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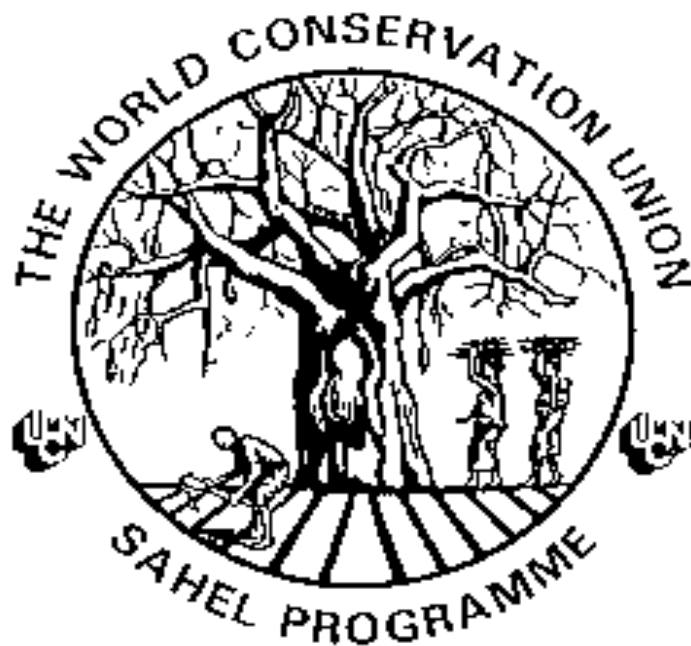
The IUCN Sahel Programme

Population in the Sahel

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The IUCN - the World Conservation Union - has published the IUCN Sahel Studies 1989, as part of its Sahel Programme. Running to 152 pages, the Sahel Studies includes sections on Rainfall, Population, Food and agricultural production, Conservation areas, Agricultural prices and natural resource management, Sustainable development, Supply and provision of firewood, and Pastoral land tenure. The report provides reviews of recent research on sustainable development issues by leading experts in the various fields.

Under an agreement between IUCN and IIED, Haramata is publishing four edited papers from the Sahel Studies in the Issues Envelope series - two in each of the September and December 1989 editions. In this Issues Envelope are included papers on Food and Agricultural Production and on Sahelian Rainfall. The original version of the Agriculture and Food paper was written by Dr. M. Norton-Griffiths formerly of IUCN, Nairobi and that on rainfall by Dr. G. Farmer of the Climatic Research Unit, University of East Anglia, UK. Haramata has been responsible for the editing of the original text.

Copies of the full IUCN Sahel Studies 1989 are available in English and French and can be obtained from the IUCN Publications Unit, 219c Huntingdon Road, Cambridge CB3 0DL, UK (price UKstg.12.50 or US\$25).

POPULATION IN THE SAHEL

RECENT POPULATION GROWTH IN THE SAHEL

Growth of Sahel Populations: 1950-2020

In 1950, the total population in the nine Sahel countries of Burkina Faso, Chad, Ethiopia, Mali, Mauritania, Niger, Senegal, Somalia and Sudan was estimated to be around 47 million (Table 2.1). Thirty years later, in 1980, the number had risen to just over 91 million. The combined population of these nine Sahel countries is expected to increase to 159 million by the year 2000, and to 263 million by 2020 (Table 2.1).

The average annual rate of increase was 1.9% per year for the 1950-60 period while the current annual rate of natural increase in the Sahel is estimated to be approximately 2.8%, with a population doubling time of 25 years. Projections into the next decade show that this rising trend is expected to continue until the mid-1990s, after which it will taper off slightly by the beginning of the next century.

Factors of Population Growth

The rate of increase of a population depends on three factors: fertility, mortality and migration, while the rate of 'natural increase' depends on fertility and mortality alone. Here, we will address natural population growth. Rapid population growth in the Sahel region occurred because of a consistent downward trend in mortality rates since the 1950s, while fertility remained at a sustained high level, or experienced a slight increase in some countries.

