5 GOVERNMENT INTERVENTION IN DRY REGIONS

Dick Foeken & Ton Dietz

5.1 The contents of government intervention in dry regions: a general introduction

In many development-oriented socio-economic studies the emphasis is on a 'developmentalist' interpretation of government activity. But governments are not only and not mainly concerned with 'development'. And behind the 'development-inspired' activities a large variety of intentions can be discovered.

Studying the intentions behind government policies in dry areas throughout the world, a student research group from the Department of Human Geography differentiated eight major types of approaches (ISG, 1984):

- 1 Neglect: although a government formally claims the responsibility for a particular area, there is no active government presence and no government activity.
- 2 Repression: the government is only interested in pacification, in maintaining (its) law and order. Military and police activities dominate the government presence. Strategic roads are being built, often using forced labor.
- 3 Expropriation: the government is mainly concerned with acquisition of tax money and/or forced delivery of local produce.
- 4 Labor migrant supply: urged by labor-demanding companies (settlers, mining companies) or foreign exchange needs (in the case of longdistance labor migration), the government stimulates labor migration, by taxation, direct recruitment, training for non-local jobs, sometimes by the establishment of banking facilities for labor migrant remittances.
- 5 Changing the conditions for production and distribution: the government is trying to create better conditions for growth or development, without being involved in production and distribution itself. There are various possibilities:
 - to create better material conditions for production and marketing, for instance by roads, electricity and water facilities, irrigation works, credit facilities;
 - to improve the 'human resources', by expanding productionoriented education and training facilities;
 - * to change relations of production, for instance by land reform or land ownership regulations, by labor laws;

- to change the distribution of the population, for instance by resettlement schemes.
- 6 Changing the organization of production and distribution: introducing more productive means of production, a more efficient organization of production and distribution, a better marketing system. Often this will mean the introduction of types of production which did not exist yet in the area (irrigation, water harvesting, fertilizers, new seeds, new breeds, mining, industrial activities).
- 7 Improving the consumption/welfare situation for the population as a whole or for particular groups. The government supplies food for work or employment projects, gives subsidies on consumer goods and on services in the sphere of general education, health care, drinking water, housing. Three subgroups can be differentiated:
 - emergency assistance after calamities like droughts, to avoid starvation and to repair damage being done (many disaster rescue and famine relief operations);
 - a basic needs strategy: guaranteeing a minimum level of food, housing conditions and services;
 - * a 'western' welfare strategy: guaranteeing a minimum level of income (minimum wage regulations, unemployment benefits, pensions, basic income) and access to a number of basic public services (not necessarily free of charge).
- 8 Protecting the environment: the government protects wildlife, and forests against human exploitation; land use is regulated to prevent soil erosion, soil quality reduction, water pollution.

5.2 The institutional form of government intervention in dry regions

One of the main themes of this study concerns the ways in which governments intervene in dry regions. Are there differences between the five countries and the five fieldwork areas in this respect? And if so, to what extent can these regional contrasts be attributed to a) the contents of interventions and b) the form of government presence and interference?

Although these two aspects often are closely related, with government interventions and their results being influenced by the degree of government presence, there is an important difference between the two. Government presence is a structural phenomenon and in this study refers to the territorial organization of the various parts of a country's government and administration. Institutional interventions, by contrast, are elements of policy making and the implementation thereof. Here we touch upon Grindle's distinction between what

he calls 'context' variables and 'content' variables. The context must be seen as the political and administrative environment in which policy implementation takes place. Of equal importance for the implementation process, and thus for the actual results of public policy, is the content of the specific policy (Grindle, 1980, p. 5). With implementation is meant "an ongoing process of decisionmaking by a variety of actors, the ultimate outcome of which is determined by the content of the program being pursued and by the interaction of the decision-makers within a given politico-administrative context" (Ibid, pp. 5-6).

The first context variable is related to the means of intervention. What means does a central government have to intervene, to impose its strategy or policy? What means do local administrators have to effectuate the stated policy goals? Above all, they need material means (money), for which they are more or less dependent on the higher echelons in the bureaucratic hierarchy. The budget which local administrators have at their disposal is, among others, dependent on: (1) how the national budget is spread over the various ministries; (2) how each ministerial budget is divided among the various departments within the organization, (3) which departments are active at the local level and implement what program(s), (4) what local means the local administrator can collect and use. In general, the lower the position of the administrator in the periphery, the smaller his budget is likely to be. However, the success of any implementation process at the local level is not only dependent on material means, but also on immaterial means. Grindle (1980, p. 12) uses the term "compliance" to denote the support from groups having interests in the policy program. Of course, the local administrators responsible for the implementation of the program have to comply with the policy. If they do, they have to assure themselves of the support of local interest groups or elites. If there are conflicts of interest between local government and other local elites, implementation may easily fail. In such cases, the bargaining power of the administrator will, once again, depend on his material means. Even if there is no conflict of interest, implementation can only succeed if both elites support the policy program.

