agricultural technology is to anticipate and pre-empt them. Environmental impact assessment has become the predominant tool for anticipating and pre-emting the adverse consequences of the development process. The environmental impact assessment mechanism ensures that social and ecological costs and other side-effects of development programs are considered.

The Kenya Government recognizes the crucial role of environmental impact assessment in rational development planning. To date, no composite law laying down the procedure and substance of the mechanism has been passed. However, there are rudimentary legal frameworks in several sectors. Two examples, with a public health orientation, follow:

Water Act. Under the Water Act, an applicant for an abstraction permit has to indicate the industrial process in which the water is to be used, the characteristics of water wastes to be expected, the proposed methods for the disposal of such wastes, its potential to cause water pollution, and the steps to be taken to avoid such pollution. In approving the application, the Water Appropriation Board may impose conditions in the permit to pre-empt pollution.

Pest Control Products Act. Under the Pest Control Products Act, the Pest Control Products Board which licenses the importation and sale of pest control products has the power to refuse to register a product if it believes that the product poses unacceptable risk or harm to public health, plants, animals or the environment.

These legislative instruments are restricted to matters falling within their sectoral jurisdictions. Hence they do not conceptualize the problems of the impact of the development process on the ecosystem as a whole, nor give a comprehensive strategy for dealing with them. There is also a notable absence of clear guidelines. Given the wide discretionary powers provided under the law, the desire to attract investment and increase production may override ecological and public health considerations.

The impact assessment process is administered across sectors by the New Projects Committee of the Ministry of Commerce and Industry in collaboration with the National Environment Secretariat. There is no legal basis for this process, and its impact on development planning is probably very limited. In any case, the emphasis has been on using economic criteria to evaluate applications for new projects. Ecological and public health considerations do not go beyond a perfunctory concern over the potential impact on air and water quality. The need for a legislative framework for a cross-sectoral environmental impact assessment mechanism with mandatory incorporation of the ecological and social dimension in development planning, cannot be over-emphasized.

Conclusion

This brief survey reveals that there is a formidable array of legal rules and regulations designed to promote public health and facilitate efficient public health administration. It also reveals major gaps in the legislative framework in certain critical areas. However, institutions have been created and conferred with wide powers to implement and enforce measures necessary for the promotion and maintenance of good health. Norms have been enacted to define acceptable standards of social conduct. Through legal compulsion they have sought to mould behaviour along patterns that enhance public health.

The recurrent health problems in Kenya cannot be explained only on the basis of deficiencies in the legal regime. There is a remarkable lack of effective enforcement of the existing normative structure. In addition, health problems arise out of circumstances for which legal regulation and prohibition are hardly the cure.

Notes


2. Where massive unemployment and under-employment exist—as in most developing countries—chronic illness and early death may not have economic costs to the employer since an employee can be replaced at no cost.

3. Development theory and practice in the 1950s and 1960s emphasized economic growth as the primary objective of development: Rostow's The Stages of Economic Growth epitomizes this line of thought. That man is the target of the development process was virtually ignored. For a critique, see: Baran, The Political Economy of Growth, Cockroft, Johnson, and Frank, Dependence and Underdevelopment. The World Health Organization (WHO) has noted the shift in emphasis from economic growth of the developing countries to their balanced economic and social development. See: WHO, Health Hazards of the Human Environment, p. 13.

4. The term public health has both a common and a technical meaning. In common usage it means the prevailing health or sanitary condition of the citizens of a nation. Technically, it means preventive medicine in contradistinction to curative medicine. In this sense, suppurating malarial vectors is a public health measure, while curing a malaria patient is not. In this paper, the term is not used in its technical and restrictive sense. See: Black, Black's Law Dictionary; Hanlon, Principles of Public Health Administration, p. 22.

Sixth Report.


26. Based on interviews with Ministry of Water Development and Public Health Department personnel.

25. See: Joint ILO/WHO Committee on Occupational Health, Sixth Report.


23. At present there are 369 public health officers countrywide, serving a population of about 17 million. Ministry of Health personnel, personal communication.


18. The Public Health Act, s. 126A. The Minister for Local Government has made adoptive by-laws regarding construction (the Building Code) which have been adopted by various local authorities, in terms of s. 210 of the Local Government Act.

17. LN 516/1961 re-enacted as the Land Planning Act, Cap. 303, the Laws of Kenya, p. 380.


14. The basis of nuisance law is sic utrum er alienum non iuvandum. You must not use your property so unreasonably and unnecessarily as to cause inconvenience to your neighbours.

13. The World Bank notes that improvements in health standards in Western Europe and North America were brought about more by rising living standards and improved socio-economic conditions, than by medical care per se. For example, the incidence of typhoid and cholera fell in Britain and the United States long before effective methods of treatment were available. See: World Bank, Health: Sector Policy Paper, p. 20.

12. For provisions dealing with venereal disease, smallpox and typhoid see generally para V. VII and VIII respectively of the Public Health Act, op. cit. It should be noted that in 1979 the World Health Organization declared that smallpox had been totally eradicated in Kenya. Government of Kenya, Ministry of Health, Status of Health 1979, p. 9.