Mortality in the Sahel countries decreased by 12 percentage points in 30 years, namely from 33 per thousand population in 1950 to 21 per thousand in 1980. These changes can be attributed to successes in reducing infant and child mortality rates. The application of modern medical knowledge and methods such as vaccination against infection, administration of antibiotics, rehydration therapy, and the use of anti-malarials, have been among the leading causes of these reductions.

As for the continuation of the prevailing level of fertility in the Sahel (and other African countries), the most plausible theory is that the speed of mortality decline has been such that fertility behaviour has not yet become adapted to the improved chances of infant and child survival. A substantial decline in fertility, from its current levels of nearly 50 per thousand of the population, is not expected to occur until the second part of the 1990s (UN, 1986). Fertility was traditionally high because mortality was high, and couples had to have a large number of children in order to perpetuate their families. Social

Table 2.1: Populations of nine Sahel countries, and populations of selected regions, 1950-2020 (in millions).

Country	1950	1960	1970	1980	1990	2000	2010	2020
Burkina Faso	3.7	4.3	5.1	6.2	7.9	10.5	14.1	18.2
Chad	2.7	3.1	3.7	4.5	5.7	7.3	9.3	11.4
Ethiopia	19.6	24.2	30.6	38.5	50.1	66.5	87.8	111.2
Mali	3.9	4.6	5.7	7.0	9.4	12.7	17.0	21.9
Mauritania	0.8	1.0	1.2	1.6	2.2	3.0	4.0	5.2
Niger	2.9	3.2	4.1	5.3	7.1	9.8	13.3	17.1
Senegal	2.5	3.0	4.0	5.7	7.4	9.8	12.8	16.3
Somalia	1.8	2.1	2.6	4.0	5.2	6.7	8.8	11.1
Sudan	9.2	11.2	13.9	18.7	24.9	32.9	42.0	50.9
Total	46.9	56.7	70.9	91.5	119.8	159.1	209.1	263.3
Africa	224.4	280.1	360.8	479.5	645.3	871.8	1,157.5	1,467.8
Sub-Saharan Africa	172.6	214.9	277.6	371.7	505.3	696.3	946.6	1,223.3
LDCs	1,683.8	2,074.0	2,645.8	3,312.9	4,036.4	4,845.2	5,657.9	6,445.5
World	2,515.7	3,018.9	3,693.2	4,449.6	5,246.2	6,121.8	6,989.1	7,822.2

Source: The United Nations (1986)

Table 2.2: Population density for the Sahel countries, 1985.

Country	Land Area 1000 km ²	Total Population 1000s	Population Density /km ²	Arable & Irrigated 1000 km ²	Agricultural Population 1000s	Agricultural Density /km ²
Burkina Faso	274	6,942	25	26	5,940	228
Chad	1,260	5,018	4	32	3,979	124
Ethiopia	1,100	43,557	36	141	33,667	239
Mali	1,220	8,082	6	23	6,734	293
Mauritania	1,030	1,888	1	2	1,266	633
Niger	1,270	6,115	7	38	5,463	144
Senegal	190	6,444	33	54	5,126	95
Somalia	630	4,653	7	13	3,394	261
Sudan	2,380	21,550	9	144	14,199	99

Population density = total population / land area

Agricultural density = agricultural population / arable & irrigated land

Source: FAO Country Tables, 1988

institutions were also geared to maximise fertility. Virtually all women got married, they married young, and they continued childbearing until the end of their reproductive period. Once widowed, they remarried soon after the husband died.

Decreases in infant and child mortality have resulted in an increased life expectancy at birth in all Sahel countries from 33.5 years in 1950 to 43.3 years in 1980. Further reductions in mortality levels are expected to raise life expectancy at birth to 51.3 years by the year 2000.

Continued rapid population increase has implications for development planning. For instance, plans for development of infrastructure, food supplies, education, and job opportunities all have to face escalating requirements because of escalating numbers of people. However, the rate of future population growth is a variable, rather than a fixed element in development planning. Therefore, this rate can be affected by specific development policies. These policies will be aimed primarily at promoting incentives for lower fertility because, as stated in the discussion on demographic momentum, the fertility behaviour of present and future generations is the crucial factor in determining the size of future populations.

