

Report No. 7903-MOR

# Morocco

## Reaching the Disadvantaged: Social Expenditure Priorities in the 1990s

September 10, 1990

Population and Human Resources Division  
Country Operations Department II  
Europe, Middle East and North Africa Region

**FOR OFFICIAL USE ONLY**



**Document of the World Bank**

---

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

**MOROCCO**  
**REACHING THE DISADVANTAGED:**  
**SOCIAL EXPENDITURE PRIORITIES IN THE 1990s**

**CURRENCY EQUIVALENTS**  
(As of September 1989)

Currency Unit	-	Moroccan Dirham (DH)
US\$1.00	-	DH 8.5
DH 1.00	-	US\$0.1176

**FISCAL YEAR**

January 1 - December 31

**MOROCCO - GENERAL COST OF LIVING INDEX**  
(210 Items, 1972-73 = 100)

1978	176.4
1979	191.1
1980	209.1
1981	235.2
1982	260.0
1983	276.1
1984	310.5
1985	334.6
1986	363.7
1987	373.8
1988	382.4

**MOROCCO**  
**REACHING THE DISADVANTAGED:**  
**SOCIAL EXPENDITURE PRIORITIES IN THE 1990s**

**TABLE OF CONTENTS**

**PREFACE**

<b>SUMMARY AND MAIN FINDINGS . . . . .</b>	<b>i-xiv</b>
<b>INTRODUCTION . . . . .</b>	<b>1</b>
<b>CHAPTER I. BACKGROUND . . . . .</b>	<b>1</b>
A. Growth and Poverty . . . . .	1
B. Aggregate and Territorial Poverty . . . . .	3
C. Structural Adjustment and its Effect on the Poor . . . . .	3
<b>CHAPTER II. THE CONCEPTUAL FRAMEWORK . . . . .</b>	<b>6</b>
<b>CHAPTER III. ASSESSMENT OF THE POVERTY PROBLEM IN MOROCCO . . . . .</b>	<b>8</b>
A. Survival Indicators . . . . .	8
B. Income-Earning Indicators . . . . .	10
C. Factors Contributing to Survival and Income-Earning Problems . . . . .	13
1. Characteristics of the Poor . . . . .	13
2. Population Growth . . . . .	15
3. Labor Market Conditions . . . . .	16
4. The Provision and Distribution of Social Services . . . . .	19
<b>CHAPTER IV. POLICY RECOMMENDATIONS . . . . .</b>	<b>26</b>
A. Social Sector Strategy . . . . .	26
B. A Policy Framework . . . . .	28
C. General Options . . . . .	33
1. Better Targeting: Priority Population Groups and Territories . . . . .	33
2. Institutional and Organizational Changes . . . . .	34
D. Sectoral Policy Recommendations . . . . .	35
E. Implications for Bank Lending in Morocco . . . . .	41
F. Directions for Further Research . . . . .	46

This report was prepared by E. Pleskovic (Team Leader, Senior Economist) in collaboration with: P. Sivitanides (Urban and Regional Economist, Consultant), K. Brown (Regional Economist, Consultant), K. Laraki (Agricultural Economist, Consultant), J.S. McGuire (Nutrition Specialist), M. Montoliu-Munoz (Labor Economist), V. Rodwin (Health Economist, Consultant), M. Saric (Health Specialist, Consultant), J. Spratt (Education Specialist, Consultant), D. Wagner (Education Specialist, Consultant), Andrew Rogerson wrote the Summary and Main Findings and Editorial Assistance was provided by E. Berg (Consultant).

<b>APPENDIX I:</b>	<b>Estimation of Poverty and Ultra Poverty Threshold . . .</b>	<b>48</b>
<b>APPENDIX II:</b>	<b>Comparison of Moroccan Health Outcome Indicators with those of other LMI Countries. . . . .</b>	<b>51</b>
<b>REFERENCES . . . . .</b>		<b>52</b>

**LIST OF TABLES**

1. Population in Poverty and Ultra Poverty, 1985.....	3
2. Aggregate Survival Status Indicators .....	9
3. Variations in Infant Mortality and Morbidity from Infectious Diseases .....	11
4. Aggregate Income-Earning Indicators .....	12
5. Spatial Variations in Poverty and Ultra Poverty Rates .....	14
6. Population and Demographic Indicators .....	16
7. Distribution of Conventional Poor and Ultra Poor Households by Occupation of Household Head, 1985 .....	18
8. Government Social Expenditures .....	20
9. Input and Process Survival Indicators .....	22
10. Aggregate Needs Assessment Table .....	27
11. National Input-Output Table for Social Sectors .....	29

**GRAPHS**

1. Per Capita Social Expenditures .....	20
---	----

**MAPS**

1. Poverty in Morocco by Subregion .....	54
2. Ultra Poverty by Subregion.....	55
3. Social Indicators .....	56

**SECTORAL STUDIES (WORKING PAPERS, IN A SEPARATE VOLUME)**

HEALTH SECTOR STRATEGY FOR THE POOR  
 NUTRITION AND FOOD SUBSIDIES  
 EDUCATION, LITERACY AND THE POOR  
 POVERTY AND LABOR MARKETS

## PREFACE

This report is based on the findings of various missions to Morocco between February, 1988, and September, 1989, as well as, on earlier sector work by World Bank staff and consultants in the social sectors. The report utilizes existing national survey data and related sources, in particular the most recent household consumption, census, employment and fertility/morbidity surveys, and the statistical abstracts of the relevant line departments, listed in the references. The authors are indebted to the extensive assistance received from the Department of Statistics and other specialists in the Ministries of Plan, Economic Affairs, Finance, Employment, Social Affairs, Equipment and Training, Health, Agriculture, and Education, in compiling and interpreting this data. A comprehensive multi-sector living standards survey (LSMS) was designed as a result of this work and has been launched in mid-1990, by the Department of Statistics with Bank and UNDP support. The results of the survey will provide more complete data for further analysis of the poverty issues identified in this report.

# MOROCCO

## Reaching the disadvantaged: social expenditure priorities for the 1990s

### Summary and Main Findings

#### A. The Underprivileged and the Social Agenda

1. This report is about inclusion. It asks how some of the least advantaged groups in Moroccan society might best be reached and provided with the means to play a full role in the economy. It draws a profile of the underprivileged and discusses what a public social expenditure strategy that specifically addresses their problems might look like.

2. The paradox of growth and poverty in Morocco is that average income has risen strongly, but the number of "poor" has hardly changed. They numbered about six and a half million souls, in 1974 and 1985 and most probably still do today, though average consumption has grown by 36% over that time. This is not grounds for pessimism: on the contrary, as a proportion of the population, the poor have declined by over a quarter over the same period (to 30%), a creditable result by comparison to many other countries. But this decrease has not been as rapid as the rise in average consumption. It is hard to be indifferent to the prospect of a sizeable "hard core" of poverty perpetuating itself at the margin of an increasingly prosperous society.

3. The issue is important and is accentuated by the two-way relationship between growth and poverty. First, sustained growth directly improves living standards and generates more tax revenue to deliver compensatory social services. Second, a growing economy, at the gateway of Europe, needs a constantly improving human resource base and an increasingly sophisticated internal market. However, widespread illiteracy and avoidable illness on the scale found today in Morocco will be major handicaps in an international competitive arena no longer driven only by unskilled labor costs. If one Moroccan in three is somehow marginalized from factor and product markets by his or her social condition, the other two are diminished thereby. Unresolved tensions originating from overcrowding, unemployment, and unequal opportunities can ultimately derail the economy. Tackling poverty, or at least some of its worst manifestations, may therefore be an economic, not just moral challenge, with a clear payback to society.

4. While these propositions are not controversial, they are not easily transformed into action by the Government. Problems of measurement, of logistics, of practical politics and of subjectivity intervene. The measurement problem -- how to identify who is vulnerable and track their progress -- is real, but often overstated. A great deal of vital knowledge, no matter how informally structured, is available within central and local administrations and voluntary groups in Morocco. Some quite striking patterns emerge, sufficient in our view to give valid orientations for action, notwithstanding legitimate technical doubts surrounding the accuracy or relevance of many individual indicators.

5. Establishing a "social strategy" is a vastly more ambitious undertaking than justifying a new university or factory or even choosing between them. The Government, however strongly persuaded of the need to act, lacks the luxury of reconsidering from base zero its entire pattern of social services or their share of the overall public budget. Embedded in the present situation are multiple, loosely defined objectives, clienteles, and institutional relationships, as well as huge sunk costs. Decisions are taken incrementally, disjointedly, and cannot be fully consistent with all other decisions taken under different circumstances. Indeed, the Moroccan social agenda is being redefined continuously as the authorities assess the results of such independent decisions: this is the reverse of the economist's ideal where unique social objectives drive decisionmaking. Moreover, value judgments which imply political choices are unavoidable whenever a policy involves the distribution of resources among people. Unfortunately this includes practically all social sector proposals with expenditure implications, given Morocco's severe overall budget constraints. Different decisionmakers, even within a single Cabinet, tolerate inequality to different degrees. Opposite opinions are voiced in Morocco, as elsewhere, as to the desirable extent of State, versus private and charitable, responsibilities.

6. A well-known problem illustrates these difficulties. Scholarships, including study abroad, are provided to most university students in Morocco virtually regardless of income. Of course, it is only normal that a gifted, but needy, student benefits from state support in order to realize his/her potential. However, because of the narrow base of direct taxation, many well-off families have access to these scholarships through income declaration exemptions. At the same time, the education budget is seriously overstretched and one-third of the primary school-age population, who are on average much poorer, is not even in school. The Bank has argued, factually, that modest financial efforts by some categories of students, who reap high returns from their subsidized education, would ease the pressure on the State budget and release funds to benefit poorer students elsewhere. A highly visible, relatively rich few would stand to lose a little and an unknown, relatively poor many to gain a great deal. This tradeoff is not trivial, and needs to be appreciated in its proper political context by the Moroccan authorities, but it cannot just be ignored: to do so is equivalent to choosing to redistribute resources, by default, in the other direction.

7. This report is designed with such realities in mind. It is not an attempt to provide an ideal solution to deprivation in all its forms. Its aims are more modest than that. It tries to set some benchmarks for identifying vulnerable groups in the Moroccan context. It also considers the "ultra-poor", a subgroup whose social handicaps might be so severe as to block them from conventional income-earning opportunities and other services intended to emancipate them. It tries to isolate what appear, subjectively, to be the most critical characteristics of poverty which the Government may want to tackle first. It then examines which policies may be most effective in addressing them. It uses as a tool to this selection a simplified matrix identifying "linkages" between actions and outcomes and gives some rough unit costs of high-impact interventions. It then revisits the recent pattern of Government social expenditures and suggests what kind of additional effort

and/or reallocation appears justified, at the margin. Finally it reviews the currently planned Bank lending program from the same perspective.

## B. The Profile of vulnerability

8. Although income distribution is an important problem in Morocco, due to data limitations, the main focus of this report is on absolute, not relative poverty. We know, for example, that the share of the richest 20% of Moroccan households in national consumption is about eight times the share of the poorest 20% -- this and related inequality indicators need to be improved significantly in the future. Deprivation in an absolute sense, as defined in this report, refers to those who cannot command a minimum basket of goods and services, principally food, considered necessary to meet their longterm physical needs. The price of this basket can rise faster than the earnings of those below the poverty line, even when in the nation as a whole real incomes are rising. If the gap between the absolute poor group and the middle class widens, as appears to have been the case in Morocco, one can expect poverty to appear to "resist" the effects of growth to some extent.