11. These are smallpox, plague, Asiatic cholera, yellow fever, sleeping sickness or human trypanosomiasis and any other disease which the minister may, by order, declare to be a notifiable epidemic disease.


7. The Constitution of Kenya, Act No.5 of 1969, ss.72(1), e. 750(V) and 813(306).


3. See: Chabeda, "Environmental Pollution and Options Facing Developing Countries of Africa with Tourist Potential Based on Wildlife." Chabeda shows that most natural waters in Kenya are contaminated with pesticides and other chemical residues; see also: National Report on the Environment, p. 75.

2. Based on interviews with Ministry of Water Development and Public Health Department personnel.

1. There are smallpox, plague, Asiatic cholera, yellow fever, sleeping sickness or human trypanosomiasis and any other disease which the minister may, by order, declare to be a notifiable epidemic disease.


Chapter 8
A THEORY ABOUT POPULATION IN EGYPT
SOADEL SHARKAWY

Introduction
The population in Egypt increased by around one million people in nine months, an average annual growth rate of over three per cent. This announcement by the Egyptian Central Agency for Statistics and Mobilisation testifies to the failure of family planning in Egypt, despite the millions of pounds the government spends on the Family Planning Agency. Clearly, the population explosion in Egypt cannot be solved by the propaganda, songs, orders or pronouncements used by the government to date.
The population explosion in Egypt is a deep-rooted problem, aggravated by complex social, economic and legal situations. The government spends large sums to limit population growth while at the same time spending like sums which stimulate population increase. Thus, for the family planning policy to yield tangible results, the causes of the problem need to be determined:
An integrated theory should be formulated in order to solve a problem which has appeared baffling and beyond remedy.
The Theory and its Advantages
This theory on population attempts to establish a link between changing elements and to find a general formula to explain some of the natural and social manifestations. Validity of theories in natural sciences can be verified through laboratory experiments. However, it is difficult and often impossible to do so in the social sciences. Thus, in the social sciences, the proponents of theories rely on citing examples from the past by way of illustration, using geographical evidence and statistics collected to reveal the validity of the theory.
Social theories constitute a basic reference to which we resort to explain faults, disorders and ambiguity. They are a manifestation of civilization, which may be described as "a constant struggle against fear." Social phenomena are often wrapped in mystery no less ambiguous than natural phenomena, leaving us anxious and fearful about tomorrow. Theories relieve us by clarifying some confusion and giving us a source of reference and criteria for predicting the future.
However, if social theories did not go beyond explaining the relationship between changing elements, they would be explanatory, static and passive. Social theories can be constructive and useful if they remedy situations or liberate man from powers to which he has succumbed. Man could use social theories to overcome problems that still appear difficult to solve, in the same way that the law of gravity was discovered and exploited to invent rockets and aircraft. Such problems include wars, hunger and population increase (specifically in the more backward and poorer societies).

The Proper Arrangement of Society
The question is whether we need to limit population growth in our country now. Since we desire to improve the individual standard of living we should limit procreation to stabilize the population size. To achieve this, the rate of economic development must be much higher than the rate of population growth. Although no accurate data is available on the rate of actual economic development, we can safely assume that this rate is less than that of population growth. Hence, population increase must be controlled if we intend to enhance the living standard of the individual.
A controlled population growth rate requires much effort sustained over time, after which the population will be stabilized for decades. This entails accepting the current standard of living throughout these years. However, the rate of development will be reversed should population grow at a higher rate than the increase of production.
These main factors promote the upsurge of population: economic, social and legal.
The Economic Factor
The best policy to promote childbearing is to subsidize essential commodities and services. Subsidizing staple commodities and essential services is related to population increase. Thus the state spends millions of pounds and hard currencies to encourage childbearing, as well as on family planning.
In the advanced countries which experience a fall in the birth rate, childbearing is boosted by granting economic assistance to families which beget the third child, and a higher premium for the fourth child and so on. Egypt offers unlimited inducement assistance in kind to each family that procreates. Such assistance involves price support for processed baby foods and milk, subsidies for antibiotics that reduce infant mortality, bread subsidies and free education in all stages to any number of children, and subsidized energy and water.
These subsidies promote unlimited childbearing since individuals come up against no obstacles or limits to make them consider the material cost involved before begetting a baby.
Rationalizing subsidies is unworkable. Subsidizing staple commodities and essential services has forced heavy economic burdens and loans on the state from abroad. These financial obligations endanger the country's future and the coming generations, compelling us to look for a solution.
The solution can not be found in proclaiming the necessity of rationalizing the subsidies, as such guidance is inconsistent with subsidizing. Rationalization here means restoring logic and discernment to the citizen when he consumes any commodity. As long as the commodity...
is sold below its real price, no individual will think of saving the cost. Because it is a symbolic price, it will neither add nor diminish anything from the consumer's budget or standard of living.

The only course of action that will restore rationality to the consumer rests on suspending the subsidies from all commodities. Commodities should be sold at their real price, with guaranteed threshold income to civil servants or those whose income is decided by the government. Wages and salaries for all others shall be determined by the interplay of supply and demand, as is the case for private sector employees, craftworkers and merchants.