An important second context variable concerns the decision-making room for local administrators and interest groups. To what extent can they manipulate the implementation process? This depends on the bureaucratic and geographic distance separating local administrators from the central government, and on the measure of control which the central government has over these local areas. Various authors stress that the political center can - and does - impose its will on the periphery, even though this is sometimes considered to be a vertical, i.e., bureaucratic, process (e.g., Schaffer & Huang, 1975), sometimes a horizontal, i.e., geographic, process (e.g., Coleman, 1977), and sometimes both a bureaucratic and geographic process (e.g., Coleman, 1977; Heeger, 1974). According to Heeger and Tarrow, there often is some reciprocity in the relationships between central and local elites. Heeger (1974, p. 60) stresses personal relations between patrons and clients (clientelism) within ethnic

groups, within and between families, etc. The central elites can use such relationships to send goods and services to the periphery in exchange for status and, if necessary, for electoral support. Tarrow (1977, p. 29), however, points out that this reciprocity becomes less relevant with increasing physical and bureaucratic distance between the center and the periphery. In that case, communication between the two is more difficult, which brings him to hypothesize that the more peripheral the periphery is, the greater is the decision-making power at the local level.

The third and last type of context variable which is important concerns the relationship between the local population (often the target group in public policies directed toward dry regions) and local administrators. In theory this relationship should be a reciprocal one: local administrators must be responsive to the wishes and needs of the population and the population must have access to the local administration. Otherwise, implementation of the programs is likely to be troublesome or may fail altogether. Harvey et al. (1979, p. 61) conclude that the distribution of values by government institutions is biased against the "small" ("the poorer, the more distant, etc."), and that it is the nature of bureaucratic access arrangements (access rules, exclusions, costs, etc.) to create that bias. For that reason, the results of the implementation process are always unexpected and unmeant: "implementation results in failures, a regressive exacerbation of existing inequalities and dualities, an exploitation of access opportunities for the more favored, possibilities of corruption and in some cases an increase in dependency" (Ibid, p. 61).

In the case study chapters various aspects of the context of government intervention will be discussed. To understand the contents of government policy in these particular case study areas, it is useful first to look at the general characteristics of the contents of the government interventions at a scale of the dry regions in each of the five countries together.

5.3 Government policy in Togo's dry areas

In Togo, except for a very narrow stretch of land directly on the southern coast, the savannah region in the North is the only semiarid/subhumid area. Attention in this paragraph is therefore almost exclusively directed to this region.

German colonization of Togo from 1895 until 1914 did not aim to develop the natural resources of the northern part. Its agricultural potential was not favorable enough to grow profitable crops like coffee and cocoa. Moreover the distance to the coast was long and roads poorly developed. Thus, commercial production of other crops would not be profitable either. However, the region was attractive to the Germans because it was a transit-area for African longdistance trade. The Germans tried to tax this trade and sell European goods to



the long-distance traders. The only local product from the north sold to southern Togo and to the neighbouring Gold Coast was livestock, because there the demand for meat was rising as a result of rising incomes from export production.

During the French colonial period (1914-1960) heavy taxation, forced labor and forced production of groundnuts caused considerable labor migration from the savannah region to the Gold Coast. Export production remained very limited because the colonial administration skimmed off profits and the lack of development of infrastructure hampered transportation to the coast. Livestock, as food for the coastal Togolese and Gold Coast markets, remained therefore an important commercial product. But in general the region was hardly commercialized and market integration with other areas as well as internal commoditization was very limited.

By the end of the French period an important shift took place in government policy towards the north of Togo. Due to the rise of nationalism, more in particular to the desire of the new political parties to win votes in this neglected and economically unimportant part of the country, government programs started to pay more attention to the well-being of the inhabitants and to the negative effects of colonial policy. In practice this meant the spread of health and education facilities, modernization and commercialization of agricultural production, development of infrastructure and even a wavering start of soil conservation activities and construction of small barrages in semi-permanent streams.