The widespread provision of family planning services is a direct measure aimed at promoting fertility decline. Other policies can affect fertility indirectly. For instance, the provision of social security by the State is often cited as a potential 'incentive for lower fertility' policy, because it is supposed to provide an alternative to couples who consider their offspring as an insurance against the hazards of sickness and old age (Nugent, 1985). Promotion of small-scale mechanisation in the household and in agriculture is another measure with a potential influence on fertility because it increases the options to substitute child labour.

Consequences of Rapid Population Growth

Much debate centres around the issue of how to relate rapid population growth to socio-economic development. For example, given the fact that there is so much space in the Sahel countries, does it matter that the population has grown so fast? The average number of persons per square kilometre is very low (Table 2.2) with six out of the nine Sahel countries having on the average less than 10 inhabitants per square kilometre. Only Burkina Faso, Ethiopia and Senegal have more, with 25, 36 and 33 persons per square kilometre respectively.

However, the picture changes dramatically when we consider agricultural density, namely the density of the agricultural population on the available arable and irrigated land. Only two

countries have agricultural densities of less than one hundred persons per square kilometre, while the highest agricultural densities are found in Mauritania, Mali and Somalia.

Apart from examining the average population density per square kilometre of total land area and of agricultural land, it is important to note that large parts of most Sahel countries are located in the desert areas, in which conditions are unfavourable for human habitation. It seems, therefore, that the 'enough space' argument has to be interpreted with caution.

Although no value judgements can be made on whether rapid population growth is 'good' or 'bad', it does have certain consequences. For instance, in many Sahel countries population growth is resulting in increasing demands by young people for food, clothing, shelter, health care, education and employment opportunities. These demands are increasing at a pace faster than the abilities of governments to generate the wealth to pay for them. Since almost half the Sahelian population is under 15 (ie. not active economically), the other half has to provide for their basic needs, thus consuming eventual surpluses and inhibiting investments into longer-term development of infrastructure and other crucial projects.

The impact of large numbers on basic resources is illustrated by the level of per capita food production (Table 2.3). Six out of the nine Sahel countries produced less food per capita in the early 1980s than during the 1974-76 period. (See Issues Paper no.9, Food and Agricultural Production in the Sahel, September 1989.) Even though in absolute terms several of these countries produced more food than previously, the number of extra mouths to feed resulted in a decreased production per person (World Bank, 1988).

Recent Trends in Urbanisation

Two major features have characterised urban population growth in the Sahel in the recent past. Firstly, in all countries urban population growth exceeded the overall rate of population growth and, consequently, exceeded by far the rate of increase of the rural population. Secondly, population growth in the capital cities of all the Sahel countries was more rapid than the rate of increase of the overall urban population.

In 1950 the aggregate populations of the countries in our study amounted to slightly over 46 million (Table 2.4), of which almost 7% lived in urban areas. By 1970, the total population of these eight countries had risen to almost 70 million, with 12.5% living in urban areas. Another 15 years later, in 1985, the total population for the same countries reached over 102 million, with 17.3% of the people living in urban centres. This means that the

Table 2.3: GNP per capita 1984, and average index of food production per capita

Country	GNP Per Capita 1984 (US Dollars)	Average Index of Food Prod. Per capita 1982-84 (1974-76=100)
Ethiopia	110	100
Chad	not available	95
Mali	140	101
Burkina Faso	160	94
Niger	190	113
Somalia	260	69
Sudan	360	93
Senegal	380	66
Mauritania	450	95

Source: World Bank (1986)

Table 2.4: Population growth of total, urban and rural population 1950-2020 for eight Sahel countries (countries as in Table 2.3, excluding Mauritania).