Subsidizing staple commodities can not be an equitable means of distributing the national income, since people with two children must subsidize those with ten. That the recipient of subsidies (in the guise of commodities and services at symbolic prices) feels no inducement to work and produce has been proven. This situation has become so widespread in the Egyptian countryside that the village now fails to produce all the foodstuffs it consumes, and imports them from the city, or sometimes even from abroad.

*Distribution of income on a sound basis.* The distribution of national income must rest on the participation of each one of the factors of national production. If these factors are labour, land and capital, labour must incorporate distribution on the basis of contribution to production. This does not preclude considerations for old age, incapacitation or disease, the victims of which may be granted cash assistance, provided that it is confined exclusively to these cases without granting assistance to those who are capable of producing but deliberately choose not to.

Subsidies of staple commodities and essential services negatively influence the size of production. Hence, it has a negative effect on the standard of living of all individuals, whether employed, unemployed, productive or unproductive.

*We cannot live in economic isolation.* Economic principles of production and distribution cannot be overlooked, because we do not live in isolation in this world, but deal with countries which respect these principles. We are compelled to deal with these countries either by requesting loans and grants or through trade. For example, accounts are squared on the basis of economic structures. Loans carry interest, grants have set limits that may or may not be overstepped and commodities are priced on the basis of cost.

We can not rely on grants and other aid since they are temporary and are stopped in certain political and international circumstances. For example, in the past, Egypt relied on assistance from some countries. Due to political developments, however, the assistance was cut. This occurred after these countries had repeatedly reminded us that they were not pleased with the economic principles we applied in utilizing the assistance.

Borrowing from abroad is affected at high interest rates; much higher rates than we charge when lending to the world, and higher than the domestic rate of interest.

Ignoring the sound economic rules by alleging the existence of social considerations does not benefit the have-nots. Instead, it draws the whole society into the world economy which harbours no pity, and is not concerned with social considerations. The utmost deference that can be paid is to recognize the international economic interests and the political terms and circumstances of the world.

*The Social Factor*  

Absence of standard of living threshold leads to population increase at a higher rate among the poorer and more backward classes. The Egyptian Constitution of 1971 provides for the welfare of motherhood and childhood:

The State assumes the protection of maternity and infancy, it gives heed to the nascent generations and undertakes to encourage and establish the appropriate circumstances for development of their aptitudes...

However, this text refers to those social and economic freedoms which do not create legal obligation for the state, but are mere aspirations whose achievement depends on the potentialities of the state. This is the view adopted by jurists of both constitutional law and public international law when they classified man's rights proclaimed in 1948.

If we investigate deeper into practical facts, we find that usage has left absolute freedom to parents over the education of their children and their progeny. Both parents are free to give or deny their infants the best upbringing and education. Parents are also free to squeeze ten children into one room, or to leave them out in the cold receiving crumbs of bread and passing most of their time playing in the street.

There is no objection to the lack of a higher material, knowledge and cultural advancement for any individual because this is the only course that can lead to the progress of the whole society. The fundamental objection is that there should be no lower limit to the standard of living of the individual in terms of accommodation, clothing, cleanliness and education. This can only be achieved if real obligation by both parents exists, together with penalties for negligence in bringing up their children. Advanced countries ascertain that both parents give their children basic education. Penalties are imposed upon whoever fails to discharge this duty. The state also details experts to ensure that the child's housing meets all the health standards. As it is, the care exercised over maternity and infancy is not merely a constitutional text, but a fact enforced in practice.

In Egypt, fathers go well beyond neglecting their children when they push them to do work, sometimes strenuous work. From an early age, these children become a source of livelihood. This was common practice in the nineteenth century in Europe, where infants were put to work crawling on all fours, before the practice was legally ended. This practice still continues in our society, without significant opposition from the incumbents in charge of social matters.

The issue is rendered more complex by the fact that the section of society which fails to take care of the health, mind and upbringing of its children is larger, with a speedier growth rate, than other sections. This leads to increased procreation with a concomitant decline of the level of knowledge, character and economy. This negative result is tangible and confirmed by statistics, and threatens society as a whole.
The Legal Factor

Illiterate citizens enjoy the full rights of citizenship, compassion, and unjustified respect. They are entitled to vote in elections, open a current bank account and have a savings passbook, drive a car and get employment—even in state agencies. The illiterate may be lucky enough to have the additional honour of representing the people in local councils and parliament. This situation is reflected in the level of work in these councils, and on the standard of rendering services to society.

This honour paid to illiteracy and ignorance aggravates the population issue, due to the undeniable relationship between illiteracy and population growth. Leading jurists of constitutional law have recommended disenfranchising the illiterate as an efficient way of combating illiteracy.

We need not go far to cite examples of the gradual manner legislation induces individuals to study and teach their children. Under the provisions of the fundamental regulations of the Consultative Council of Deputies (22 October 1866 under the reign of the Khedive Ismail) Organization Regulations required the Consultative Council of Deputies to make literacy a condition for those who may elect the deputies in the Eleventh Assembly elections.

As elections were to be held every three years, the election law gave illiterates a time limit of thirty years to learn and qualify to participate in elections. It would be quite a boon to adopt this system, with a curtailed time limit, to induce the illiterate to learn reading and writing.