After independence and two coups d'état in the 1960s (bringing northerners in the political center of Togo) the north suddenly received a lot of 'developmentalist' government attention. Counterbalancing regional inequality and a more equal spread of prosperity became important objectives. Reality was less sunny, though. Industrialization remained almost completely concentrated in the south and most investments in the struggle against regional inequality were directed to the Kara-region on the savannah region's southern border. However, also the northern part of the savannah region has received its share of development investments. 'Developmentalism' mainly came in the form of integrated rural development programs, which were financed to a large extend by foreign aid. Moreover, large-scale modernization of infrastructure has integrated the northern region more closely with other parts of Togo.

From 1976 onwards the savannah region was planned to develop as the supplier of food, mainly cereals, beans and livestock to the national market. But although integrated rural development programs have managed to raise yield per acre considerably, population has grown too and in the 1970s and 1980s there have been dry periods and drops in crop production. In fact the result of this is that, with livestock as an exception, the savannah region has become an

importer of food in stead of an exporter (De Haan 1988, p.173). On the other hand because improvement of infrastructure did lower transportation costs to the coast and because agricultural development programs were mostly focused to export crops, enabling the peasants to pay off their inputs bought on credit, export production has become more and more important. First the emphasis was on groundnuts, later, from the 1970s until recently, the emphasis shifted to cotton. In fact the savannah region is by now the most important cotton producing area in Togo.

Infrastructure and agriculture have been the major development concerns for the northerner-dominated Togolese government during the last decade. The development of non-agricultural activities, education and health care, water development and housing conditions did not get as much attention.

5.4 Government policy in Kenya's dry areas

Unlike the other four examples, dry areas in Kenya are pastoral areas to a large extent. Before 1880 the pastoralists were the predominant force in Kenya, both in the drylands and in more humid areas. Especially the Maasai were controlling large portions of the territory. Dramatic droughts and diseases between 1880 and 1900, followed by a British colonial policy favoring White settler interests, resulted in a complete reversal of the fortunes of the pastoralist societies. After Independence (1963), the government of Kenya also gave priority to sedentary agriculture, especially in the humid areas of the former 'White' highlands and in the areas of Kikuyu and related ethnic groups. In most of dry Kenya the inhabitants had to cope with a harsh policy on top of a harsh environment. We will describe the various phases of government interference, using four historical 'breaking points': 1938, 1954, 1965 and 1976.

Early colonial policy was mainly concerned with 'pacification', separation of 'tribes' and imposition of definite boundaries between them and their animals. The whole of Northern Kenya became a closed zone, with restricted movement, a situation that would last until 1968. Existing marketing networks between pastoralists and between cultivators and pastoral people were forced to disappear. In the early part of the century the pastoralists, the Maasai in particular, lost an important part of their grazing area, both in the semiarid and in the more humid areas. In the dry areas large-scale settler enterprises were developed, livestock ranches and sisal estates. These enterprises started to attract large numbers of labor migrants from the densely populated humid areas. In the semiarid 'African Reserves' policies to attract labor migrants were not very successful yet, despite taxation and - in the more densely populated areas - direct labor recruitment. Although the British had appointed African chiefs, their effective power to enforce alien laws was very limited. Mostly the British did not bother too much about 'lawlessness' in the

more remote dry areas. Now and then military and police actions were organized against 'cattle thieves, tax defaulters, boundary trespassers and other criminal elements'.

In the 1930s - and especially during the 1931-34 drought - environmental degradation of the land was increasingly becoming an issue among government employees dealing with the drylands. Baringo, Maasailand and the Akamba area southeast of Nairobi were thought to become heavily overpopulated and overstocked. The solution was called 'destocking'. In 1937 herdsmen were forced to sell part of their stock to a newly established foreign meat canning factory for very low prices. The 'Akamba Political Protest' following this campaign was so widespread that the government was forced to use persuasion in stead of violence. During the war cattle prices went up dramatically, resulting in a clear marketing response from the cattle owners. After the war, when prices slumped again, destocking could no longer be contemplated as a major 'solution' and other methods of ecological regeneration had to be found. Some grazing areas were closed to facilitate natural recovery or reafforestation. Other areas were registered and enclosed, hedges were planted against run-off and land was terraced along contours. These were the domain of the African Land Development Board, established in 1946, also starting vaccination campaigns, water development and organized stock marketing. In 1945 also a National Parks Ordinance created the legal framework for a large number of parks and game reserves. The ecological problem and destocking were not the only items on the agenda of the time. The economic recovery after the Great Depression resulted in an increased demand for wage labor. Before the war, labor migrants were predominantly coming from ethnic groups in humid areas. During the war many men from the semiarid areas were recruited for Army Service. During the Mau-Mau guerrilla (1950-56), white employers regarded Kikuyu workers as too dangerous and began to replace them by newcomers, among them many men from the relatively nearby semiarid areas. Soon the Akamba areas Kitui and Machakos as well as Elgeyo-Marakwet district were among the areas with the highest labor migrant participation in Kenya.