Year	Total (000s)	Urban (000s)	Urban as % of total	Rural (000s)	Rural as % of total	Capital Cities (000s)
1950	46,090	3,180	6.9%	42,910	93.1%	920
1960	55,740	5,150	9.2%	50,590	90.8%	1,640
1970	69,690	8,720	12.5%	60,960	87.5%	2,990
1980	89,860	14,190	15.8%	75,670	84.2%	5,160
1990	117,600	22,530	19.2%	95,040	80.8%	8,290
2000	156,140	37,420	24.0%	118,700	76.0%	13,380
2010	205,120	62,420	30.4%	142,680	69.6%	--
2020	258,280	97,370	37.7%	160,700	62.2%	--

Source: United Nations (1987)

urban population of these eight countries had increased from 3.2 million to 17.8 million, a five-fold increase in 35 years, corresponding to an average annual urban population growth of 5.4% for that period. During the same 35-year period the rural population increased at an average rate of 1.9% per year, from 42.9 million in 1950 to 84.6 million in 1986.

It is a commonly held assumption that it is the rural migrants who contribute most to the swelling ranks of urban dwellers. This assumption is not correct. Although migration does contribute to urban population growth, the rate of natural increase of urban populations plays a more important role. This was first tested by Preston (1979) who examined a sample of 29 developing countries, and found that the mean percentage of urban growth attributable to natural increase was 61%.

As a result of past high fertility and of in-migration of young people, the structure of Sahelian city populations is young and a large proportion of urban people are in the stage of family formation and in the prime childbearing age group. A consequence of the age structure of the Sahelian city populations is the built-in demographic momentum, since a population with a young age structure has a large potential for further growth. This implies that, even if fertility were to decline drastically today, which is not likely to happen that soon, and even if rural to urban migration were halted right away, which is not likely to happen immediately either, every Sahelian city would still be facing a rapid increase in numbers of inhabitants in the near future.

Urban Growth and the Demands on Resources

The expected escalating growth of city populations in the Sahel is bound to be doubly taxing on available resources. Not only do Sahel countries experience the transition from an agrarian society into a market-oriented, more urbanized society at an accelerated pace, but they are simultaneously coping with a rapid increase of the city populations. Just the process of urbanisation itself, even at a zero population growth rate, would require an increasingly large infrastructure, specialised skills and capital investments to provide the city populations with their basic needs of food, shelter, clothing, health care and education. Other needs must also be met, such as roads, community buildings, child care services, waste disposal accommodations, clean drinking water, energy sources and a variety of manufactured goods.

As an example of the precarious equilibrium between population growth and the availability of basic resources, we can consider access to safe water supply. Data from Burkina Faso, Chad, Mali, Niger, Senegal and Sudan report that in these countries only 30,

26, 14, 34, 44 and 48 per cent respectively of the population have at present access to safe water (PRB, 1987).

Urbanisation and Changes in the Labour Force

The percentage of the economically active population employed in agriculture in 1985 ranged from between 66% in Sudan to 89% in Niger. These high percentages indicate that agriculture continues to be the major economic sector in the Sahel region. Nevertheless, as the 1988 World Development Report (World Bank, 1988) shows, over the period 1965-1980 (Table 2.5), agriculture decreased as a proportion of the total labour force while the share of industry remained modest. In contrast, the service sector seems to be the fastest growing in the economy of the Sahel countries.

Ever larger cohorts of workers are entering the labour market each year and will continue to do so in the future. The economies of most Sahel countries encounter difficulties employing the increased numbers of agricultural workers, as well as the rapidly increasing number of persons trained in specific skills meant to be employed in the so-called 'modern sector'. As a result of the inadequacy of the labour market to absorb the available manpower, a search for work and for improvement of one's living conditions has propelled large scale population movements.

MIGRATION AND EMPLOYMENT

Population Movements

Large scale movements and migrations of population have long been characteristic of the Sahelian countries, from primarily rural areas to other rural areas or to urban areas. However, they have taken on new dimensions over the last fifteen years which have led to important changes in the distribution of the economically active population. Four major types of movement are of importance here.

International

In countries such as Mali and Burkina Faso, and in the Senegal River region, international migration has long been a balancing factor between demographic pressures and limited local potential. This type of migration is now considerably lessened due to increasingly restrictive immigration policies among neighbouring countries, for example Cote d'Ivoire and Nigeria.