If the economic and legal considerations we have elaborated are overlooked, the steady increase of population will deepen the gap between ourselves and the world. In Egypt, unlimited population growth will seriously jeopardize the entire society, threaten the happiness of every individual, and take us back to the law of the jungle.
Chapter 9
LAW AND POPULATION
A Reassessment
ADEL AZER

Population Profile of Egypt

To reassess the theoretical and practical efforts achieved in law and population it is useful to look at the population profile of Egypt. The population of Egypt has become too large to be compatible with the exploitation of the country's resources, and has therefore become a national problem. In thirty years the population has doubled, increasing from 19 million in 1947 to 38 million in 1974.1

This phenomenon is mainly due to a decrease in the death rate and persistently high birth rate. The average number of children per family is 5.1, and a new child is born every 22.1 seconds. Marriages are on the increase. In 1973, some 339,000 marriages were contracted, compared with 383,000 in 1977. There are 9.5 to 10.3 marriages per thousand. These marriages yield 39.5 births per thousand.

Statistical data in 1947, 1960 and 1976 show an increase in urban population (33%, 37% and 44% respectively) and a corresponding decrease in rural population (67%, 63% and 56% respectively). In 1976, the economically active population was estimated to be 11,000 persons, representing 30 per cent of the total population.2 Economically active males represent 54.1 per cent of the total male population, while the females do not exceed 5.5 per cent of the total female population. In addition, there is a high dependency ratio: 2.5 dependents to every person in the work force.

Developing Population Policies in Egypt

Awareness of various issues regarding population can be traced back to 1922. However, from 1922 to 1951 the activities in this area were limited to individual initiatives through private associations, conferences and scholarly works in universities. This period witnessed medical attempts and services in family planning and treatment of sterility.

The first official population policy was drawn in 1962 and aimed at reducing the birth rate. In 1965, a Supreme Council for Family Planning was established to plan and coordinate policies. Its Executive Council was entrusted with implementation. During this phase, population policy took the medical approach to family planning through medical units run by the government and some private associations.

In 1973, a new policy was adopted, giving priority to a socio-economic approach to reduce population growth.3 The policy was based on nine factors: the family's socio-economic standard, education, the status of women, mechanization in agriculture, industrialization (with emphasis on agricultural industrialization), reducing infant mortality, social security, mass media, and availability of family planning services. Each ministry concerned was asked to promote this plan of action.

Another phase began in 1975, adopting a developmental approach. Four targets for action were set:

• To reduce population growth to an optimum rate within the framework of the country's socio-economic policy for development
• To set up new communities in the western desert and in Sinai
• To give more weight to development in rural areas
• To promote the productivity of the labour force

In 1985, the Population Council was reorganized and named the National Council for Population, under the chairmanship of the President of Republic. Among its present functions are to approve population policies which would promote the highest rate of economic and social development; approve the annual population projects, with special emphasis on family planning, child care, increasing employment for women and literacy.

Meanwhile, annual population growth remains high and inconsistent. From 1961 to 1965, the rate of growth was 2.8 per cent. In 1972, it dropped to 2 percent, and in 1980 rose sharply to 3 per cent. In 1982, it dropped again to 27 per cent.4 The first drop (in 1972) is supposedly due to the Population Council's concentrated medically-oriented efforts in family planning. This interpretation is debatable.

The continuous population increase poses a serious problem, especially considering that the population has increased by 293 per cent in the past eighty years. During the same period, cultivated land area increased by only 16.2 per cent. The situation would be even more critical if, according to forecasts, the population reaches 70 million by the year 2000.5

Theoretical Considerations

Law and Social Change

The social nature of law

Controversies on the nature of law and its role as an instrument of social change still persist. Traditional trends, still extant in parts of the Third World, view law as a mere imperative, and restrict the role of legal scholars to analyzing basic abstract concepts and interpreting existing texts.6 Such views risk total detachment from the dynamic changes characteristic of contemporary societies.

On the other hand, with the development of the social sciences, legal scholars became aware of the need to relate law to social phenomena. Ehrlich spoke of the "living law" which consists of the "ways of acting together of
men in society. Later developments in the sociological study of legal phenomena asserted that an individual right is but a social interest protected by a legal norm. The German School (known as the Jurisprudence of Interests) stressed the need for studying prevailing interests in each society, aiming at eliminating potential conflicts between different social interests, and protecting those deemed important to society.

Among the criteria proposed for evaluating social interests, one of practical value was that each social interest should be evaluated according to its social role, i.e., its participation in constructing the social order and in contributing to society's social ideal. This, of course, should not conflict with human rights. The choice would also be influenced by the ideological stance of the ruling party or group.

Law as instrument of social change

Traditionally, law could only sanction the status quo. In contrast is the belief that law is omnipotent in all fields of social life. Neither view is justified since law, as any other social institution, may either contribute to social change or sustain the status quo. In both cases, the legislative policy is purposeful and should be based upon scientifically justified prediction of its effects. Since law does not function within a vacuum, but interacts with social, cultural, and economic factors, knowledge of the social reality becomes a pre-requisite to legislation. This knowledge can be acquired only if the phenomenon is studied dynamically, i.e., as it exists and interacts within its social context.