9. The minimum-basket approach to poverty, monitored through infrequent national consumption surveys, is necessarily partial. It also undervalues certain income sources, such as charitable food gifts, and nonmonetary indicators such as health and literacy status. We have therefore combined the consumption approach with various "direct" manifestations of wellbeing and deprivation. A pattern emerges of tremendous gains since Independence, gains of which Morocco is justly proud, yet of opportunity for much more progress in certain key areas. In the last 20 years, Moroccan life expectancy has risen from 49 to 62 years; the death rate fell from 18 to 10 per thousand; and infant mortality almost halved to 73 per thousand. Conversely, child mortality, maternal mortality, severe malnutrition and male illiteracy remain well above comparators and the gap is not closing rapidly. Overall illiteracy, at 60%, is particularly troublesome, especially when one considers that school enrollments are still not keeping pace with population growth, which at 2.5% remains high.

10. Overlaps and discrepancies come out when these phenomena are mapped together. The highest incidence of poverty and ultra-poverty is in the South, followed by the Tensift and Center-South (Maps I and II), and the lowest in the Center, North and East. The South and Center-South also score worse in terms of infant mortality and education, a few provinces outstandingly so. There are also large discrepancies within sub-regions and provinces. Low medical service coverage and access to drinking water in most of the South and many interior provinces is predictably associated with both low health status and low consumption. However, low health care coverage in other areas, with below-average poverty (in particular, Center-North), is not associated with higher mortality. Such superimpositions illustrate how vital outcomes depend both on (a) underlying community and household living standards and on (b) the deployment of social services, which can reinforce as well as correct regional disparities.



11. The at-risk population is still mostly (65%) rural. This is about the same as the overall population (60% rural). Within the urban poor subgroup, major concentrations of the poor are found in parts of the Center-South (e.g. Errachidia), Tensift (Essaouir) and even the Center (Settat), which has a lower-than average rural poverty rate. Slightly over half--about 3.4 million--of the poor fall into the category of "ultra" poor, those far below (we assume, four fifths or less) the minimum living standard associated with the poverty line. They are somewhat more likely to be urban (42%), and in five urban areas their share of the total population is over one-fifth, whilst their representation in the adjacent rural areas is much lower. However, by far the largest absolute numbers of poor and ultra-poor are found in the rural South and Tensift. Given the sharply different patterns of economic activity, population density and infrastructure involved, even this broad outline shows the futility of applying a single "antipoverty recipe" countrywide or even uniformly within certain regions.

12. What else characterizes the poor and vulnerable in Morocco? First, large family size. Seventy percent of poor households have more than the national mean of five members: their average is 7.4 in rural and 6.5 in urban areas. Family composition matters, since we know the proportion of dependents to able-bodied adults greatly affects intrafamily nutrition possibilities, pressures for adult and child employment, capacity to undertake cash expenses for education and health, and so on, thus potentially perpetuating deprivation into the next generation. Forty-one percent of Moroccans are less than 15 years old. This share is higher in groups with higher fertility, such as the rural population generally (46%) and, most likely, very high in poorer sections of the population. Only 36% of Moroccan women, mostly urban and probably not among the poorest, are current users of family planning services.

13. The second main characteristic of the deprived is their overwhelming lack of education. In 1985, 73% of poor Moroccan urban heads of household and 85% of poor rural heads of household had no education at all. Nationally, male illiteracy is about 55%. Female illiteracy, also correlated with higher fertility and lower health status, is much higher (78%), in line with lower school enrollments for girls at all levels. Low educational attainment levels among poor adults affect their ability to seek and retain productive employment, follow prudent health and nutrition practices, and use available social services to good effect. There is now a large pool of young adults (about a fifth of the population is 15-24, slightly more are 25-44) who missed their first chance to learn but who still have a lifetime within which to affect, positively or negatively, the attitudes and earnings of whole families. They could be reached through special adult programs: literacy is contagious. However, adult literacy investments are nowhere near as cost-effective as those reaching the school-age population.

14. Their third characteristic is their lack of assets, especially title to land. We have too little information on asset holdings by income group to draw policy conclusions. The asset base of the poor largely determines the stability of their income, enabling or preventing the absorption of unexpected shocks to family earning power. From anecdotal evidence, we also know that insufficient collateral blocks many poor, especially in cities, from investment in self-employed activities, even on a

modest scale. In rural areas, the incidence of poverty is nearly twice as high in landless as in landowning rural households (48% versus 28%). In 1974, 23% of farmers were landless and 56% owned less than five hectares. Thus most of the rural population was either directly vulnerable to increases in producer prices of food staples, or stood to gain little from them as it probably consumed most of the family farm output. We cannot speculate whether and how this pattern may have changed in the 1980s. Parallel availability of well-chosen public rural infrastructure (roads, electrification, irrigation, water supply) is another critical constraint to emancipation of the rural poor. Expenditure on such community-based infrastructure would promote growth and equity.

15. **There is no straightforward relationship between employment and poverty.** Put simply, the poor cannot afford to be unemployed, due to the absence of Government or charitable assistance which is now unthinkable in Morocco given the scale it would demand. Indeed, only 10% of rural poor and 15% of urban poor household heads are reported to be inactive. This includes the aged, severely ill and handicapped, many of whom cannot and should not join the end of the long jobseeking line. For the vast majority of the poor who do work, hardship comes instead from low-productivity, short-duration, low-paid, insecure activities, often taken at the expense of opportunities for self-improvement. Some 50% of the entire population works as non-wage family labor. In rural areas 38% of the employed, and 60% of all female workers, report working less than 40 hours per week. A full-time agricultural worker in 1985 was eligible for a minimum wage sufficient to buy only half of the poverty level household consumption basket. In urban areas, poor household heads are roughly equally distributed among unskilled workers, office and service employees, small retailers, other small self-employed, and inactive. The minimum industrial wage in 1985 bought 60% of the poverty level household consumption basket.

16. **The relationship between education and unemployment is therefore not straightforward.** Since poor illiterates can tolerate open unemployment much less well than the educated non-poor, the illiteracy rate of the Moroccan unemployed is actually lower than that of the overall population. University graduates lead the field of the "declared" unemployed, followed by secondary and vocational training graduates, and primary school leavers. Many of the better-educated, typically from better-off backgrounds, can wait out short periods of unemployment to capture better jobs in the modern, typically public sector (the largest single employer of Moroccan baccalaureates is the Ministry of Education). Studies of longterm unemployment in Morocco find this once again concentrated among a fraction of the totally uneducated poor, with a variety of handicaps within the competition for low-paid jobs. Illiteracy remains a critical social handicap in its own right, whilst higher educational attainment, by itself, is no guarantee of immediate employment.

### C. The Social Dimension of Adjustment

17. **It is not easy to assess the impact of structural adjustments on the Moroccan economy since 1984, particularly the impact on the vulnerable groups of society.** An important distinction needs to be made between: (1) the "chronically" vulnerable, who are the focus of this report and (2) the

more politically loaded target of "those affected by adjustment", no matter what point of the social spectrum they started from. While the former also are likely to be exposed to the effects of adjustment, the two groups' concerns do not necessarily coincide in all situations. Moreover, available information is insufficient to permit an accurate assessment of adjustment effects -- the latest household survey was in 1985, when the effects of liberalization and stabilization programs were just beginning to make themselves felt. (A 1990 Bank- and UNDP-supported Living Standards Measurement Survey will help close this gap.)

18. **We can therefore only offer an inconclusive assessment for now.** Trade liberalization and Dirham devaluation, and consequent reorientation from nontradables toward exporting and efficient import-substituting activities have caused multiple, sometimes offsetting layers of change for many of the absolute poor. Workers in nontradable sectors, especially construction, utilities, services and much of the service-oriented informal sector, as well as subsistence farmers, were probably not in a position to take immediate advantage of this shift. Such groups may have suffered, on balance, through increased prices of imported goods. Those who could access enough land and other inputs (such as irrigation water) to shift production towards tradables clearly gained. We can only speculate how far the positive indirect effects on rural wages may have compensated for the increased prices of goods purchased by the landless.

19. **Other employment effects.** In the cities, the "sunrise" private sector, concentrated on apparel, textiles, leather goods and electronics, boosted wage employment in a different segment of the labor market (relatively low-skilled jobs with higher-than average female participation and loosely regulated wage structures) from that in which workers were displaced. Probably neither shift involved large numbers of the absolute poor, or nearly-poor, at least not directly. To a great extent, the employment effects of adjustment per se were drowned by the continued high rate of rural-urban migration and natural increase in the active population. Under these circumstances, it is hard to imagine rapidly increasing activities open to the urban poor where employment growth would not be at least partly offset by declining real wages.

20. **The scorecard is also mixed for monetary and fiscal policy.** Inflation was crushed in the last few years to the credit of the Government and Central Bank. This creates a complex web of small gainers and losers in the short term and is most valuable for generating stable expectations for the long term. In general, lowering inflation brings relatively greater benefit to those living off fixed incomes, such as pensioners. However, such transfer payments are much less frequent in Morocco than in developed countries and many poor are both producers and consumers of goods affected by inflation. The main thrust of fiscal reform, being the simplification of direct taxes and the introduction of VAT, has multiple implications for relative income distribution, and justifies further research in this respect. Its impact on absolute poverty depends on the extent to which the minimum basket is affected. We have no clear indication of this, although the recent elimination of exemptions on coffee, rice, transportation and cattle feed justifies some concern. On the positive side, the raising of personal income

tax threshold may have been of great benefit to some poor with formal-sector (assessable) incomes.

21. **Changes in administered prices and wages are equally complex.** The progressive elimination of energy subsidies shifts resources to less energy-intensive activities which tend to be more labor-intensive, but higher energy costs can affect the absolute poor directly, for example, where there are unavoidable transportation costs. Major shifts in producer and consumer prices for foodstaples, as indicated earlier, have multiple effects on rural poor as producers and consumers, and negative, but heavily subsidy-dampened, effects on the urban poor (see para. 34). Wage policies pursued under adjustment have resulted in real wage declines for the public sector in the last four years (1985-1989), though this trend was reversed in the 1989/90 round of pay revisions. However, only a small fraction of urban (absolute) poor household heads and negligible numbers of the rural poor are directly dependent on civil service incomes: indirect effects through services consumed by affected public sector workers may be stronger. Lastly and most clearly, adjustment has seriously affected the capacity of the Government to finance basic social services, including those directed at vulnerable groups: this is examined below.

#### D. Elements of a New Public Social Expenditure Strategy

22. **What kind of antipoverty programs are most effective?** The linkage approach. We looked at evidence from Morocco and elsewhere on policies (inputs) that simultaneously affect more than one dimension of poverty (outputs). These are called forward linkages: the stronger these are, the more benefits can be obtained from a given effort. Conversely, we identified cases where a single desirable output requires complementary efforts on several different inputs. These are called backward linkages: the stronger the complementarity, the greater the waste from ignoring a complementary input. For example, the critical determinants of higher infant mortality in Morocco are: higher female illiteracy; lower income-related factors; higher fertility; and lower health services coverage. Improved health services are therefore necessary but not sufficient to achieve the desired result. This condition seems self-evident, but it is seldom respected in investment planning.