The year 1954 is generally regarded as a major turning point in the colonial attitude towards African agriculture in Kenya: from a settler-biased policy to more attention for the 'African Reserves'. Now inadequate land-use methods and traditional land tenure patterns became the most important fields of interest. Pastoral land use was intensified through rotational grazing schemes and through water development. 'Strong government', using grazing guards, fines and imprisonment made the schemes very unpopular. They came under severe attack by African politicians at the eve of Independence. Grazing scheme policy during the 1950s was coupled with an outspoken marketing policy, using stock quota, stock routes, fencing, holding grounds and livestock watering points. About the arable use of the semiarid lands the policy ideas

were not all that clear during the late colonial period, despite the fact that an increasing number of people were becoming agro-pastoralists. There was some government attention for indigenous irrigation and its commercial potential. Mau prisoners were used to start minor irrigation projects. Agro-pastoralists were encouraged to grow 'famine crops' (cassava and sweet potatoes) and the first results of plant breeding became available, drought-resistant ('Katumani') maize varieties. Besides, the 1960-61 drought resulted in more attention for food crop monitoring and in the first large-scale famine relief operation.

After Independence, tribal and even International boundaries broke down as well as regulations regarding stock quota and stock offtake. With an expanding beef-consuming urban population, measures had to be taken to safeguard commercial beef production. A specific Livestock Marketing Division was organized within the Ministry of Agriculture. Ideas were formulated to organize a stratified beef industry: arid areas would raise calves; after that ranches in the semiarid areas would fatten the cattle; in the vicinity of the market, in more humid surroundings, the fattening would be finished, producing heavy-weight, high-quality animals. A lot of emphasis was put on the Maasai area. Here a process started after Independence which was at that time regarded as rather dangerous politically. Humid fringe areas were rapidly adjudicated as individual holdings, owned by non-Maasai. Quite a number of Maasai leaders also succeeded to register large tracts of semiarid land as individual ranches. To stop this process a 'group ranch' policy was thought to be more adequate. Supported by the World Bank the 'Kenya Livestock Development Programme' was launched to develop these group ranches. Crop cultivation, however, got hardly any attention from government circles, although it was estimated that only one quarter of the four million Kenyans living in the drylands were primarily depending on livestock at that time. Most of these cultivators could be found in Machakos and Kitui, where a process of semi-proletarianization was well under way. A large minority of the households relied on remittances of male labor migrants and on the (inadequate) production of food for home consumption by the women and the children. A fast-growing population - in the 1970s 4 per cent increase per year - increasingly endangered the quality of the land available for cultivation. The breaking down of fallow requirements resulted in productivity decreases and soil erosion. Land use competition between pastoralism, cultivation, wildlife and wood production resulted in severe conflicts. Droughts in 1971-73 and again in 1976 opened the eyes of many civil servants about the fragility of living in these drylands.

After 1976 the relative neglect of the drylands in the government budget came to a halt. Supported by FAO/UNDP and USAID projects were started in dry areas, labelled 'integrated rural development', with a lot of emphasis in practice on water development, education and health facilities. Dry-land food production had to be increased by higher-yielding, drought-resistant varieties of maize, sorghum and millet. A number of small-scale irrigation projects were started with the aim to provide local food and employment opportunities (partly for marginalized former pastoralists). A few large-scale irrigation projects were launched both for local food production and for cotton production (e.g. the Bura Irrigation Project). The emphasis of production interventions clearly shifted from livestock to arable farming. In Machakos an all-embracing 'Machakos Integrated Development Programme' was started in 1978, with EEC support. Soon it was part of a nationwide 'Arid and Semi-Arid Lands Programme', covering almost all dry districts, each district sub-program adopted by a particular donor. This parcelling out of dry Kenya among foreign donors resulted in a patchwork of approaches. ASAL Programmes mostly finance a large number of small, scattered projects, to be implemented by the existing government machinery and with a strong emphasis on 'popular participation'. Livestock only got meagre attention. Most emphasis was put on agricultural development, water development, soil conservation, education and training. The ASAL Programme approach had a following wind in Kenya since the launching of the 'District Focus for Rural Development', in 1983. Large numbers of additional civil servants were posted to the rural districts from Nairobi and the District Development Committees became important planning agencies. More or less against this emphasis on district autonomy, a number of River Basin Authorities were also created at the end of the 1970s. They had to initiate and co-ordinate region-wide large-scale development activities, which were in many respects the opposite of the ASAL and District Focus approach. In the most recent Development Plan (1989-93) a change of attitude can be noticed concerning livestock development after a decade of government neglect. Employment creation in the non-farm rural sector also gets much more attention. To enable a stronger integration of the various government policies and to end the situation of a donor-centered 'piece-meal treatment', a separate Ministry of Arid and Semi-Arid Lands and Wastelands Development was created in 1989. It remains to be seen whether in the era of structural adjustment, privatization and cost recovery the 'developmentalist attitude' towards the drylands will survive. Another possibility is that a multitude of nongovernmental organizations, already present in their hundreds, will take over a lot of activities in the 'development domain' from the Kenyan government.