In contrast, international migration is still important in the eastern Sahelian countries, especially to the Arab countries of

Table 2.5: Composition of the labour force in nine Sahel countries, 1965 and 1980.

Country	Total Economically Active (000s)		Economically Active Employed in Agriculture (000s)		(%)	
	1970	1985	1970	1985	1970	1985
Burkina Faso	2,874	3,765	2,537	3,222	88.3%	85.6%
Chad	1,381	1,790	1,245	1,419	90.2%	79.3%
Ethiopia	14,403	19,182	12,237	14,827	85.0%	77.3%
Mali	1,933	2,598	1,724	2,165	89.2%	83.3%
Mauritania	433	590	367	395	84.8%	67.1%
Niger	2,375	3,203	2,239	2,861	94.3%	89.3%
Senegal	1,910	2,897	1,579	2,304	82.7%	79.6%
Somalia	1,252	1,999	993	1,458	79.4%	72.9%
Sudan	4,677	6,991	3,601	4,606	77.0%	65.9%
Total	31,238	43,015	26,522	33,256	84.9%	77.3%
Average Annual Growth Rate:		2.1%		1.5%		-0.6%

Source: FAO (1986)

Causes of Migration

Two important factors underlying these migration patterns have been a decline in the potentials and conditions of rural production systems, and gross inequalities between rural and urban wages and services. In response, people have moved to areas where they perceive they have better opportunities. In rural areas, livestock herders and farmers have been equally affected by environmental factors, such as drought, by governmental policies in pricing and marketing, and by the increasing difficulties of sustaining growing rural populations without cash supplements from non-agricultural activities. Furthermore, drought in particular has also reduced rural incomes from cash crops, and has indeed forced people out of cash cropping in view of the uncertain returns and the expensive inputs.

Income inequality between rural and urban areas is also a potent driving force, for the wages paid for a day of agricultural work are much less than those paid in either the formal or informal sectors. For example, average urban incomes are between 1 and 2.5 times higher than rural incomes in Somalia; between 1 and 7 times higher in Burkina Faso; and between 1 and 4 times higher in Senegal.

Other factors that encourage migratory movements include a lack of social amenities and basic infrastructure in rural areas; localised manpower requirements to implement large investment projects such as dams and roads; and seasonal manpower requirements at certain stages of cultivation.

Impacts of Migration on the Economically Active Population

Migratory movements have led to a significant redistribution of the economically active population across the region and among different sectors. In the urban areas, the largest increase in the economically active population has been in the informal sector. Even though the salaried sector has shown a sustained growth of 6%-7% per year for two decades, the number of people involved remains modest. This growth has noticeably slowed, and in some cases has even stopped, since 1980, due to a generalised recession in many Sahelian countries. In contrast, the informal, non-structured sector readily absorbs untrained people. However, population growth and migration is making this informal urban sector grow in a very unplanned way, leading to ever greater problems in working conditions and productivity. Whereas a competent craftsman may make roughly the same income as those in the salaried sector, these new untrained workers only make the salary of a labourer. However, this may be more than could be earned in the rural sector, and may provide rural-based households with an important source of cash income.

the Persian Gulf. In 1980, for example, there were 165,000 Somali workers outside Somalia and some 500,000 Sudanese workers outside Sudan.

Seasonal

Seasonal migrations toward the cities or to agricultural areas that lack manpower are still important. This is particularly so in Senegal where agricultural labour moves into the groundnut zone and the oil processing plants during the growing and processing season, while in Sudan population moves seasonally towards the areas of modern, irrigated and mechanised agriculture. These movements should also be seen as a balancing factor to correct for rural under-employment, especially during agriculturally slack seasons. However, although originally of only short duration they now often constitute the first steps toward longer, or even permanent, migration.

Rural-Rural

Rural-rural movements and migrations take many forms. First, there are permanent moves of whole families of nomadic livestock herders to areas with more regular rainfall, where they have sometimes adopted a largely sedentary lifestyle. Second, are the movements of farmers toward regions with more favourable conditions of rainfall, permanent water sources, or irrigation. Such movements are both spontaneous (for example toward Dedougou in Burkina Faso, or those in Senegal toward eastern Senegal); and organised by governments. This was the case of the resettlement schemes in Ethiopia in which 160,000 people were moved in 1984 and a further 183,000 in 1985. Similar government sponsored resettlement schemes have been seen in the Nile valley in Sudan, and in valleys in Burkina Faso from which onchocerciasis had been eradicated.