23. **Apparent priorities.** This leads us to a strong presumption that efforts to reduce illiteracy (through formal and adult nonformal education) and improved family planning services have major forward linkages on earnings potential, on improved health, nutrition, sanitation, and access to education for other family members. Backward linkages tell us that to be fully effective, these investments need to be integrated with basic health, nutrition, and income-enhancing programs for the poor. This is a relatively simple recipe, which needs to be adapted to the different pressure-points of each region, using much more disaggregated and up-to-date information, such as the 1990 multisector survey mentioned above.

24. **Cost-effectiveness.** None of these actions is costless, but some interventions are strikingly cost-effective. Here are some orders of magnitude, based as far as possible on actual Moroccan expenditures. For

convenience, they are expressed as a proportion, or multiple, of the monthly minimum industrial wage, SMIG, as a rough measure of the alternative cost of simply paying for about half a poor family's maintenance for one month (see para. 15):

- (1) Supplementary feeding and nutrition surveillance for one at-risk infant for two years (avoiding many years of underachievement at school and beyond, or worse): 0.5 SMIGs;
- (2) complete set of vaccinations against the principal causes of avoidable childhood mortality: 0.1 SMIG per child;
- (3) providing family planning services to an at-risk mother (poor rural mothers average over 9 pregnancies): 0.3 SMIGs per acceptor per year;
- (4) doubling the classroom materials available to every Moroccan child in primary school, per year: 0.1 SMIG;
- (5) teaching an adult to read and write through evening classes, including allowance for failure rate, about 0.3 SMIGs;
- (6) compare these to the annual cost of scholarships and subsidized services (not even counting the cost of teaching itself) for the average Moroccan university student, 19 SMIGs.

25. **How is each tax Dirham spent on social services?** Almost one third of total government expenditures in 1988, including defense and debt service, was used for "social" spending as defined below. As a proportion of all civilian spending after debt service, the share is well over half. It amounted to 370 Dirhams per capita in 1980 and remains unchanged, adjusting for inflation, today, equivalent to 7.0% of per capita GNP. Nearly three-fifths of the "social dirham" is spent on education, a much higher proportion than in comparator countries. The next largest category is food subsidies -- about one fifth of social spending -- followed by health, with about one-tenth. The remaining tenth goes to all other social programs combined: housing, employment, social and cultural affairs (including adult literacy), youth and sports, and some transport expenditures. Not recorded here are implicit subsidies, such as on electricity, and training activities appearing under the relevant "productive" sector budgets.

26. **Future prospects for public social spending.** In the 1990s the social budget is unlikely to outpace the overall budget unless there are substantial reductions in the shares of military expenditure, debt service or both. It is difficult to identify in the civilian budget, after debt service, logical places for very significant reductions in favor of social spending. The Government should give priority consideration to reallocating to the social sector any savings produced by debt reduction or reduced defense requirements. Failing such shifts, the most likely scenario is one where social spending, in line with overall spending, rises by no more than, say, 2.5% per year after inflation, or approximately the population growth rate.

That means no increase overall in 1980 per capita spending (DH 680 in 1988 terms) for the rest of the century.

27. It will therefore be necessary to redouble efforts to optimize the internal allocation of the social budget, in order to favor actions which contribute strongly to the integration of the poor into the economy at the expense of other programs. The education sector, on the one hand, and food subsidies, on the other hand, which right now together absorb four-fifths of available social spending, are obviously the most likely sources of future savings.

28. **Education: the social lottery?** Moroccan education policies are analyzed in detail in recent Bank sector reports on higher education, vocational training, and rural primary education. The key statistic of the 1980s is this: while the population grew by 2.5% per annum, primary enrollments grew only 2.0%, but secondary rose 8.7% and higher education, 12.2%. Since in addition, the higher levels are far more expensive than primary, the base is being starved of funds. Unsurprisingly, it experiences efficiency and quality problems that discourage parents and raise the cost per graduate. Today, one boy out of three in rural areas, and two girls out of three, will never go to school. Of those enrolled nationwide, only one in 3 now enters secondary school and one in twenty passes the baccalaureat. This means the cumulative share of the overall state subsidy to education captured by the privileged few who reach university is overwhelming. Moreover, pass rates by income group are not recorded, but international experience indicates the representation of the poorest groups in secondary education is likely to be slight and in tertiary, minuscule.

29. **More school buildings and teachers will not be enough to spring the poverty trap.** Two ingredients are missing. First, basic schools are so short of funds (97% of their budget goes to salaries) that they cannot sustain even modest standards of books, materials, sanitation, school health, meals, maintenance, teacher training, management, and inspection. All of these are known to be key ingredients in education success. Moreover the value of the education dispensed, as seen by poor parents (nine-tenths illiterate) hardly sparks enough enthusiasm to overcome the high costs they face. Second, these sacrifices are objectively prohibitive for many poor families, especially where girls are concerned. Direct cash costs of schooling for each child in Morocco can be as high as 10% of family disposable income at the poverty level. Add to this the costs of foregone child labor, especially childminding and handicrafts. Any serious effort to break the cycle of poverty, at least over a generation, has to work on both pressure-points: for example, by motivating parents by reaching them with literacy programs, subsidizing schoolbooks and providing alternatives for care of younger siblings, as well as improving conditions and the relevance of the curriculum in schools.

30. **Where are the resources for this transformation?** We come back to upper secondary, technical/vocational, and university education, the most expensive and fastest-growing parts of the system. They may be a critical factor in breaking the vicious circle described above. The higher education system deserves to expand - artificially restraining its growth or overcrowding it and thus emptying it further of credibility are no solutions.

But it could easily expand in ways which draw less, per graduate, on public subsidies. These involve much shorter courses, more student loans to compensate for fewer domestic scholarships based on demonstrated need, and fewer foreign scholarships. It could also involve promoting more private and semi-public institutions, run autonomously and charging regulated fees, supported on a limited basis (e.g., by tuition grants) by the State. A saving of one-tenth of the nonacademic costs of universities would roughly double all nonsalary expenditure in basic education. More substantial encouragement of semiprivate academic institutions could produce larger results over time without penalizing poor university students.

31. **What is the right type of Vocational Training?** There has been much discussion of appropriate training directed at various underprivileged groups, especially in rural areas. Vocational training for regular job market placement needs to be clearly differentiated from special social safety-net programs, which might include some vocational training elements. This will require major policy changes in three areas. First, vocational training programs should be tightly linked to economic needs rather than being driven by the supply of school leavers. This means that employers in the productive sectors will need to be involved in all stages of planning, program development and actual training delivery, including cost-sharing. Second, there is a need to enhance local area initiatives and spur micro-enterprise development and/or income generating activities for various disadvantaged groups in particular in rural areas. This means, among other things, making use of existing education and training structures to provide short-term, targeted training related to particular income earning activities. Third, the blurring of responsibilities between various ministries with a social service mandate has led to the multiplication of initiatives in the area of pre-employment training by institutions whose experience is primarily that of welfare assistance provided to the handicapped, and who have relatively little contact with the labor market. A consolidation of these programs to free up resources for most needed basic education and literacy programs is in order.

32. **Nutrition and food subsidies are next in line.** Good nutrition depends on much more than entitlement to plentiful food. Success depends equally on maternal training in basic nutrition and hygiene practices, on safe water, and on medical surveillance and nutrient supplements for at-risk cases. One Moroccan child in four is chronically underweight and one in twenty-five (1987) is moderately to severely malnourished. These conditions, and less obvious vitamin and mineral deficiencies, are not usually fatal, but nonetheless a major cause of developmental impairments which reduce lifetime learning and working potential. Hence investing in infant nutrition has a high social return, because whilst its costs are modest and concentrated in time, its effects may be large, irreversible and last decades.

33. **Off-budget programs need permanent funding.** The major Moroccan nutrition programs are the infant and child health and supplementary feeding programs of the Ministry of Health, and two other programs heavily dependent on foreign food aid, the World Food Program's support for school lunches and the USAID/Catholic Relief Services' program which is directed to poor households through centers operated by the Ministry of Social Affairs. These programs have overall a maximum potential coverage of less than half the

estimated number of nutritionally at-risk mothers and children. As a minimum, budgetary provision should be made to expand the infant nutrition surveillance and supplementary feeding program's reach and preserve the main benefits of the other two programs beyond the commitment horizon of the donors.

34. **Careful rationalization of the generalized subsidy system.** An obvious potential source of savings, and of polemics, is the national food "compensation" system, whose largest cost items are wheat flour and sugar. Much technical and political effort has been devoted recently to restructuring the system so as to release funds for more cost-effective programs. Neither subsidy, until recently, was deliberately "targeted" to the poor. They were available to all consumers in proportion to the quantity bought. Consequently only about 16% of the subsidy budget went into the shopping baskets of the poor, but the subsidy is nonetheless a critical component of the purchasing power of those households. While the Government plans to eliminate virtually all food subsidies by the early 1990s in an effort to reduce public expenditures, special care should be taken to protect the poor by alternative, smaller, but better targeted programs. Refined sugar, a cultural but not nutritional necessity, could be subsidized less without major harmful nutritional effects. Provided the new measures being contemplated do not inadvertently reduce incomes for very small beet and cane farms, and part of the savings are channelled into targeted nutrition programs, the poor could only benefit.

35. **The wheat flour subsidy has already undergone several changes.** These aim at reducing outlays, but minimizing nutritional impact on the poor, by reducing leakages to better-off consumers. In particular, the subsidized "national" flour is coarser, hence less attractive to middle class consumers, than unsubsidized "luxury" flour, and the quantities of national flour are strictly rationed. Further potential savings could perhaps be obtained by marketing a cheaper but nutritionally sound product, such as barley flour or wheat-barley flour mix, with even fewer leakages. Other targeting options include restricting sales of subsidized flour to fewer bakeries in disadvantaged areas. The potential savings are very substantial: half the wheat flour subsidy, which could become redundant in terms of the nutritional status of the poor, would buy a doubling of most basic health services and nutrition expenditure.

36. **Public health: the acid test of Government social concern.** The Government has recently proposed to the Bank a major (\$170m) four-year program to rehabilitate basic health services throughout the country. This effort acknowledges that public health services - the only defense for 80% of the population that have no insurance arrangements, including virtually all poor - had been gutted by inadequate funding. Health coverage remains low overall (50% in rural areas) and extremely sparse in poor regions. Health outcomes are in important respects worse than in Senegal, Sri Lanka and Pakistan, much poorer countries, and uniformly worse than the Philippines, a slightly poorer country. Such countries spend on average nearly twice Morocco's share (3%) of their national budgets on health.

37. **Turning the corner.** Under the 1984-1988 austerity period, Morocco's health budget was preempted for salaries and to sustain a minimum



set of hospital services. Patients and their families, including the poor, still meet most hospital food, medicine and supplies costs out-of-pocket. Meanwhile the credibility of other facilities, intended as cost-effective screens for the hospitals, declined further. Courageous recent moves to increase charges for hospital consultations (with exemptions for the poor) and reduce unnecessary subsidies from the public budget to the supposedly self-financing health insurance sector will release some of this pressure. Still, public funding will have to go up both in the short term, to optimize the existing network, and in the medium term, to at last extend that coverage to the overwhelming majority of the population.