5.5 Government policy in Morocco's dry areas

Moroccan macro-economic and regional policy strongly tends to differentiate between the central and fertile plains on the Atlantic Ocean, 'Maroc Utile', and the dry and mountainous outer regions, 'Maroc Inutile'. However, at the beginning of the French colonization (1912) the majority of the population lived in these outer regions with limited agricultural potential. During the French period mainly the economic potential of 'Maroc Utile' was developed. At first especially rain-fed grain cultivation received attention and after that irrigated agriculture and mining of phosphate. This resulted in large flows of internal

migrants from the densely populated outer regions to the central plains, changing dramatically the country's population distribution.

After independence (1956), the new government gave priority to the development of infrastructure in order to integrate the Northern Rif area with the rest of Morocco. The Rif had been colonized by Spain with an attitude between neglect and repression. The Rif area was clearly among the poorest regions of the country. Growing awareness of regional inequalities in the level of living seemed to give rise to a change in policy. However, attempts in the early 1960s to give more attention to education, health facilities and agricultural reforms in the outer regions and to the development of rain-fed agriculture, were brushed aside by a policy favoring industrial development in the cities and large-scale irrigation projects, producing for the (European) export market in the central region, e.g., World Bank-supported construction of about 30 barrages, planned to irrigate one million hectares by the year 2,000. Between 1965 and 1977 approximately 80% of the agricultural investments and more than 40% of the total government investments went to irrigation. With regard to the drier regions with rain-fed agriculture, the government only wanted to guarantee a minimum level of food and work, by means of large-scale supply of grain, relief works and food-for-work projects. In order to maintain a continuous food supply, both for the cities and the drier regions, grain was imported from Canada, the U.S.A. and France in large quantities.

In the mid-1970s the Moroccan government had to break with its policy of agricultural neglect of the outer areas. A crisis was caused by deteriorating terms of trade, negative balances of payment, loss of part of the Western European market to new members of the European Community like Spain, Portugal and Greece and political unrest in the cities, which were full of unemployed migrants, who had left the neglected rural areas. Two Army coups that failed also played their part. Rural areas instead of cities, and rain-fed agriculture instead of irrigated agriculture received priority in the new development plans from 1978 onwards. Above all, the Moroccan government wanted to stop rural-urban migration by improving living conditions in the rural areas. That is why education, health care, electricity, drinking water and housing facilities are being improved. Secondly in those dry regions with relatively favorable climatic conditions for rain-fed agriculture (annual rainfall between 400 and 800 mms), wheat and barley production is stimulated in large integrated rural development projects. These projects aim at the development of infrastructure and basic facilities for the rural population, besides increased grain - and currently also meat - production for the national market. The new policy seems to be successful if one looks at the current population increase of rural centers and towns, which exceeds the average population growth in Morocco's large cities.

5.6 Government policy in Mexico's dry areas

Mexico's dry regions differ widely in population densities, ethnicity, urbanization and level of economic development. The approach of the Mexican government can be characterized as mainly a sectoral policy, an agricultural policy in particular. One can even speak of an 'agricultural bias' in Mexican rural development programs, completely overlooking the non-agricultural productive sector (Druijven, 1990) and the peasantry as a mass of consumers. National, macro-level government policy has a major influence on these sectoral policies. Between the variety of sectoral policies and sub-policies hardly any coordination exists and little continuity. A strong tendency to identify new initiatives with the President means that after every 'sexenio' (six-year presidential periods) everything changes and on-going projects are never concluded (a tendency known as 'proyectismo'). Macro-level policy in Mexico can be described by using the following periodization.