Assessing law as an instrument of social change goes far beyond the traditional legislative practice of drafting laws. The following crucial scientific processes are performed prior to drafting:

- comparative studies of legislation and policies
- recognizing the limitations of the legal instrument
- adequate socio-legal analysis of the field covered by the legislation
- becoming aware of the values of the population concerned and forecasting the expected psychological effects of the proposed innovation
- unifying all the information in a synthesis which would be used as core of the proposed legislative policy

Law and the belief system

The most resilient areas to social change through law are those related to strongly entrenched values in society's belief system. Legislators must become aware of the strength of such values, of the social forces which reinforce them and of the degree of flexibility possible for the introduction of change. The different possible repercussions must be carefully weighed. Past experience reveals that some laws promulgated contrary to deeply entrenched values and despite strong popular resistance succeed, through the use of coercive measures, in changing individual behaviour. Nevertheless, the values remained intact and people's attitudes persisted. Eventually, the legal grip loosened and traditional behaviour re-emerged.

On the other hand, if the belief system is undermined without being replaced by the alternative values, the whole social structure would be endangered. Scholars who witnessed Atatürk's forceful changes recorded the following observations: "We are facing spiritual chaos—the entire cultural heritage of a people was upset". Despite the difficulties encountered in such cases social change is possible. Some authors suggest that the law should be supported by other social institutions. It is also reported that if an individual's needs are changed, or if his learned habits of thought and behaviour cease to satisfy his need, adjustments in attitudes and values would possible.

Others argue that since individual belief is mostly derived group belief, strategies should envisage ways of influencing group belief. Group psyche—the result of interaction between individuals—can be influenced if changes are successfully introduced in the processes of individual interaction in society. These theoretical considerations serve as a background to our appraisal of law and population.

Comparative Theory and Practice in Law and Population

The legal position on population control is divided. In search of a rationale for intervention, it was suggested that family planning schemes would be an application of the Brazilian doctrine of social protection. This doctrine concerns itself with individual social problems which, if left unsolved, are felt to have a direct impact on other individuals and finally on society.

Another view claims that the right to life should be protected from the moment of conception. The proponents of this view are against any interference with procreation and propose restrictions on contraception and abortion. Others uphold the right to individual liberty and access to information and to means for family planning. This view allows the interruption of pregnancy on the woman's request. In contrast, the UN has adopted a balanced solution. The Teheran proclamation of 1968 stated that "parents have a basic human right to determine freely and responsibly the number and spacing of their children". The UN Declaration on Social Progress and Development in 1969 added that the "knowledge and means necessary" to exercise this right should be made available to parents.

The 1984 International Conference on Population in Mexico City urged governments to "ensure that all couples and individuals have the basic right to decide freely responsible the number and spacing of their children, and the information, education and means to do so". Thus, an equilibrium is set up between the individual right to determine family size, and the right of society to promote the concept and methods of family planning and avail them for individual choice. Due to the UN position on this issue, lawyers have become interested in contributing to population studies and policies. Some fore-runners in this emerging field claim the existence of a Population Law.

It is difficult to demarcate the boundaries of population law. Only a few have attempted to define it. Lee defines population law as "that body of the law which relates
directly or indirectly to the population growth, distribution and those aspects of well-being affecting or affected by population size and distribution.22

To support this view, reference is made to Waldheim's declaration that "demographic questions should be examined jointly with other factors such as: public health, education, employment, nutrition, housing and environment." The role of law in this area would not be limited to enforcing policies, it would also reflect, refine and coordinate policies. In addition to being an instrument of social policy, law can also be used as a catalyst for social reform.23

Another interesting attempt to define population law was the enactment of a General Law on Population in Mexico in January 1974. Article 1 stated the objective: "to regulate the phenomena that affect population in regard to size, structure, dynamic, and distribution in the national territory, with the goal of achieving just and equitable participation in the benefits of economic and social development."24

The flexibility shown in demarcating the areas covered by population law is a consequence of the wide range of factors related to population. The relevance of these factors would naturally vary in different cultures, and according to the prevailing socio-economic conditions.

An assessment of the implications of law on population problems in Egypt has contributed to better understanding the use of law in this field. The main findings are summarized below.25

**Marriage and divorce laws**

This section deals with the minimum legal age at marriage, polygyny, and divorce.

**The minimum legal age at marriage**. A survey of women's age at first marriage undertaken in several countries, has revealed that the average age ranges from 16 to 24 (or 25) years old. However, various social and economic factors, like poverty and low standards of education, push young girls into early marriages. Forty per cent of those fifteen to nineteen years old in Africa, thirty per cent in Asia, fifteen per cent in America, nine percent in the Soviet Union and seven percent in Europe were forced to have married.26

It is often suggested that the minimum legal age should be raised, assuming that this would contribute to reducing birth rates. However, in countries with high fertility rates such as Latin America, raising the minimum age would have no effect. Evidence there has shown that women marry later, and still have large families.27 This issue is influenced to a great extent by cultural and socio-economic variables as the following examples from Egypt show.

In Islam, marriage is a contract. The religion requires no formalities, yet the law states that the marriage contract must be registered in order for any law suit to be heard in court concerning the marriage.28

In Egypt, Law 78/1931 sets the minimum legal age for marriage at 16 years old for females and 18 for males. Law 44/1933 forbids registration of a marriage if either the groom or bride is below the minimum age. Officials violating this law are to be penalized.