38. **Employment and Training programs.** Employment programs, primarily in terms of public works schemes operated by provincial governors, are a tiny fraction of the social budget. Employment is a legitimate concern of governments and a major focus of macroeconomic policy. However, views are sincerely divided, in Morocco, Europe and within the Bank, as to what the role of direct public assistance for employment should be. Some see "Employment Creation" schemes in the public sector as a contradiction in terms. They criticize both the waste that is inherent in selecting and carrying out small projects without regard to market signals and the inequities and "mistargeting" that can arise when solely political criteria are used to determine need. More importantly, it is extremely difficult to design and manage such projects so to achieve a lasting training effect, transferable to other future opportunities (witness the universal skepticism as to the net value-added of military service conscripts in peace time). There is another point of view, which deserves equal respect, that what may look to outside critics like "makework" in fact instills, restores or preserves dignity, self-confidence, disciplined work attitudes and other priceless intangibles eroded by long-term unemployment. Such expenditure, arguably, is at least preferable to welfare support which involves no work counterpart from the able-bodied unemployed.

39. There may be alternative channels for such "productive" support that deserve exploring in Morocco. The regional Governments are just beginning to experiment in this difficult area. The starting point should be to combine a community-based environment of nonformal training for self-employment with basic education skills, and judicious use of existing credit channels. The literacy element, which has powerful positive ramifications for the poor, is critical. However, the motivation should be a real economic opportunity, such as vocational training for job upgrading for casual and lowpaid workers on the fringe of the modern economy, and assistance for small credit for off-farm income opportunities, especially for women. A complementary set of programs could concern low-cost child day-care, based on community networks, so as to release female workers and jobseekers as well as older children who are better off in school. Further research on how to increase school retention, and address the educational needs of recent school dropouts is urgently needed and underway with Bank assistance.

#### E. The Roles of Nongovernmental Organizations and the Bank

40. **The non-government sector.** These community- and workplace-based examples are the right place to end our search for what might be done more,

less, or better, and how it can be sustained. The case of nonformal adult training is quintessentially one where nongovernmental leadership and management is paramount. It simply cannot be done only through orthodox Governmental delivery systems, and not just for cost reasons. However, the Government could provide seed-money, especially startup grants for equipment, encouragement of various kinds through media, political and technical support, detachment of small numbers of motivated professionals, and possibly tax incentives. (For example, it could ask employers to give bonuses to workers who complete literacy courses, and allow tax credits, grants or other advantages to companies who do so). Other major examples of existing and future Government-private/voluntary sector collaboration include: voluntary childcare services, also offering nutrition guidance, under Government technical supervision, voluntary efforts for specific disease control and vaccination campaigns, and the operation and maintenance of ambulances and other basic health services via, e.g. the Red Crescent. More recently still, a major precedent has been set by the multi-million dollar rehabilitation project of a large Casablanca health district and its teaching hospital, financed in large part by local businesses and community organizations. The principle of "matching grants" from the State to local initiatives is well established in Morocco. External donors, and the Bank in particular, should welcome opportunities to extend the reach of such initiatives, but cannot improvise them.

41. **The Role of the World Bank:** current. We are prepared to be consistent and to put both our resources and stafftime, where we believe them to be needed for poverty reduction. We have already taken several steps. The Rural Primary Education project (\$83m, 1989) focusses on expanding access, especially for underserved populations, with special facilities and incentives to encourage enrolment by rural girls. The 1989 Sixth Agricultural Credit loan through CNCA (\$120m, 1989) has special components for easier access to small loans for farm and off-farm activities, especially by women. The Health Sector Loan (\$104m, 1990) provides for rehabilitation of basic health services and first-level referral facilities, especially for maternal and child health, nutrition, family planning and emergencies. All three loans are, we hope, first phases of even longer-term commitment to these objectives.

42. **Additional actions proposed.** We envisage, first, a substantial followup loan for basic education in 1990, concentrated on expanding lower secondary education opportunities and improving quality for underserved populations. We have also offered support to develop a new generation of semiprivate short-duration polytechnic institutes, to help break the vicious circle of education funding. Third, we plan to incorporate in the forthcoming Structural Adjustment Loan an explicit social expenditure monitoring framework and safeguards for vulnerable groups, and safety-net programs covering both essential nutritional needs and transitional unemployment. Fourth, we propose that the next support for agricultural sector loans should address land policy issues including land consolidation and the development of an efficient land market. Also, since many of the poor are women, we are working on ways to provide training in a systematic way to ease their entry into job market.

+  
+                    +  
+

**43.            We stand ready to mobilize technical and financial support, both from our own resources and the international donor community, for any and all of these proposals, at Government request, as well as to help Government materially with the further analysis, discussion and dissemination of the main topics discussed in this report.**

## MOROCCO

### REACHING THE DISADVANTAGED:

### SOCIAL EXPENDITURE PRIORITIES FOR THE 1990s

#### INTRODUCTION

0.01 Morocco has achieved considerable social progress since independence (1956), but great potential remains for improving the living standards and productivity of the poor. This study provides a social sector strategy framework to improve the effectiveness of social programs and enhance the income-earning capacity of the poor. It addresses two basic issues: the extent to which current health, education, employment, and nutrition and food subsidy policies and programs address the needs of the poor, and the effectiveness and efficiency in the production and distribution of these social services.

0.02 This report is organized into four chapters. The first provides the general background. The second outlines the conceptual framework. The third identifies the dimensions of poverty in Morocco and analyzes the major factors contributing to its persistence, which include the characteristics of the poor, population growth, the composition of the labor market, and problems in the provision and distribution of social services. The final chapter presents policy options and recommendations for Bank lending strategy and future research.

#### CHAPTER I - BACKGROUND

##### A. Growth and Poverty

1.01 Since the early 1970's Morocco has pursued an economic growth policy which has included efforts to meet distributional and social needs. Between 1971 and 1985 real Gross Domestic Product (GDP) per capita increased 36%, while the poverty rate<sup>1/</sup> fell by 29% (from 42% to 30%) (see Table 1). The incidence of poverty declined from 38% in urban areas and from 42% to 30% in rural areas, but the overall number of poor<sup>2/</sup> remained approximately the same (6.6 million). In the late 1970's and early 1980's more than 10% of GDP was devoted to social policies and programs-- relatively high by international standards.

---

<sup>1/</sup> Poverty rate is the estimated ratio of the poor compared to the population.

<sup>2/</sup> Persons with expenditures below the estimated poverty threshold (see appendix 1).

1.02 During the last 20 years, as a result of GDP growth and the provision of social services, significant improvements occurred in all social indicators. Life expectancy rose from 49 to 62 years, the death rate fell from 18 to 10 per thousand, and infant mortality dropped from 145 to 73 per thousand (see Table 2 and Appendix II). Female literacy increased from 10% in 1970 to 22% in 1985. Progress would have been even greater if it were not for rapid population growth, which doubled in 27 years (1960-87) from 11.6 million to 23.3 million. 1

1.03 Despite these improvements, several social indicators remain unfavorable. The child death rate (32 per thousand) remains quite high, as does the illiteracy rate which is 60%. The maternal mortality rate is a high 585 per hundred thousand. Safe water is accessible to only 57% of the population. The incidence of poverty varies considerably among regions, provinces, and urban and rural areas. Infant mortality, child death, child malnutrition, and population per physician rates are worse in rural than in urban areas. Some indicators, such as the illiteracy rate, exhibit major gender differences; female illiteracy is almost twice as high as male illiteracy.

1.04 The relationship between the level of per capita GDP growth and the poverty rate is determined by inequality in income distribution. Reducing this inequality will help lessen poverty even if GDP does not grow. In Morocco, consumption distribution<sup>1/</sup> remains quite uneven, with slightly greater inequality in urban areas. A Gini coefficient based on consumption expenditures worsened from 0.35 in 1959 to 0.45 in 1971 and then improved to 0.41 in 1985. The ratio of the share of the wealthier 20% of households and the share of the poorest 20% was nine to one in urban areas and seven to one in rural areas. Inequality in consumption distribution continues to be a severe problem. Thus growth and redistribution policies are required to extend the benefits of development to the poor.

1.05 In summary, despite rapid economic development in the 1970s and early 1980s, poverty reduction has not been as rapid as the rise in average consumption. To improve the present situation, additional and continuous efforts need to be devoted towards poverty alleviation in the future. Although efforts toward poverty reduction may absorb resources valuable for short-term economic growth, such efforts, in the long run, will strengthen the resource base of the economy. First, poverty reduction would expand and improve the human capital base of the economy; second, it would increase national income; third, it would decrease government expenditures on nutrition, health care, and other welfare programs; and fourth, it would lead to a decrease in fertility and population growth rates, allowing for higher levels of per capita income.

---

<sup>1/</sup> Household income data are not available. Note that the distribution of household expenditures may underestimate the extent of income inequality, since income is usually more unevenly distributed than consumption.

## B. Aggregate and Territorial Poverty

1.06 Poverty remains a serious problem in Morocco. In 1985 per capita GDP was US\$590, or 22% percent below the average for lower middle income (LMI) countries. The aggregate poverty rate (30%) is one of the highest in the region and the rate of ultra poverty is also relatively high (16%)<sup>1/</sup>. As table 1 shows, the poverty rate is only slightly higher in rural (32%) than in urban areas (28%); the ultra poverty rate is similar in both.

Table 1: POPULATION IN POVERTY AND ULTRA POVERTY, 1985  
(in thousands)

	Poor		Ultra Poor	
	Number	Percentage	Number	Percentage
Urban	2,594	28	1,436	15
Rural	<u>3,990</u>	32	<u>1,985</u>	16
TOTAL	6,584	30	3,421	16

Source: Direction de la Statistique. Ministry of Planning.

1.07 There are considerable variations in the incidence of ultra poverty and poverty at the regional and sub-regional level, and across urban and rural areas (see map 1 and 2). Large differences in urbanization levels and natural resource endowments among regions also exist. About two thirds of the urban population live in the central and northwest regions. Most of the country's industry is located in the center-north and northwest. Other regions are mostly rural; the south is 95% rural. Morocco's landscape ranges from mountainous to tropical, from coastal temperate to harsh deserts. Diverse topographical and environmental conditions and dispersed populations are partially responsible for difficulty of access to social services and poor health status in certain regions.

## C. Structural Adjustment and its Effect on the Poor

1.08 An analysis of poverty and requisite policies must take place within the larger context of Morocco's macroeconomic situation. Since 1983, due to severe structural problems including growing inflation, a large deficit and an increasing debt burden, Morocco has undertaken extensive stabilization and adjustment policies supported by a series of IMF standby arrangements and World Bank adjustment loans. The impact of such efforts has been the subject of several World Bank reports and will only be outlined briefly here. Instead, we will focus on the program's impact on the poor. However, the newness of the effort and the limited availability of data specific to the poor render the analysis preliminary at best.

<sup>1/</sup> Ultra poor are persons in households with expenditures per person lower than an estimated ultra poverty threshold, which is defined in appendix I. The food component of this threshold represents 80% of the cost of the minimum required basket.