Finally, in some countries there have been massive movements of disaster victims during periods of severe drought, for instance to Nouakchott in Mauritania in 1973. More recently, refugees from civil strife in the eastern part of the Sahel have constituted massive shifts of primarily rural populations.

Rural-Urban

Extensive movements have been recorded in all countries from primarily rural areas to primarily urban areas. As a result, growth rates of urban populations typically exceed those of rural populations.

Rural-rural migrations pose a quite different set of problems. Herders who become sedentary must learn the new techniques of farming and adapt to methods of livestock management without seasonal movements. Similarly, farmers settling in areas with higher rainfall, or in irrigated areas, must become accustomed to new crops and planting calendars, or to techniques specific to irrigated farming.

Seasonal or medium-term migration involves men much more than women, and often results in changing conditions of work in agriculture and livestock management. Specifically, male migrants usually leave their wives and children behind, imposing an extra heavy burden of work on rural women. For example, a survey carried out by ORSTOM in 1978 on migration among the Mossi population in Burkina Faso indicated a male absence rate of between 30% and 50% for the 15-29 age group and between 20% and 45% for the 30-44 age group. Similarly, a more recent survey by the ILO reported a rate of male absence of 81% in certain villages in Koudougou province, Burkina Faso. Consequently, there are usually more men than women in the urban areas and more women than men in the rural areas.

These migratory movements of population, and especially of the male component, have many far reaching effects. First, there is an increased work-load among those left behind, particularly the women, which can lead to a severe shortage of labour at critical times in the agricultural calendar. This in turn has other effects: it limits the amount of land that can be cultivated and it causes reluctance to try new farming practices, or crops, that might give better yields but which are more time-consuming. Second, an increasing proportion of rural incomes is generated from sources other than farming and this leads to a partial marginalization of rural work per se. Finally, young people who achieve a certain degree of formal education do not come back to rural areas upon completion of their studies. All those who would be best qualified to start utilising new and more productive techniques, and to understand the importance of means of preserving the environment, tend to shun farming as a career.

POPULATION POLICIES AND PROGRAMMES IN THE SAHEL

Political Commitments to Population Policies and Programmes

The World Population Conference held in Bucharest in 1974 may be considered the first deliberate attempt to plan for concerted action at a global level to influence demographic variables. A major outcome of the conference was the World Population Plan of Action (UN, 1975). All the Sahel countries were represented in Bucharest and their presence marks a growing interest among

Sahelian policy makers in the consequences of demographic growth for socio-economic development.

In the years following the conference, the Sahel countries have launched a number of population programmes and policies. These interventions have been aimed primarily at reducing mortality and slowing down rural-urban migration. Fertility rates, however, have received less attention. Only two Sahel countries, Senegal and Ethiopia, described their fertility rates as being unacceptably high, and each proposed specific actions aimed at reducing fertility. The other eight countries stated that their fertility levels were satisfactory and made no mention of explicit interventions in this area. Nevertheless, Burkina Faso stressed the importance of family planning for maternal and child health, and in 1985, Niger joined Senegal and Ethiopia in initiating actions to reduce levels of fertility.

Niger's current standpoint is eloquently expressed in the following quotation from a speech delivered by the late President Kountche in 1986, at the occasion of the twenty-sixth anniversary of national independence.

"... (in Matameye) I cited the critical aspects of Niger's population growth and set forth the grave disparity with our rate of economic growth. I concluded pessimistically that an important factor in the development of our country was at issue, one that merited our complete attention ...

... Our religion affirms that it is a grave sin for any true believer to create new lives that he lacks the means to support ..."

National Population Debates

One expression of increased concern about demographic processes and balanced development is the frequency of national seminars linking population and development. These are mainly meant to provide recommendations for further policies and action and act as a forum for open discussions.