In the first two or three decades after the Mexican Revolution (1910) the redistribution of landed property was the most important item on the new government's agenda. However, the land reform failed to result in a drastic increase of agricultural production, which was regarded as a must to feed the fast-growing population and to support an (import-substitution-) industrial breakthrough. In the Central Highlands of Mexico in particular an extremely fast urbanization process and agricultural stagnation were each other's partners.

During the late 1940s the Mexican government, inspired by the success of the US Tennessee Valley Authority, tried to develop the coastal areas. Quite a number of river basins ('cuencas hidrologicas') were seen as natural development regions. Large-scale and expensive projects to make dams, dikes and artificial lakes resulted in a sharp increase in irrigated land and in large-scale production of electricity. Part of the development goal was to settle people from the densely-populated Central Highlands in these Coastal river basin areas. But despite the colonization of these areas it did not result in a major population redistribution, large enough to bring down the population in and around Mexico city. From a planning point of view, the river basin as a basis for development policy were soon regarded as a failure, because of the often extreme internal differentiation.

Considerable government investment in irrigation development in the dry northwestern and northern parts of Mexico became the major element of agricultural policy. Between 1940 and 1968 between 80 and 90 per cent of the total agricultural budget was spent on irrigation. The Mexican government wanted these irrigated areas in the north to become the input producers for agroindustry and the suppliers of foreign exchange to finance the import of industrial capital goods. Land owners in the north became wealthy farmers, partly based on government subsidies. The peasantry and the co-operative cultivators (the

'ejidatarios') of the Central Highlands, however, were hardly supported to increase their irrigated area. They remained the suppliers of cheap food for the urban population. The Green Revolution of the early 1960s further accentuated the dichotomy. The hybrid maize varieties had to be accompanied by other inputs. Only a minority of the cultivators, and mainly those in the North, were able to gain from the new technological developments.

After 1965 Mexico was confronted with an agricultural crisis with two sides. On the one hand an increasing volume of basic food like maize, vegetables, oilseeds and dairy products had to be imported. On the other hand the peasantry was impoverished by the very low prices for their agricultural products. Growth of agricultural production clearly lagged behind the population growth and the impoverished conditions in the rural areas created a flood of migrants towards the cities, further increasing the food demand. In the national agricultural policy the peasantry was greatly overlooked.

In 1967 the integrated rural development program 'Puebla' was started. This program tried to show that an appropriate application of the agrarian technology of the Green Revolution could diminish the problem of rural poverty and stimulate the commercial production by the peasantry. Cultivators which had been neglected up till then could gain access to credit and fertilizers, if they had enough irrigated land. But not all areas had irrigation possibilities and not all cultivators in irrigated regions had access to irrigated plots.

When it became clear that many peasants in the rain-fed areas of the drylands could no longer cultivate their land or refused to continue, and the agricultural crisis was far from solved, the government started to become involved in development policy in those rain-fed areas. During the 1970s and early 1980s the dry areas were suddenly confronted with many rural development programs, some far beyond agriculture alone. Mexico's oil boom resulted in an expanding government budget and in a government attitude towards the impoverished areas which moved from neglect to a 'welfare ideology'.

From 1973 until the mid-1980s 'PIDER' was a large-scale program of 'integrated rural development' in 140 'micro-regions', which were mainly located in the semiarid areas. Supported by the World Bank the program put an emphasis on productive investments. Each micro region was meant to be a planning unit for projects in agriculture, infrastructure, health care and education. Originally the program was centrally planned, with the involvement of fourteen federal government institutions. In 1981 the program was decentralized to the level of the states.

Between 1977 and 1980 the Ministry of Agriculture and Irrigation (SARH) had its own 'rain-dependent districts' program. Technological innovations had to be geared to the needs and possibilities of peasants in rain-fed areas. During the same period a specific program was directed at regions that were regarded as being most marginal, often very isolated and with a meagre development potential. The major objective of this 'Coplamar' Programme was to improve the education, health and other cultural facilities in those areas, which happened to be the Indian areas ('Indigenas').

During the 'second oil boom' (1980-1982) an ambitious policy was launched to realize a total national self sufficiency of basic food (the 'SAM' program). Using a system of subsidies the production, distribution and consumption of basic food had to be changed considerably.

The year 1982 can be regarded as a major turning point after a decade of unprecedented attention for the poor dry areas. Despite the oil boom income, the government budget had rocketed beyond the means in such a way that the enormous foreign debt created a financial crisis in 1982. During the presidency of Miguel de la Madrid (1982-1988) the debt problem and lack of political support lead to a breakdown of all government-inspired rural development initiatives in the dry areas. The 'PRONADRI' plan in the 1983-88 National Development Plan, with explicit attention for the dry lands, was never implemented.