1.09 Until the mid 1970's, Morocco followed a relatively conservative approach to economic development. Then from 1975 to 1977 the country experienced a boom in phosphate prices which coincided with rising defense expenditures and an unprecedented expansion in public investment. In the late 1970's phosphate prices plunged and the second oil shock hit; Morocco's favorable terms of trade quickly reversed. In order to maintain its higher rate of public investment, Morocco resorted increasingly to external markets. From 1975 to 1983 Morocco's debt grew from US\$1.8 to US\$13.9 billion, at which point it represented nearly 120% of GDP and 355% of foreign exchange earnings. The unanticipated rise in international interest rates in the early 1980's, compounded by the declining productivity of public investment and a prolonged drought from 1980-84, adversely affected the country's balance of payments. Bereft of foreign exchange reserves, Morocco was unable to shoulder its debt burden--the debt service ratio reached 53% in 1983 with interest payments alone accounting for 20% of exports.

1.10 In 1983, Morocco's access to international markets was sharply reduced. Under advice from the international Monetary Fund (IMF) and the World Bank, the government designed a program with dual objectives: 1) to stabilize the economy in the short run by reducing aggregate demand and the government deficit and 2) to enhance the efficiency of the economy by reforming the underlying structure of key economic and social sectors. Restrictive fiscal and monetary policies were employed to contain aggregate domestic demand, while structural reforms in trade and industry, agriculture, education and the public enterprise sector were initiated to augment the supply response of the economy.

1.11 In brief, the results of the program in Morocco have been relatively successful. The current account has turned from a deficit of 7.8% of GDP in 1984 to small surpluses in 1987 and 1988; the budget deficit has decreased, on a commitment basis, from 11.2% of GDP in 1984 to 4.2% in 1988; inflation, as measured by the CPI, has dropped from 11.5% to 2.3% over the same period. GDP growth has been increasing at an average annual rate of 3.3% since 1984. However, severe problems continue to plague the economy. Per capita consumption has stagnated, public investment has fallen sharply, and foreign exchange reserves have been rebuilt at an aggravatingly slow pace. Real interest rates have risen by approximately 20 percentage points since the mid-seventies. Despite improvements, the country's balance of payments position remains precarious. Debt indicators remain high and constitute a continued impediment to external financing. In the following, we present some specific macroeconomic policies and their effects on the poor.

1.12 Trade and exchange rate liberalization have led Morocco to orient its economy away from development through import substitution with extensive state intervention to the promotion of exports and more efficient import substitution with greater reliance on the private sector. The prescribed devaluation has benefited primarily those of the low income population employed in export activities. On the other hand, many urban poor who rely heavily on imported goods and/or are engaged in the production of non-tradables, most notably in the informal sector or working in such activities as construction, utilities and services, do not stand to benefit directly from liberalization policies in the short-run. Most of the rural poor are unable

to take advantage of the benefits of devaluation. Small (poor) farmers in Morocco do not typically own sufficient land and lack enough access to basic irrigation and transportation; thus, they can not rapidly switch into export production.

1.13 Tax reforms in Morocco aim at achieving three objectives: (1) to increase Treasury revenues; (2) to harmonize the tax system with other resource allocation objectives; and, (3) to ensure equitable division of the "tax burden" across population groups. In general, tax policies are not a suitable instrument for poverty alleviation, however, certain aspects of Morocco's tax reforms will have an impact on the poor. For example, the introduction of a value added tax (VAT) on goods and services in 1986 and the more recent elimination of VAT exemptions on such items as coffee, rice, cattle feed and transportation services will likely have an adverse effect on both the rural and urban poor due to the larger proportion of their incomes spent on these consumption items. On the other hand, the zero-bracket personal income tax threshold was raised from DH 6,000 to DH 12,000 making the system less regressive in spite of the fact that it does not affect the core poor. In addition, the government intends to strengthen existing institutions and to rationalize tax administration efforts which may contribute to the improvement of equity in the long run.

1.14 Contractionary monetary and fiscal measures have been implemented to control the fiscal deficit and thus curtail excess demand in the economy. High reserve requirements and ceilings on bank credit are two examples of such restraint. General liberalization of the financial sector is also being pursued. For instance, interest rates have been allowed to rise to positive levels. It is these actions that have helped to bring down inflation, which is positive for those of the poor whom high inflation tends to effect most severely. The highest cost of these measures has been the curtailment in investment. Real expenditures declined by over 50% between 1981 and 1986. While the adjustment has succeeded in encouraging higher private investment--with the private share of Gross Fixed Capital Formation (GFCF) rising from 12.9% in 1982 to 16.6% in 1986--the level of public investment had by 1988 fallen below the minimum necessary to meet the development needs of the private sector and the social needs of the population. It should be noted that the government is aware of the deleterious long-term effects of these trends and the increase in the level and efficiency of public investment expenditures is a major component of its continued adjustment program.

1.15 Reforms in administered prices through the reduction in subsidies and price controls are also an integral component of the Moroccan adjustment program. For instance, the reduction and eventual elimination of energy subsidies is planned to curtail inefficient energy use, which would in turn improve the foreign reserve position of the country. A positive outcome for the poor derive from the fact that shifting the resource bias away from energy intensive (labor-saving) technology has led to more labor-intensive employment.

1.16 With respect to wage reforms, Morocco has directed wage control measures to the public sector in an effort to reduce the budget deficit. The government has limited salary increases to the lower end of the scale,



resulting in declining real incomes for government workers during 1985-1988. This trend was reversed in 1989/90 round of pay revisions. Another outcome is a decline in productivity and lower quality of services as it has become difficult to attract and retain competent public employees. In 1983, the Government introduced a law to eliminate education sector jobs vacated by retirement which has since been extended to other sectors. In the long run, these changes should improve the efficiency of public resource allocations, but in the short run, hardships may be imposed on the poor through reductions in service quality, the loss of employment and reductions in real wages of public employees, many of whom fall into the poorest 30% segment of the population.

1.17 Agricultural pricing policies are also subject to major reforms. In terms of consumer subsidies, the government aims to remove virtually all food subsidies by the year 1990. Since the subject of this report is government social expenditures, this topic will be discussed in detail later in the report. As for input subsidies, two major policy reforms are a reduction in sugar production (a heavily subsidized crop) and a reduction in input subsidies, particularly for fertilizer. These cuts will adversely affect many farmers. But, they will also lead to a reduction in the production of fertilizer-intensive crops and the freeing of government resources. Thus, poor farmers may end up benefiting to a greater degree from such resources depending on their eventual allocations.

## CHAPTER II - THE CONCEPTUAL FRAMEWORK

2.01 In this section we present the conceptual framework and methodology of this study. The purpose of this framework is to integrate and advance existing poverty concepts and resolve some methodological issues in addressing poverty. The approach includes: the classification of the numerous needs of the poor into survival and income-earning categories, the introduction of the concept of comparative indicators, the division of the poor into two categories, the ultra poor and conventional poor, and the introduction of backward and forward linkages as useful tools for policy analysis.

2.02 First, we distinguish two main dimensions of poverty--survival needs and income-earning needs. Survival needs relate to basic health, nutrition, sanitation, water, and shelter. Income-earning needs cover human capital development and employment opportunities. To assess these needs two types of indicators are used: aggregate indicators and territorial indicators. The former are national averages; the latter represent regional, sub-regional, or provincial averages.

2.03 Following Cornia (1987), survival and income-earning indicators are classified into status, process, and input. Status indicators are used to determine the magnitude of income-earning and survival problems, while input and process indicators are used to identify major factors contributing to poverty. As examples, child mortality is a status indicator; government expenditure per capita is an input indicator; while the number of hospital visits is a process indicator.

2.04 Second, in assessing poverty, we introduce the concept of comparative indicators to allow for the quantification of the deviation of Moroccan living conditions from international norms and standards. We use comparative indicators to identify high-risk population groups (infants, children, women), critical social sectors (health, nutrition, education, and employment), and territories (regions and urban and rural areas). We then investigate causes for these deviations to determine whether they indicate priority areas for policy intervention.

2.05 Several approaches are used to define relevant comparative values for survival and income-earning indicators. Our first choice is to use existing international standards (for instance child labor, unemployment). When international standards are not readily available, we use a proxy based on a comparison of Moroccan indicators to respective averages for lower middle income (LMI) countries or to average values of indicators for a group of countries similar to Morocco in terms of per capita GNP, poverty rate, and/or region.

2.06 International norms or standards can be employed as policy goals to improve Moroccan poverty conditions. LMI or other similar country indicators, on the other hand, represent a starting point for a more systematic assessment of poverty conditions in Morocco. The major limitations of these indicators as a basis of comparison are differences in the quality and reliability of statistical data, variations in delivery costs of social services, and country-specific cultural and environmental conditions. Despite these limitations, comparisons are useful for identifying priority poverty problems, particularly important given Morocco's limited financial resources. This comparative method can then be used by the government to determine medium- and long-term goals that reflect both resource constraints and political preferences.

2.07 Third, we distinguish two subgroups, the ultra poor and the conventional poor. According to empirical evidence provided by Lipton (1988), the ultra poor are severely malnourished, handicapped or sick individuals as a direct result of their extremely low income levels. In addition, as noted by Wagner and Spratt (1989), this group suffers from educational poverty, i.e., cross-generational lack of basic literacy and numeric skills<sup>1/</sup>. As a consequence of these characteristics, the ultra poor are unable to take full advantage of employment opportunities as well as basic health, education and other welfare services accessible to the rest of the population. Thus, this group requires special targeting of social services. Given the limited availability of data in Morocco on the ultra poor as defined above, we use a proxy, also suggested by Lipton (1988), which identifies the ultra poor

---

<sup>1/</sup> For information on "educational poverty", see working paper on Education, Literacy and the Poor.

according to their expenditure level<sup>1/</sup>. In turn, we define the conventional poor as those households which have incomes higher than the ultra poverty threshold yet below the poverty threshold (see appendix 1).

2.08 Fourth, we introduce the concepts of linkages and spatial integration for identifying priorities among policy alternatives. Following Hirschman (1968), we classify linkages between poverty policies into two types: backward and forward. Backward linkages refer to direct and indirect input requirements for satisfying the needs of different members of poor households. An example of a backward linkage is adequate preschool nutrition, without which lifetime learning ability may be impaired. Forward linkages refer to output linkages or how the satisfaction of one need contributes to the satisfaction of other needs. For example, in the long run education may contribute to reductions in mortality, fertility, illiteracy, and unemployment.

2.09 The concept of linkages can be used to improve and broaden the analysis of costs and benefits in calculating returns to investment. While it adds to the complexity of analysis, since many linkages are hard to quantify, it better reflects the indirect and induced effects of social sector expenditures. The identification of backward policy linkages can help identify sectoral and spatial integration requirements. On the other hand, forward policy linkages can be used to identify positive externalities and thus, cost-effective policy packages. Overall, linkage analysis can contribute to a more systematic approach to decision-making in social planning.