For example, in June 1986 in Mali, the Association Malienne pour la Promotion et la Protection de la Famille (Mali's private family planning association) organised a seminar on "Population Growth and Development" for major political and religious leaders. Attending were high-level Muslim leaders and representatives of the Catholic and Protestant Churches. Discussions centred on the impact of rapid population growth on different aspects of the Malian economy, and on religion and family planning. The seminar resulted in a number of recommendations for action, including decreasing current levels

of population growth, increasing the proportion of children in the formal education system, lowering unemployment, and improving health care and agricultural development.

A "Seminar for Key Government Planners and Policy Makers" was organised in Senegal in April 1987 (Bernstein, 1987) by the Commission Nationale de la Population (CONAPOP). The seminar presented a number of computer based socio-economic models which demonstrated the relationship between rapid population growth and development in different sectors of the Senegalese economy, including the provision of health care and education, the consumption of fuelwood and cereals, and the management of the labour-market. An official National Population Policy for Senegal was promulgated in April 1988 by President Diouf. The policy covers many aspects of population, including maternal and child health, fertility, mortality, urbanisation, advancement of women, youth programmes, migration, employment, and demographic research.

In Chad, a session on "Demographics and Population Policies and Programmes in the Sahel" was held during the January 1988 meeting of Sahelian Heads of State and Ministers of Agriculture, under the auspices of CILSS. Relationships between rapid population growth and development of different sectors of the economy were illustrated by computer models.

Present Status of Family Planning Policies and Programmes

National population policies are intended to affect one or more of the three basic demographic variables, namely fertility, mortality and migration. Here, we shall deal with examples of policies and programmes specifically designed to influence fertility. These include efforts to decrease maternal, infant and child mortality, because improved chances of child survival tend eventually to reduce the average number of children per woman.

Since 1985, the Government of Burkina Faso has been promoting family planning activities as an integral part of maternal and child health care. The 1985 National Family Planning Action Plan calls for the integration of family planning services into existing urban health clinics and rural primary health care facilities as well as the institution of programmes to treat infertility and sexually transmitted diseases.

The 1986-90 National Health Plan also includes family planning as one of the eight components of the National Primary Health Care Programme. Specific objectives are to decrease illegal abortion, combat health problems due to closely spaced births, and reduce infertility (WIRD, 1987c). Furthermore, in October 1986 the laws and ordinances forbidding the advertisement and

promotion of contraceptives were abolished, and by March 1988 so too was the requirement for three blood tests before the contraceptive pill could be prescribed. These tests had been a major obstacle to the distribution of the pill because they were expensive and only rarely available.

At the conference on "Population and Development" in December 1987, the problems associated with population growth were clearly recognized. However, participants noted that while fertility decline was not yet perceived as a priority by all Burkinabe, high infant mortality and migration were major preoccupations of most families. Furthermore, the strong resistance to family planning came not so much from women but from men, who feared a destabilisation of the family. For these reasons, family planning in Burkina Faso is promoted mainly for the purposes of maternal and child health.

The Government of Chad, with the help of USAID, has redrafted the 1920 French anti-contraception law (USAID, 1987) and in March 1988 the Minister of Public Health gave his approval to provide family planning information and services through the primary health care programme of the Ministry of Public Health.

This approval was a breakthrough in family planning in Chad, the more so because repeal and amendment of the current legislation and the adoption of new legislation to legalize contraceptives was still pending. Previously, contraceptives were illegally imported and sold through private pharmacies to the small proportion of women who could afford them.

The Government of Ethiopia has recognised since the early 1980s that the rates of population growth and fertility were too high. The government relies on an overall plan of socio-economic development to bring about a lower growth rate, under the hypothesis that improved living conditions will promote the desire for a smaller number of children. Family planning is provided throughout the country in the context of maternal and child health programmes.

Mali was the first West African francophone country to repeal the 1920 French law which prohibited the advertising, sale or distribution of contraceptives. The government encourages child-spacing for family well-being, rather than to reduce fertility. Abortion is illegal, although it may be authorized to save a woman's life, and sterilization is available on medical grounds. The Family Health Division, set up within the Ministry of Health and Social Welfare, has responsibility for co-ordinating and expanding all family planning activities in Mali (WIRD, 1987a).