5.7 Government policy in Spain's dry areas

Over the years, the Spanish government has intervened in the country's dry areas in numerous different ways. This variety results from the fact that Spain's dry regions differ notably from one another in terms of their socio-economic, demographic and physiographic characteristics. Interventions in the semiarid Madrid region obviously deviate from those in such partially depopulated and erosion-scarred mountainous areas as the Sierra Morena and the Montes Orientales. And in the dry coastal plains of Alicante and Murcia, they are different again. Below, attention is focused on the types of interventions found mainly in the comparatively backward rural areas with a dry climate.

Broadly speaking, the objectives pursued by the central government in dry rural areas may be divided into five groups: 1) promotion of irrigation, 2) provision of drinking water, 3) erosion and flood control, 4) enhancement of agricultural productivity and 5) socio-economic development.

Government efforts to develop irrigation have a long history in Spain, dating back to ancient (Roman and Moorish) times. During the first half of the Franco period (1939-1975), large irrigation projects served to reduce rural unemployment and poverty (the 'hydraulic policy'). By means of land settlement schemes, areas previously not used for cultivation were brought into production in order to enable landless agricultural laborers to have their own farms. Thus,

a class of small private farmers came into being, next to the large landowners who dominated the Spanish countryside for a long time. In this period of 'autarkia' the fascist ideology favored small farmers as a social class. Landless laborers were regarded as politically dangerous. Their dissolution into a peasantry was thought to be a remedy against socialist and anarchist uprisings. During the 1960s, however, Franco's irrigation-cum-settlement policy changed. It was aimed less at raising the number of small farmers than it was to increase overall agricultural productivity and efficiency. Part of Spain's newly irrigated land in the semiarid zone became the hub of export-directed production of fruits and vegetables. This trend was continued during the 1970s and 1980s, with government policies emphasising modernization and mechanization, now also including the upgrading of old irrigation systems. The latter involved replacing simple hand-dug ditches by concrete channels and conduits, and installing pipes and drip-irrigation systems. In latifundismo-dominated regions like Andalusia, such infrastructural improvements served the additional purpose of reducing the high rate of unemployment among the many landless day laborers.

Not long ago, countless villages in the drier parts of Spain had little or no drinking water for part of the year. Since the 1960s, when the government decided that every community ought to have an adequate supply of water throughout the year, much has been done to alleviate this problem, and today virtually every village has its piped water system. Even so, during a period of excessive drought, the local wells (and river-fed reservoirs) may fall dry, leaving the villages without any water. When that happens, the government mobilizes a fleet of water trucks for shipping water into the stricken areas.

Following centuries of deforestation and overgrazing, soil erosion has become a serious problem in much of semiarid Spain. In addition to the widespread loss of farmland, artificial lakes become filled with sediments while irrigation channels become clogged up. As a result of increased surface run-off and chocked river channels, sudden down-pours tend to cause destructive floods (riadas). By means of reforestation projects and the construction of dams and terraces, the government has made impressive efforts to control soil erosion and to protect the villages and irrigated land - both usually located in the river valleys - against the violent and dangerous riadas.

Besides being concerned about problems caused either by too little or too much water, the government is active in disseminating information about improved methods of producing crops and livestock. At present Spain has an extensive network of agricultural extension centers, the *extensión agraria*. This service includes research stations where, among others, experiments are carried out aimed at developing and/or improving drought-resistant crop varieties and animal breeds. Finally, government interventions involve a host of activities which in one way or another contribute to raising the quality of life in the rural communities in the drylands. In areas suffering from 'overpopulation', people are encouraged and assisted to become permanent outmigrants. Over the years, courses have been offered to villagers interested in finding (seasonal) employment in tourist centers or cities. Apart from building piped water systems, other infrastructural improvements have been made, such as numerous roads and bridges, health care facilities and schools. But perhaps most spectacular have been the welfare benefits made available by the government since 1977. A combination of old-age pensions, public works schemes (to relieve unemployment), disability payments and other forms of social security - all financed by 'Madrid' - has contributed substantially to raising the level of material well-being of the millions of landless people and small farmers trying to make a living in Spain's poorly endowed, dry regions.

5.8 Shifts in government policy emphasis

In chapter 5.1 we have differentiated between eight major approaches of governments towards dry areas. Here we will schematically summarize our findings for the five countries.