### CHAPTER III - ASSESSMENT OF THE POVERTY PROBLEM IN MOROCCO

#### A. Survival Indicators

3.01 An analysis of survival indicators provides useful insights into the survival status of the poor. As shown in table 2, most Moroccan health and nutrition indicators are positive with respect to their comparators, reflecting improvements achieved over the last two decades. Two important examples are life expectancy (62 years) and daily calorie intake (2,729 per capita). However, several indicators do reveal negative deviations. Children seem to be the highest risk group: child mortality is 32 per thousand, or 156% higher than its comparative indicator and moderate to severe child malnutrition is 28%, or 27% higher than comparator levels. The maternal mortality rate is 585 per 100,000, or 106% higher than its comparative indicator.

---

<sup>1/</sup> A more appropriate definition of the ultra poor should be based on their health and nutrition status. However, the data are not available, but will be sought as part of the forthcoming Living Standards Measurement Survey (LSMS). Therefore, our current analysis of the ultra poor is based on expenditure level, as well as, indirect evidence (see Table 3).

**Table 2: AGGREGATE SURVIVAL STATUS INDICATORS, 1984-85**

Survival Needs				
Groups	Related Indicator	Existing Value	Comparative Indicator	Percentage Deviation
1. CHILDREN	Child death rate per 1,000 <sup>a/</sup>	32	12.5 <sup>b/</sup>	-156
2. CHILDREN	Severe child malnutrition (%)	4	4 <sup>c/</sup>	0
3. CHILDREN	Underweight prevalence (%)	28	22 <sup>b/</sup>	-27
4. INFANTS	Infant mortality rate p/1,000	73	83 <sup>b/</sup>	+12
5. INFANTS	Low birth weight (%)	9	13 <sup>c/</sup>	+31
6. WOMEN	Maternal mortality p/100,000	585	284 <sup>d/</sup>	-106
7. WOMEN	Fertility rate (1986, ‰)	4.5	4.7 <sup>c/</sup>	+4
8. WOMEN	Birth rate per 1000	33	35 <sup>c/</sup>	+6
9. ALL GRPS	Access to Safe water (%)	57	62 <sup>b/</sup>	-8
10. ALL GRPS	Population growth (1980-86, ‰)	2.5	2.6 <sup>c/</sup>	+4
11. ALL GRPS	Life expectancy (years)	62	58 <sup>b/</sup>	+7
12. ALL GRPS	Daily calories per capita	2,729	2,511 <sup>c/</sup>	+9
13. ALL GRPS	Death rate per 1,000	10	11 <sup>c/</sup>	+9

<sup>a/</sup> This indicator is particularly unreliable due to the mode of measurement.

<sup>b/</sup> Average value of indicator for group of countries similar to Morocco in terms of per capita GNP, poverty rate, or region.

<sup>c/</sup> Lower Middle Income (LMI) countries' average.

<sup>d/</sup> Median value of indicator for countries with high mortality rates for children under five.

Note: Positive sign indicates a better position relative to the comparative indicator.

Sources: World Bank 1987; UNICEF 1990; Enquête nationale population et santé, 1987.

3.02 These patterns merit further review with an emphasis on evaluating the underlying causes for indicators exhibiting negative deviations. The major causes of morbidity and mortality for all groups continue to be the prevalence of communicable diseases, such as respiratory infections and diarrheal diseases. Underlying causes for many of these diseases are relatively low access to safe water (57%), poor sanitation, and the limited availability of basic health care services.

3.03 Also, high morbidity and mortality rates are linked to poor nutritional status, especially for infants and children. While some measures of preschool nutritional status appear to have improved in the past 10-20 years, particularly in urban areas, chronic undernutrition has remained virtually unchanged. Nationwide, a quarter of the children under three years old are chronically undernourished, about 15% are underweight, and 4% are too thin. Overall, 17% of Moroccan children exhibit some form of protein-calorie malnutrition. The causes of these persistent problems are due to the insufficient, non-nutritious, and often contaminated food provided to infants and children which in turn derive from insufficient family earnings, lack of basic health education and unsanitary living conditions.

3.04 Less critical indicators also merit attention, as they can reveal useful information about other social sector problems. As an example, calorie intake per person is relatively high, but underweight prevalence and malnutrition remain serious problems -- thus, the solution to nutritional problems in Morocco lies beyond simply providing sufficient calories per capita. Further analysis indicates that intra-familial food distribution in addition to a generally poor health environment and lack of access to health facilities, proper maternal and child health care, and education are determining factors of the nutritional problems faced by vulnerable groups.

3.05 While an analysis of the health and nutrition indicators on an aggregate basis is informative, it overlooks considerable variations in the incidence of survival problems in urban and rural areas and between provinces and regions (see map 3). In terms of nutrition, problems are twice as severe in rural areas compared to urban areas: although 56% of the population lives in rural areas, 75% of undernourished children are found there. Nutritional status is the worst, measured according to the percentage of undernourished and underweight children in Tensift, Sud, and Centre-Sud. As shown in table 3, infant mortality is higher than the national average in 16 out of 47 provinces, most notably in Chefchaouen, Tata, and Ouarzazate. The incidence of morbidity from infectious diseases, which is higher than average in 18 provinces, varies slightly from the incidence of infant mortality. The provinces with the highest morbidity rates are Tata, Ouarzazate, Boujdour, Errachidia, and Figuig. It is worth noting that these provinces are located in subregions which have the highest rates of ultra poverty.

#### B. Income-Earning Indicators

3.06 There has been considerable effort on the part of the Government in terms of human capital development during the last two decades. However, human capital development and income-earning status in Morocco do not compare well to international standards or other LMI countries, as shown in table 4. To begin with, Gross National Product (GNP) is \$590 per capita, significantly lower than in other LMI countries which average \$750 per capita. Both male and female illiteracy rates deviate considerably from their comparators by 72% and 56% respectively. It is interesting to note that although female illiteracy is much higher, male illiteracy shows the larger deviation, reflecting similar gender discrepancies in comparator countries. Primary school enrollment rates, particularly for girls, are also low compared to the LMI average.

3.07 Unemployment<sup>1/</sup> rates are relatively high as compared to the accepted structural unemployment rate of 5%. As is usually the case in developing countries, recorded open unemployment is considerably higher in urban areas, especially among females. In rural areas, the rate is lower but this hides the fact that 58% of the rural active population (three million, of which two million are women) is engaged in non-wage activities.

---

<sup>1/</sup> Unemployment is defined by the Moroccan Direction de la Statistique to be people ages 15 and over who have not worked during the 30 days preceding a survey, but who have been looking for a job during that period.

**Table 3: ESTIMATED VARIATIONS IN INFANT MORTALITY  
AND MORBIDITY FROM INFECTIOUS DISEASES, 1987 <sup>a/</sup>**

Province	Sub region	Infant mortality (per thousand)	Morbidity <sup>b/</sup> from infectious diseases (per thousand)	Ultra-poverty rate (%)
Chefchaouen	Nord-Ouest 3	140	4.5	18
Tata	Sud 2	130	74.4	28
Ouarzazate	Sud 2	128	26.1	28
Taounate	Centre-Nord 2	122	5.2	10
Errachidia	Centre-Sud 2	117	23.1	20
Marrakech	Tensift 1	116	7.4	19
Azilal	Centre 5	116	4.0	15
Boulmane	Centre-Nord 1	113	5.9	16
Taroudant	Sud 1	110	10.4	15
Sidi Kacem	Nord-Ouest 2	109	2.5	17
Tiznit	Sud 2	106	5.0	28
Tétouan	Nord-Ouest 3	105	2.6	18
Essaouira	Tensift 2	105	2.4	15
Figuig	Oriental 1	105	12.6	17
Agadir	Sud 1	95	6.2	15
El Kelaâ Sraghna	Tensift 1	95	3.6	19
Taza	Centre-Nord 2	92	5.3	10
Guélimit	Sud 2	87	11.8	28
Oued-Eddahab	Sud 2	NA	11.8	28
Béni-Mellal	Centre 5	69	7.9	15
Ifrane	Centre-Sud 1	72	6.9	22
Salé-Témara	Nord-Ouest 1	<u>65</u>	<u>6.4</u>	<u>10</u>
National Totals		92	4.6	16

a/ Includes the provinces with infant mortality or morbidity rates higher than national averages.

b/ Calculated on the basis of reported cases of typhoid fever, measles, conjunctivitis, trachoma, poliomyelitis, leprosy, tetanus, scarlet fever, diphtheria, and meningitis.

Source: Annuaire Statistique du Maroc 1988.

**Table 4: AGGREGATE INCOME-EARNING INDICATORS**

Type of indicator	Current value	Comparative indicator a/	Percentage deviation
GNP (per capita, 1986, US\$)	\$590	\$750	-21
Illiteracy (age 15+, %, 1985)			
Males	55	32	-72
Females	78	50	-56
Primary school enrollment (% of age group, 1984-86)			
Males	96	107	-10
Females	62	85	-27
Urban open unemployment (% , 1987)	14.7	5 <sup>b/</sup>	-194
Males	13.4	5	-168
Females	18.5	5	-270
Rural open unemployment (% , 1987)	5.6	5	-12
Males	8.4	5	-68
Females	1.5	5	+70
Rural child labor (% of rural employed, 1986)	13.5	0 <sup>c/</sup>	-
Males	10.2	0	-
Females	17.5	0	-
Urban child labor (% of urban unemployed, 1986)	2.9	0	-
Males	1.9	0	-
Females	5.9	0	-

a/ LMI average.

b/ Comparative indicator for unemployment represents the structural rate under full employment (5%).

c/ Comparative indicator for child labor represents accepted international standards.

Sources: World Development Report, 1988. Direction de la Statistique : Population Active Rurale, Vol. I, 1986-87; Population Active Urbaine, 1984-87; Annuaire Statistique du Maroc, 1988.

3.08 With regard to wages, information is scant in Morocco. According to the World Bank Trade Liberalization and Industrial Adjustment Report (1988), real wages for several key industrial sectors have been declining steadily in recent years. Minimum wages fall below the poverty level for an average household (assuming one worker per household) by 40% for industrial workers and by 50% for agricultural workers.<sup>1/</sup> However, there is evidence that minimum wages are seldom enforced; thus, providing further evidence of low real wages for many workers. Finally, child labor is high, especially in rural areas, which is partially attributable to the insufficiency of the wage levels of other family members.

3.09 Disparities in income-earning indicators across regions are evident in sub-regional poverty and ultra poverty rates. Since the estimation of poverty incidence is based on household expenditure/person, the poverty rates primarily reflect variations in income-earning capacity across different geographical areas. As indicated in table 5, the patterns of incidence of rural/urban poverty and ultra poverty across subregions are similar. It shows that rural poverty is worst in Sud 2 (50%) or 56% higher than the national rate, followed by Sud 1 and Nord-Ouest 3. Urban poverty is highest in Centre-Sud 1 (38%), followed by Tensift 2, and Centre 4. In absolute terms, rural poverty is highest in Sud 2 and urban poverty is most severe in Nord-Ouest 3. Similarly, rural ultra poverty is twice as high as the national rate in Sud 2 (32%), followed by Oriental 1, and Centre-Sud 2. Urban ultra poverty, on the other hand, is highest in Centre-Sud 1 (26%), followed by Centre-Nord 1, and Centre-Nord 2. The absolute numbers of rural poor are highest in Sud 2; for urban poor in Nord-Ouest 3.