According to official statistics in 1980, the average age of women at marriage was 22 years old. However, field study in the Law Population Project showed that the average age of the female sample was 18.7 years in rural areas and 19.3 years in urban areas. Official statistics show that those who married at an early age, and had a long married life, also had a high birth rate.

Should the law in Egypt adopt the frequent recommendation that the minimum legal age be raised as a measure to reduce the period of fertility? An important phenomenon (not revealed by official statistics) was manifested in a number of marriages which had been contracted in violation of the legal minimum age: 5 per cent of the rural female sample stated that they had married at the age of twelve; 7.7 per cent at thirteen; 6.7 per cent at fourteen; and 27.7 per cent had married at fifteen. Thus, the total percentage of rural women who had married before the minimum legal age (sixteen years) was approximately 42 per cent of the rural sample. A few of the male sample had married before the legal age.29

The law requires the local registration official (the Maazan) to receive proof of the age at marriage. However, if the groom or bride does not have a birth certificate, the law allows him or her to presenting a medical certificate estimating the age. This legal flexibility provides a loophole resulting in many violations of the minimum age requirement.

This is a situation of cultural lag: the law conflicts with social values and traditions, and consequently fails to achieve its intended goal. Early marriages result from the parents' wish to find suitable match for their daughters to preserve their chastity. Poor parents desire to reduce family expenses by marrying girls off early. Financial aid from the family makes these marriages possible. Illiteracy is also strongly correlated to early marriage.

Any attempt to raise the minimum age under these circumstances would be futile, considering the many socio-economic factors contributing to early marriage. Saneey reached a similar conclusion in Iran.30

**Polygyny**

The three main trends in Arab legislation concerning polygyny are:

- Polygyny is permitted without restrictions, except the religious requirement of "doing justice to them dealing equally between them." This occurs in Kuwait, Saudi Arabia, Sudan and Libya.

- Judicial consideration of whether "equality in treatment" is possible is required, as in Moroccan law. Syrian law empowers the court to forbid polygyny if the man is unable to provide for his family's needs.

- Polygyny is prohibited and considered a crime.

Egypt is among the countries which permit polygyny, but restrict it indirectly to avoid conflict with religious precepts. In Egypt, a law passed in 1980 (later replaced by act 100/1985) required the husband to state in the marriage contract any existing marital ties, and required the registrar to inform the previous wife(ves). An existing wife is entitled to ask for divorce if she considers the new marriage harmful to her.

The Moroccan law entitles the women to insert in the marriage contract a clause prohibiting her husband to marry another. If the husband disobeys, the wife may
modern methods of fertility regulation. Only seven countries restrict access to family planning. One of these countries, Rumania, has a common government activity undertaken to influence birth rates. Several findings negate this hypothesis:

- 1970 official statistics show that 55 per cent of divorces occurred during the first three years of marriage. Naturally, women would have borne few children in this short period.
- Women who remarried were compared to women whose marriages were interrupted by divorce. During the same period, the divorced women had an average of 8.7 years of married life and 1.4 children. The married women who did not divorce had an average of 18.4 years of marriage and 4.2 children. In addition, divorced women spend 7.5 years unmarried before remarrying. These years, of course, shorten their period of fertility.

**Divorce**

Our study on law and population tested two hypotheses: that divorce contributes indirectly to population growth because wives believe that having several children stabilizes the family; and that divorce contributes to population growth if one or both partners remarry and have children. A sample of divorcees was nearly equally divided in opinion as to whether divorce could have been avoided had they had more children. Meanwhile, research shows that the rate of childbirth among divorced women was very low. In fact 61 per cent of the rural divorced women and 47 per cent of urban divorced women had no children—confirmed by official statistics.

The alternate hypothesis maintains that divorce contributes to population increase, if one (or both) of the couple remarries and has children. Several findings negate this hypothesis:

- Polygyny and procreation. In 1980, polygynous marriages in Egypt represented 2.5 per cent of all Muslim marriages. Of these, many were in rural areas, and motivated by the desire to have more children. Field research shows that polygyny was positively correlated with higher rates of childbirth. Polygynous marriages in rural areas had an average of 6.6 children, and 5.4 children in urban areas. In contrast, an average of 4.18 children were born in the total sample of married couples.

**Fertility regulation**

A recent study on law policies affecting fertility reveals that family planning services constitute the most common government activity undertaken to influence population growth. In 1965, only twenty-one countries supported family planning. By 1983, about 127 out of 166 countries supported the provision of contraceptives. Government support may take the form of services or financial assistance to private associations engaged in the field, or both. Thirty-two countries, including Japan, Syria and Greece, do not provide support, but also place no restrictions on family planning. One of these countries, Rumania, has a persistent policy. Only seven countries restrict access to modern methods of fertility regulation.

In Egypt, the first stage of government involvement in family planning was in 1962. At present, the President of the Republic presides over the National Council for Population. The main targets for current population policies are family planning, child care, female employment and literacy.