Table 5.1 clearly shows that there is a general shift in emphasis from neglect, repression and expropriation until the mid-1950s to infrastructural investments and support for agricultural productivity since the mid 1950s with an additional emphasis on relief/basic needs/welfare and the environment since the 1970s. Government neglect of dry areas is the dominant attitude for Togo, Kenya and northern Morocco for most of the early part of the Century; for the Moroccan Rif area even going on until Independence, now and again interrupted by military actions. Occasional shows of force are also evident for Kenya, even until today. Repression was a dominant feature for Spain during and after the civil war. Expropriation of produce from the dry areas through government interference was mainly experienced by northern Togo at the end of the German period and occasionally during the French period. More indirect forms of government expropriation could be found in semiarid Spain before the 1930s. Governments regarded dry areas as domains for labor recruitment in all five countries, but in different periods: in Togo all through the French period, in Kenya mainly starting after the 1930s but dying out after Independence (this does not mean that labor migration was no longer relevant, only that active government support came to an end), in northern Morocco, Mexico and Spain mainly starting after 1960.

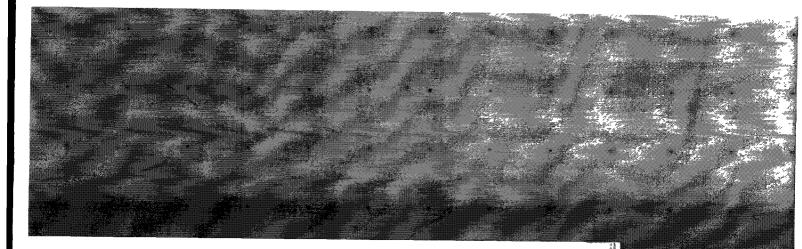


Table 5.1	Government policy in dry areas: a summary													
Emphasis (1)		riod 10		1925		1940		19	1955		1970		1985	
Neglect	T k M s													
(2) Repression	ĸ			 м		 S								
(3) Expropr.	 s	т Т												
(4) Labor mi- gr. supply				 t		ĸ				M S		x		
(5) Infrastruct				x					k t	м				
Land reform	x	x	x	S	S				k					
(6) Agric. Pro- ductivity						 x	 x	 x	t k m x	х	T M X	T k M X	k m X	T K m
Mining Industr.							S	S	s x	s x	s M X	s M X x	s M X ×	s M X X
(7) Relief										s k	s - <u></u> k	s k	s k	s k
Basíc Needs											m	m m X	m k m X	m t k m
Welfare										s	S	s x	s X S	s S
(8) Environment	"					k			t k s	m s	m s	 М ѕ	k M s	t K M s

k, K : Kenya; m, M: northern Morocco (Rif, the former Spanish part); s, S: Spain; t, T : Togo; x, X: Mexico (capital letters: major government emphasis).

Active government support for infrastructural development in dry areas started in Spain and Mexico after 1940, both directed at improved physical infrastructure and improved educational and health facilities. In northern Morocco the area was rapidly opened up after 1960. In Togo and Kenya the investments were much smaller and started later. In Kenya governmentdirected improvements in education were impressive after 1975, often together with a strong increase in activities of non-governmental organisations, supported by a variety of foreign donors, which seems to be far less important in the other countries. Other changes in the conditions for production and distribution are meagre: land reform was a key issue in Mexico in the first two decades after the 1910 revolution; and in Spain, in an aborted form, around 1935. Government interference in land issues were important during some periods in Kenya.

A growing government activity in attempts to increase the agricultural productivity of dry lands (mainly for some cash crops, but increasingly for some food crops too) are evident for all areas since the late 1950s, preceded by earlier attempts in Mexico and Spain. Government support for the development of mining enterprises has been important in Morocco and Mexico. Genuine attempts at government support for or even government initiatives directed at industrial development of some of the dry areas can be found in (northern) Mexico and in some of the Central areas of Spain, but hardly in the other three countries.

Government attention for relief and basic needs as an issue grows in all countries since the early 1970s, changing to a form of government-based social security in Mexico during the 'oil boom' and in Spain after the late 1970s.

The 'environment' as an issue for government intervention is high on the current agenda in most countries, but it is interesting to note that there have been occasional periods in which there was a lot of government concern for environmental degradation in dry lands before.

Government attention for dry areas does not necessarily mean government activities in all dry areas. The above-given description only gives a comparative context. In the second part of the book five specific case studies are being presented, each of which should be read within the overall framework of this contextual evidence.