### C. Factors Contributing to Survival and Income-Earning Problems

3.10 The factors contributing to the unfavorable living standards and low-income earning status of poor households can be classified into four broader domains: the characteristics of the poor, population growth, the structure of the labor market, and the suboptimal provision of social services.

#### 1. Characteristics of the Poor

3.11 As defined in the conceptual framework, the poor are divided into two artificial categories, "conventional" poor and ultra poor. This disaggregation enables an assessment of the nature and severity of poverty issues afflicting different segments of society and accordingly, the better targeting of social sector policies and programs.

#### The Conventional Poor

3.12 In Morocco, most surveys and studies have not disaggregated the population according to poverty levels. As such, limited information is

---

<sup>1/</sup> On average, there appear to be slightly more than one full-time member per household, but exact data are not available.



**Table 5: SPATIAL VARIATIONS IN POVERTY AND ULTRA POVERTY RATES, 1985**  
(In thousands)

REGION	Subregion	Urban Areas					Rural Areas				
		Total Urban Population	All Poor		Ultra Poor		Total Rural Population	All Poor		Ultra Poor	
			Number	Rate (%)	Number	Rate (%)		Number	Rate (%)	Number	Rate (%)
SUD	Sud 1	341	77	23	40	12	534	247	37	154	16
	Sud 2	301	72	24	55	18	996	495	50	314	32
TENSIFT	Tensift 1	598	183	37	105	18	1,350	474	35	265	20
	Tensift 2	335	122	37	90	21	851	236	27	110	13
CENTRE	Centre 1	919	158	17	55	05	23	2	07	0	00
	Centre 2	573	112	19	71	12	51	10	19	5	10
	Centre 3	865	245	28	118	14	108	26	24	10	09
	Centre 4	382	139	37	71	18	1,363	358	26	140	10
	Centre 5	567	198	35	118	21	945	246	25	106	11
NORD-OUEST	Nord-Ouest 1	973	176	18	86	09	161	52	32	28	17
	Nord-Ouest 2	626	193	31	107	17	1,246	433	35	206	17
	Nord-Ouest 3	800	246	31	141	18	793	284	36	138	17
CENTRE-NORD	Centre-Nord 1	602	220	36	129	21	392	110	28	34	09
	Centre-Nord 2	208	60	29	43	21	1,311	306	23	117	09
ORIENTAL	Oriental 1	524	130	25	55	12	384	139	36	93	24
	Oriental 2	128	17	13	8	05	485	189	35	81	17
CENTRE-SUD	Centre-Sud 1	454	175	38	119	26	317	91	29	53	17
	Centre-Sud 2	224	72	32	37	16	639	218	34	133	21
MOROCCO		<u>9,421</u>	<u>2,594</u>	<u>28</u>	<u>1,436</u>	<u>15</u>	<u>12,355</u>	<u>3,991</u>	<u>32</u>	<u>1,965</u>	<u>16</u>

Source: Direction de la Statistique. Ministry of Planning.

available specifically about poor households. The forthcoming LSMS survey should help to address this deficiency, but in the meantime, some characteristics are apparent. One notable feature of both urban and rural poor households is large household size: 70% have more than five members. On average, conventional poor households are larger in rural than in urban areas with an average of 7.4 and 6.5 members, respectively.

3.13 Poor families suffer from low human capital development. In 1985, 73% of the heads of urban households and 85% of those of rural households had no education. Also, female illiteracy is much higher than male illiteracy (78% vs. 55%) nationally. Low educational levels severely restrict income and productive capacity, as well as, the ability to follow prudent health practices or use available social services.

3.14 Another observed characteristic is a lack of assets; this reduces the ability of the poor to earn a stable income. In urban areas, this deficit means that the poor do not have the means or collateral to obtain credit for home ownership or small business endeavors. In rural areas, the incidence of poverty is higher in those households which do not own land than in those which do (48% compared to 28%). In 1974, 23.4% of farmers were landless and 56.5% owned less than five hectares.

### The Ultra Poor

3.15 Even less information is available with regard to the composition of ultra poor households. No data on asset holdings is provided on this subcategory of the poor. However, some information is available on household composition and human capital development. These households, both in urban and rural areas, are larger than conventional poor households. Additionally, wages of female workers are considerably lower than wages paid to their male counterparts. In terms of human capital development, about 90% of heads of the poorest households, both rural and urban, reported no formal schooling whatsoever. This exceptionally low level of education not only affects economic productivity, but may be assumed to affect younger generations as well, through educationally impoverished environments in the home.

## 2. Population Growth

3.16 The aggregate and territorial poverty problems faced by Morocco must be considered in the context of existing and future demographic pressures. Since independence, Morocco's population has more than doubled. As mentioned, death rates have fallen and life expectancy has risen and a small decrease in birth rates has been achieved. These combined factors have led to a virtually stable, but relatively high, population growth rate over the last three decades (around 2.5% per year). Through this period, Morocco's population has become increasingly young due to emigration and reduced infant mortality rates. Only 15% of the current population is over 44 years old, while 62% is less than 24 years old (see table 6).

3.17 As a result, the labor force has been expanding at a rate significantly higher than population growth. From 1984-1987, the active population grew at a rate of 6% compared to 2.6% overall. Territorial differences are also observed between rural and urban areas. Rural-urban

migration accounted for 42.8% of all urban growth between 1971 and 1982. The number of urban centers (cities with over 100,000 people) has doubled in the last 22 years.

**Table 6: POPULATION AND DEMOGRAPHIC INDICATORS**

	1965	1973	1983	1986	1988
Total Population (in millions)	13.3	16.4	20.9	22.7	24.0
Fertility Rate ) per	7.1	6.7	4.9	4.9	6.1
Crude Death Rate) thous-	18	15	10	11	9
Crude Birth Rate) and	49	44	38	36	35
Infant Mortality)	145	120	91	90	90
Life Expectancy (years)	49	53	59	59	62
Less than 24 years (%)	59%	62%	63%	62%	62%

Source: Ministère du Plan, Centre d'Etudes et de Recherche Démographique

3.18 The government projects the population to reach over 30 million people before the end of the century. It is important to note that these projections are based on declining growth rates. Such declines can only occur if current family planning programs, which now reach approximately 36% of the female population, are expanded. While no data on population growth are available according to income status, poor families tend to be the largest and the last reached by family planning efforts. Therefore, future family planning, as well as, other social services should incorporate specialized policies to meet the needs of the poor. Overall, such a large population and the fast pace of urbanization have and will put great pressure on per capita social expenditures and should be considered carefully in policy planning.

### 3. Labor Market Conditions

3.19 The open unemployment rate in Morocco in 1985 was about 14% in urban and 5% in rural areas. Urban unemployment has consistently been above 10% over the last 30 years, while rural open unemployment has remained around 5%. This disparity is common in less-developed countries, both due to data collection problems in rural areas and to increased market participation in urban centers. High unemployment levels in urban areas tend to depress wage levels, especially among the least skilled workers. In rural areas where measured unemployment levels are lower, underemployment, unstable jobs, and low earnings represent the most severe labor issues. In rural areas, 38% of the employed work less than 40 hours a week; this figure is close to 60% for

female workers. Overall, 50% of rural employed population works as non-wage family labor.

3.20 One major contribution to low income levels is the composition of labor activities. In rural areas, the majority of the conventional poor (in 1985) were in households headed by farmers (53%), followed by agricultural workers (13%), and nonagricultural workers (8%). About 10% were in households headed by inactives (see table 7).

3.21 The low income of poor farmers is attributable to ownership of small, unproductive plots, lack of basic inputs, such as irrigation and fertilizer, and a limited use of technology. Crop productivity for small farms is so low that a large number of farmers are unable to cover their basic needs without additional income from raising livestock. The low income of conventional poor agricultural workers is due to low rural wages in combination with limited employment. In 1985, the minimum agricultural wage was DH 20.32 a day. This means that an agricultural worker employed at the minimum wage level was making only DH 4,877 per year if he/she was employed full time, or 40% of the income required at the poverty level for the average household.

3.22 In urban areas, conventional poor household heads are found across low-skill and low-wage occupations, such as nonagricultural workers (23%), office and service employees (21%), merchants (17%), industrial non-agricultural employers (15%), and inactives (15%). The primary factors contributing to urban poverty are low wages, temporary employment, and unemployment. In 1985 the minimum full-time industrial wage was DH 7,546 a year, or only 50% of the income required at the poverty level for the average household.

3.23 Another major factor contributing to Morocco's high unemployment rate is the relatively large supply of unskilled labor. In the early 1980s, the urban labor supply grew faster than the urban population growth rate, 6% versus 5.8%, due to an increasing number of women in the work force and the continuing impact of rural-urban migration especially by individuals seeking employment. From 1971 to 1982, 42.8% of urban population growth was due to rural-urban migration. Many of these rural migrants lack skills applicable to urban occupations, a problem exacerbated by the limited availability of vocational training programs.

3.24 Educational level also contributes to unemployment within poor families, although the relationship is less straightforward. In fact, the illiteracy rate of the unemployed is lower than that of the overall population. This is because most of the illiterate population is poor--they cannot afford to be unemployed and thus are forced to accept low-paying jobs or marginal employment in the informal sector. Conversely, a majority of better educated people are able to afford being unemployed for short periods of time in order to seek satisfactory employment. Notably, labor market studies indicate that uneducated and illiterate workers are frequently unemployed for the longest periods.

**Table 7: DISTRIBUTION OF CONVENTIONAL POOR AND ULTRA POOR HOUSEHOLDS BY  
OCCUPATION OF HOUSEHOLD HEAD, 1985  
(in percentages)**

	<u>Rural areas</u>		<u>Urban areas</u>	
	<u>Conventional</u> <u>poor</u>	<u>Ultra</u> <u>poor</u>	<u>Conventional</u> <u>poor</u>	<u>Ultra</u> <u>poor</u>
Farmers	53	45	2	2
Agricultural workers	13	18	4	5
Nonagricultural workers	8	9	23	24
Top managers and professionals	0	0	1	0
Managers and professionals	0	0	1	1
Merchants	5	5	17	17
Industrial, nonagric. employers	5	6	15	17
Office, service workers	5	4	21	17
Others	0	1	1	2
Inactives	10	13	15	16
	---	---	---	---
<b>TOTAL</b>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

Note: Totals may not match up due to rounding.  
Source: Direction de la Statistique, 1987.

3.25 On the demand side, GDP fluctuations over the last decade have affected the ability of the economy to generate stable employment. For instance, real GDP per capita rose from 1980 to 1983; it then fell in both 1984 and 1985; since then it has risen, but still remains below its 1983 level. Agriculture and micro-enterprises--sectors in which a large percentage of the poor are employed--have experienced the widest fluctuations. In addition, the economic sectors with high employment growth seem to have generated very low-paying jobs, i.e., low skilled jobs in services and industry. Also, there has been an increased use of temporary labor in industries such as food processing, chemicals, and parachemicals, especially in Sud, Tensift, and Centre-Sud.