The bulk of family planning services is provided by rural and urban health centres under the Ministry of Health. Private associations under the auspices of the Ministry of Social Affairs contribute to providing additional services. They are financially assisted by the Ministry and international donors, and are exempt from fees and custom duties.

There are no restrictions on the production, importation and distribution of contraceptives, although some diaphragms, condoms and spermicidals are imported. Contraceptives are also manufactured locally by national and foreign pharmaceutical companies. The government facilitates raw material importation and no customs are levied. Contraceptives are dispensed in the family planning centres at subsidized prices, and sold in pharmacies without a medical prescription. Staff of government centres are given incentives for selling contraceptives.

**Voluntary sterilization**

Regulation of voluntary sterilization differs between countries. Some countries have special legal provisions permitting sterilization for family planning, e.g., Austria, Cuba, Czechoslovakia, Denmark, Spain, Turkey and Tunisia. A few other countries, like Burma, Chile, Iran, Saudi Arabia and Somalia, consider it illegal. Many countries have no specific legal regulations on sterilization—interpreted in favour of the operation—such as the UK, US, Canada, India, China, and Germany.

In Egypt, no laws regulate or prohibit sterilization. However, according to medical ethics, the written consent of both the one undergoing the operation and the spouse should be acquired. Legal action can be taken against the surgeon if he does not obtain written consent. The Islamic doctrine prohibits permanent methods of sterilization but approves sterilization on medical grounds.

**Abortion**

The Egyptian Penal Law (1937) takes a harsh stand against abortion. Abortion is punishable by imprisonment, whether it is performed by the pregnant women herself or by another person. If a medical doctor, surgeon, pharmacist, or midwife performs the abortion, the penalty is augmented to long-term imprisonment. Despite legal prohibition, abortion exists in Egypt and is widespread. In a study at Cairo University Hospital in 1969, Kamal reported that abortion cases constituted thirty-seven per cent of all cases brought to the hospital. Of these, thirty-five per cent were induced.

Abortion is performed where the mother's life or health is in danger. Abortions for economic and social considerations have become widely accepted, and in fact openly performed in some of the University hospitals. The situation presents a clear example of legislative lag, in which the law is outdated and lags behind the changing needs of society. Islam forbids abortion after 120 days of pregnancy when, because according to a hadith, the be-
gaining of life occurs. However, if the general rule that "necessity legalizes prohibitions" is applied, pregnancy may be terminated if it endangers the woman's life.

Islamic schools are divided over abortion during the first 120 days, with some prohibiting it except in cases of necessity, and some allow it if:

- the nursing mother's milk dries at the early signs of pregnancy, while the husband cannot provide a wet nurse. This has been interpreted by the Zaidiya school as allowing abortion in case of extreme poverty and inability to face the expenses of more children.
- the mother's health would be injured by pregnancy
- the baby is in an abnormal position suggesting a difficult delivery

Despite the flexibility of the Islamic rules, no steps have been taken to change existing legal prohibition.

Incentives and disincentives

The use of incentives or disincentives to influence behaviour affecting fertility is still controversial. Some nations, particularly in Latin America, have felt that it is inappropriate and instead stress voluntary fertility regulation programmes. Other countries' laws state explicit incentives, such as allowing only three paid maternity leaves to a government employee, and limiting child allowances to three children. In Egypt, taxation laws allow an exemption for "having one child or more." The Tunis Symposium on Law and Population offered a balanced view, recommending that:

- Any benefits or services provided as incentives to family planning be in addition to the benefits and services to which all persons are entitled as basic human rights.
- Governments ensure that any benefits or services withheld or withdrawn as disincentives in family planning do not infringe upon basic human rights.

Appraisal of Efforts in Law and Population

Within the context of Egyptian population policy, lawyers' contributions to the field of population have been modest. Law has contributed to the area of fertility regulation by describing the structure and organization of family planning agencies, and has removed restrictions on contraception. The legal tool has also been used to stipulate national policies on population.

However, lawyers have made no attempt to change some laws which clearly conflict with population policies, such as the restrictive laws on abortion. Nor have they contributed to the formulation of population policies.

Decisive Factors for Law and Population

Reappraising legal involvement in population matters involves answering such crucial queries as: what are the hurdles which face population policy? Where the problems lie, and which sector of society they concern. Why these issues are relevant to that particular sector. The following indicators may serve to answer these questions.

Education and fertility. There is a strong correlation between the levels of education and the rates of fertility. In 1960, statistics revealed that wives who were illiterate or with only basic literacy (read and write but do not hold a certificate) had the highest average number of births—4.47 and 4.95, respectively. The average dropped to 3.56 children among holders of a primary certificate; and to 2.21 among holders of secondary certificates. University graduates had only 1.82 births on average. Our research on law and population confirmed this correlation.

Illiteracy. School drop-outs are the primary source of illiteracy. A recent study revealed that the two main causes are low standards among primary school students (usually underprivileged), and the need for child labour to increase family income. These reasons accounted for 60 per cent and 31 per cent of drop-outs, respectively.

Infant mortality. High infant mortality is correlated to the desire to give birth to a large number of children. In advanced countries, the rate of infant mortality is fifteen per thousand, while in developing countries it ranges between ninety to one hundred per thousand. In a few countries, it reaches between 125 and 149 per thousand.