In Niger, a non-governmental National Family Health Centre (NFHC) in Niamey has been providing family planning services only since 1984 in ten preventative maternal-child health care centres.

This programme has been supplemented by community meetings and limited mass media publicity.

However, a national family planning and demography project is now being prepared which aims to provide family planning services in 120 public health facilities in all Departments. Although the 1920 French anti-contraception law is still officially on the books in Niger, the government has declared its strong commitment to family planning. A large budget was allocated for maternal and child health care in the 1979-83 National Development Plan, and family planning services are now actively encouraged. The overall objectives are to reduce infant and maternal mortality, and promote child spacing and marriage at a later age as a means for both fertility reduction and improved health (WIRD, 1987b).

Senegal is the only Sahel country, and one of very few African countries, to have an official National Population Policy. A family planning programme was initiated and integrated into maternal and child health services in 1978 to reduce fertility and improve maternal and child health. The Association Senegalaise pour le Bien-Etre Familial (ASBEF) is the major non-governmental organisation involved in family planning activities. The Association aims to increase public awareness of the advantages of family planning, to provide assistance in the training of government personnel in family planning, and to collaborate with other agencies in the integration of family planning with other development activities.

In the Sudan, the National Population Committee (NPC) has recently been assessing what is known about population and development in order to formulate a national population policy. The Third National Population Conference was held in 1987 to develop and issue a set of recommendations that would serve as an interim population policy. Conference participants concluded that high birth rates, high death rates and excessive migration are key factors inhibiting Sudan's development.

The Effectiveness of Demographic Interventions

The effectiveness of these demographic interventions in the Sahel remains open to question. Fertility in the region is still high and rising, urban growth and migration still continue in a fairly unplanned fashion, and only the rate of mortality seems to have been influenced significantly by deliberate intervention.

A major reason for the success of mortality reduction policies is undoubtedly that their goals are universally shared. This universal acceptance of demographic targets is less common for migration and fertility policies. Furthermore, when mortality is at a high level at the start of a campaign for mortality decline, it is quite easy to achieve dramatic successes in a short time

and with relatively modest means. This is not the case with migration or fertility policies, which require a long-term, sustained effort to yield results. In contrast, efforts to reduce fertility will show concrete results only after a certain number of years, or even after one generation.

Mbaoke (1987) observes that there is a potential contradiction between government interests and the motivation of individual families, and that this contradiction determines the effectiveness, or otherwise, of population-related activities. The success of large-scale vaccination campaigns and the like in the Sahel region demonstrates the effectiveness of demographic interventions when government objectives and the motivations of individual families coincide.

However, when national and individual perceptions of appropriate demographic behaviour differ, actual programme results may be just the opposite of what they were intended to be. There are, for example, numerous examples of activities designed to halt rural exodus in the Sahel countries that have instead resulted in an accelerated pace of rural-urban migration; young rural people who had acquired some training in the programme used their new knowledge to leave the village for the city in the hope of improving their situation.

Although less is known about family planning programmes in the Sahel than about migration policies, contradictions between government objectives and the desires of individual families are likely to exist. A family planning programme, specifically designed to reduce the average number of children per family, may well result in a temporary increase in fertility. This may be due to a combination of more efficient child spacing practices, a lower incidence of miscarriages and still-births, a lower incidence of pathological sterility, as well as more information on proper health and nutrition practices on the part of the mother. As a result, families may end up having a larger number of children than they would have had without the intervention of the family planning programme.

Population policy still has a long way to go in trying to bridge the sometimes contradictory interests of governments and families themselves. Where children remain a crucial source of labour to rural families, and their sole assured source of income and security in old age, policies to reduce fertility will need support in a range of other fields if they are to achieve their objective of slowing population growth. As with environmental concerns, and so many other aspects of social and economic development, population behaviour and policies cannot be separated from trying to assure people a secure and decent livelihood.

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