In Egypt, the infant mortality rate is about eighty-five per thousand. Our research findings show that 78.3 per cent of wives in rural areas, and 52 per cent of wives in urban areas have suffered the death of at least one infant. In addition, there is a high percentage of miscarriages among the underprivileged—35 per cent in rural areas and 39 per cent in urban areas. This contributes to women wanting several pregnancies.

Social security. The main goal of social security is to provide maintenance for individuals and their dependents who are in need, because of sickness, unemployment, old age or other infirmity. In some developing countries, such schemes fall short of providing for the minimum standard of living. In such cases, parents rely to a great extent on their male offspring to provide security for the future. For instance, 72 per cent of rural women and 30 per cent of urban women stated that a mother with only female offspring should continue to bear children until she gets a son. This sector of the population—and under prevailing conditions—it would be futile to point out the utility and desirability of birth control.

These indications, in addition to research finding in Egypt and in most of the developing countries, show a strong correlation between the hurdles which face population policies, and the socio-economic problems suffered by the underprivileged sectors of the population. In this context, the Mexican Population Law which endorsed the promotion of "the full integration of marginal groups in national development" is particularly relevant.

Proposed Contribution to Law and Population

If we concede that the underprivileged should be the main target for population policies, what constitutes a relevant policy for this sector of society? The point of departure is the assumption that parents have a basic human right to determine freely and responsibly the number and spacing of their children.

A United Nations document on the status of women and family planning suggests that: "The responsible decision takes into account, among other factors, the right of every
child to be a wanted child, and the needs of the community as a whole. This clarification overlooks a common situation in developing countries wherein the child is wanted, although this may conflict with the interests of society. For example, child labour may be an essential source of income and having a large number of children could be the only source of security for parents in their old age. In such cases, parental decisions to have a large family should not be considered irresponsible or irrational.

Among the underprivileged, deprivation constrains choices, and needs dictate decisions. What is meaningful to them is that which proves functional. If a change of attitudes is sought, then there has to be a prior change in policy orientation and emphasis.

Every policy related to population (such as development health, education, social security) should be formulated in accordance with the precepts of Social Justice. This is not just a simple application of the principle of equality. Rather, the proposed approach seeks to have far-reaching impact.

Equality or equal opportunity as criteria would not contribute to social justice for the underprivileged. Social justice should be understood as distributive justice based upon equity. Social justice then, is a general approach to formulating socio-economic policy. At the same time, it is a particular goal to attained within each policy issue related to law and population.

Adopting this approach to dealing with the underprivileged, entails a different outlook and different goals, and would produce entirely different consequences from other approaches. For example:

- It was thought that economic growth would, by itself, produce enough commodities to improve the population's standard of living. This proved to be a myth. With such an approach, deprivation persists. A recent reminder of this are the serious social repercussions confronting conservative policies in the West, the result propagating economic growth but allowing mass unemployment.

- The Mexican Law of population recommends promoting "the full integration of marginal groups in national development". If government policy is geared towards social justice, the nature of development would be questioned. Would marginal members of society share in the fruits of such development, or would they be integrated into an exploitative development. In this context, the question should be raised: "Development for whom?"

- Providing basic needs also raises such queries. Is it conducive to a distribution of amenities based upon equity? Or is the provision based on a strategy of coping and living with poverty?

This proposed approach to equity entails restructuring the components of social policy, especially concerning the underprivileged. Contradictions and conflicts between the components of socio-economic policy must be avoided, requiring clear vision and purpose. Sometimes, population policies are foiled by unwitting or unintended policies in other factors, such as school books portraying the family as a large, extended entity, or the mass media propagating traditional values. There are two pivotal elements of a policy based upon equity:

- providing a service (or other component of socio-economic policy) that will be considered functional for the underprivileged
- implementation or delivery should be based on a process of outreach to the underprivileged

Within this context, the following policy areas are of special importance.

The Field of Education

Population policies in developing countries often refer to the "elimination of illiteracy" as a primary goal. Statistics reveal that literacy (reading and writing without holding a certificate) does not bring about a change of attitude towards procreation. The same lack of impact has been observed in other areas, such as polygyny.

Taha Hussein, the prominent Egyptian intellectual and past minister of education, has pointed out that literacy as a goal is ineffective. A person who undergoes such training, he added, "would acquire insignificant knowledge, would be incapable of objective thinking, easily influenced and dangerous to himself and to society." School drop-outs, as mentioned previously, are a problem in various countries.

The crucial issue in education is its relevance to the underprivileged, the quality provided, and the educational goals which are sought. Similarly, social security schemes would be ineffective if the pensions are below the standards of living. Health education and services would also have no impact unless the services (including family planning) reaches out to the underprivileged, and takes account of their values and traditions.

Conclusion

Legal involvement is necessary to achieve equity and to translate this goal in socio-economic and population policies and social legislation. By adopting the proposed approach, the field of law and population would acquire a new countenance, and the components of this field would be functional, thus contributing to reality which would be meaningful to the bulk of the target population. Only then, can we envisage free and responsible parenthood.

Notes

2. Those below 15 years and those above 64 years old correlated to the economically active population.
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