3.26 Another factor which must be considered in evaluating employment opportunities and policies is the informal sector, which is often seen as the only option for the otherwise unemployed poor, as well as, the entry point for rural immigrants into urban centers. There are many definitions of this diverse sector, but by all estimates it is quite large, comprising at least 40% of the urban population. Typically, this sector offers ease of entry, has low capital requirements, and employs local technology. Operations are small, regulations are minimal, and returns typically are low. These characteristics have allowed the informal sector to absorb a large percentage of the growing urban labor force. But, these characteristics also mean that informal sector laborers have little job security, minimal access to credit and other

technological inputs, and no support from the labor regulations or benefits required in the formal sector.

3.27 Labor market opportunities for the poor are also determined by access to assets. In urban areas, many of the poor live in squatter settlements, lacking even secure housing. Also, restrictive licensing agreements and stringent collateral requirements often prevent the poor from undertaking income-earning activities or furthering their asset holdings. In rural areas, poor residents' lack of land ownership and access to infrastructure further undermines their ability to increase their incomes or security. While land reform would help ameliorate this situation, since Independence, only 25,000 (as of 1986) of poor rural residents had benefitted from officially-sponsored redistribution. This amounts to only 0.2% of Morocco's rural population. Also, despite the Government's major effort to expand irrigation, only 1-2% of the poor have access to such improvements (Swearingen 1987). Another major effort on the part of the government, with the support of the Bank, is the rural electrification program. An estimated 25% of the rural population now has electricity, but no data are available as to how many of these rural residents are poor. While some poor certainly have benefited, large land owners were targeted as the initial beneficiaries. An example of the importance of productive inputs, such as water, is illustrated by the fact that farm income in Doukkala was increased almost five times after the introduction of irrigation, irrespective of farm size<sup>1/</sup>.

#### 4. The Provision and Distribution of Social Services

3.28 The needs of the poor can only be addressed in the context of an understanding of the positive and negative effects of central government policies and expenditures on social services. This is particularly true in Morocco where the contribution of the private sector, as well as, provincial and municipal governments to the production and distribution of social services, is minimal. The policy recommendations presented later in this report actually highlight the importance of decentralization and further involvement of the private sector, especially non-governmental organizations. However, given their limited involvement to date, we focus here on central government services and their impact on poor. The following sections examine three broad aspects of government social expenditures: recent trends and sufficiency of spending, the effectiveness of production, distribution and targeting of social services, and the accessibility of such services. These aspects, in turn, are analyzed across four primary sectors of government spending--education, nutrition and food subsidies, health, and employment.

##### Trends in and Sufficiency of Social Expenditures

3.29 Trends in social expenditures are illustrated in table 8 and graph 1. It should be noted that for the period of 1985 to 1988 only provisional figures are available--as opposed to actual expenditures in earlier years. It has been demonstrated that historically actual expenditures for social sectors have been considerably lower than provisions. For example, actual

---

<sup>1/</sup> Doukkala-II Appraisal Report, World Bank 1988.

**Table 8: GOVERNMENT SOCIAL EXPENDITURES**

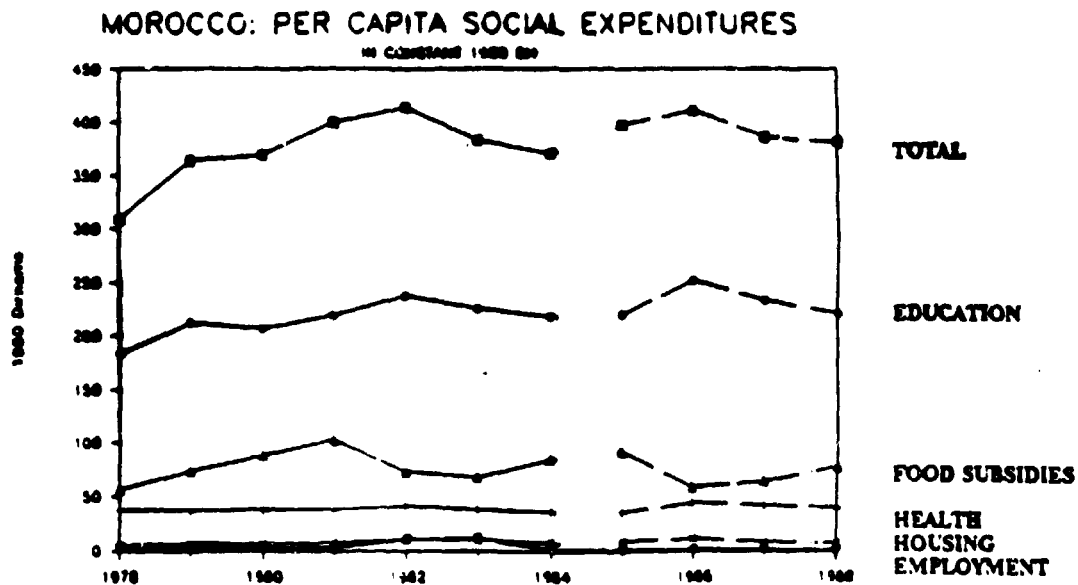
Year	Social expenditures as percentage of govt expenditures	Social expenditures as percentage of GDP	Per capita social expenditures (DH 1980)
1978	28.0	9.0	309
1979	32.4	10.5	364
1980	32.7	10.0	369
1981	31.0	11.5	400
1982	31.1	10.7	414
1983	30.5	10.2	383
1984	30.2	9.2	370
-----			
1985	33.2*	10.1	390*
1986	40.6*	9.8	411*
1987	37.2*	9.8	386*
1988	32.9*	8.4	381*

\* Figures for 1985-88 are provisional--committed not disbursed--expenditures.

Note: Social expenditures include education, food subsidies, health, housing, employment, transportation, cultural affairs, Islamic affairs, youth, and sports.

Source: Ministère des Finances, Royaume du Maroc.

GRAPH 1



- - - Provisional (not actual expenditures)

expenditures on health and education in 1988 were about 60% of budget commitment authority. Thus, the following analysis is likely to err on the more positive side and should be reinterpreted once actual figures for all sectors and years are available.

3.30 Social expenditures as a percentage of GDP increased from 9% to 11.5% during 1978-81 and declined to 8.4% between 1981-1988. Similar trends can be observed in per capita social expenditures which declined from DH 414 in 1982 to DH 381 in 1988. During the last decade, per capita social expenditure increased in real terms only 23.3%, while GDP increased 57%. The share of social spending in total government expenditures increased from 28% in 1978 to 41% in 1986 and declined since then to about 33% in 1988.

3.31 Graph 1 shows the evolution of total and sectoral social per capita expenditures during 1978-88. Education has had the highest share of DH 9.1 billion (58.4% in 1988). Food subsidies with DH 3.5 billion in 1988 or 22.5% were the second largest expenditure item. The third largest component of public spending was health, which accounted for DH 1.7 billion (11.5%) in 1988.

3.32 In terms of trends in education, expenditures per capita reached their highest level (DH 252) in 1986 and declined in 1988 to DH 222. During the last decade per capita expenditures on education rose in real terms by 20.6%, compared to 23.3% for total social expenditures. Overall, the percentage of social spending allocated to education is high (+85%) compared to the LMI average (see table 9). At first glance this suggests that overall spending on education is sufficient. But this overlooks issues of delivery and allocation of services that benefit the poor. Discrepancies between primary and higher education adversely affect the poor. From 1978-88, the share of primary schooling in the education budget fell from 37 to 34%, while higher education's share increased from 14 to 20%. The result is that the average growth rate of enrollment in primary education (2.0%) from 1978 to 1988 was lower than the population growth rate (2.5%). The same growth rates were much higher for secondary and post-secondary education, at 8.7% and 12.2% respectively. If present educational policies are maintained and budgetary limitations unchanged, it is estimated that the national illiteracy rate will remain at 50% of the adult population even beyond the year 2000.

3.33 The trends in spending on food subsidies show that from 1978 to 1988 per capita food subsidies increased about 40%, compared to 23.3% for total social expenditures. However, these subsidies have not been well targeted according to income status or nutritional needs. As a result, only 16% of these subsidies have been consumed by the poor. Malnutrition continues to be a severe problem for infants and children. Other government programs, with external funding assistance, attempt to meet nutritional needs of vulnerable groups through food supplementation or integrated basic health programs, but their outreach remains limited. For example, the maximum potential coverage of feeding programs that target malnourished mothers and children is only 44% of the priority target group, which is estimated at 1.3 million.

3.34 Per capita expenditures on health were relatively stable (DH 36-DH 38) from 1978 to 1985; they then rose to DH 44 in 1986 but declined again to DH 41 in 1988. From 1978 to 1988 per capita health expenditures increased only 11%



**Table 9: INPUT AND PROCESS SURVIVAL INDICATORS**

<u>Type of indicator</u>	<u>Existing value</u>	<u>Comparative Indicator</u>	<u>Percentage deviation</u>
Attended births <u>a/</u> (1987)	25.1%	49.1%	-49
Number of beds per 1,000 (1987)	1.1	2.0	-45
Health as percent of total government expenditures (1983)	3.0%	5.2%	-42
Population per physician (1987)	5,555	5,053	-10
Population per nurse (1987)	1,070	1,752	+39
Education as percent of total government expenditures (1986)	25.0%	13.5%	+85

a/ Grant 1989.

Source: Financing Health Services in Developing Countries: A World Bank Policy Study, 1987.

on a real basis while social spending rose 23.3%. Graph 1 indicates only a small decline in health expenditures from 1986 to 1988, but this reduction is of concern given the insufficient level of such expenditures to start with. In 1983 the percentage of total government expenditures allocated to health was considerably lower (-42%) than the respective LMI average (see Table 9). In 1986 public health spending accounted for 3.0% of total government expenditures which is low even when compared to other countries with lower per capita income, such as the Philippines, Yemen Arab Republic, and Liberia (6.0%, 4.7%, and 5.7%, respectively). However, such comparisons do not reveal a complete picture of health services, because they do not account for differences in production, demand or consumption patterns or the efficiency in service delivery.

3.35 Yet, these relatively low expenditure levels coupled with the other negative deviations shown in table 2, as well as, analysis by sector specialists indicate that additional investments in health are merited. For example, accessibility to drinking water remains low (-8); this has been found to be a major contributor of diarrheal and other chronic diseases. Another example is birth attendance (-49), which leads to high infant and maternal mortality rates. The improvements of these indicators would yield high health benefits and strong forward linkages. It should also be noted that many of the health centers do not provide birthing services, only 13% provide periodic checks, and 56% provide vaccination services.

3.36 In terms of employment, expenditures on such programs reached their peak between 1982-83 and declined considerably after 1984. They fell from a level of DH 11 in 1983 per capita to DH 1 in 1988. Only about 1% of the population is currently reached directly through employment programs. As is

clear, such low levels of support are not sufficient to address persistent unemployment in urban areas nor underemployment in rural areas.

### Production, Distribution and Targeting of Social Services

3.37 Recent World Bank evaluations of the overall health delivery system report a number of inefficiencies in the production and distribution of health services, such as low hospital occupancy rates in urban areas, low use of dispensaries in rural areas, and insufficient equipment, medical supplies, trained personnel, and transportation vehicles. Even university hospitals, which are the most expensive, have low average occupancy rates (77% in 1987). Average occupancy rates of local hospitals rarely exceed 50% essentially due to a lack of extra medical supplies and inadequate management.

3.38 The government has relied on three main policies to improve nutrition: food subsidies, supplementary feeding programs--such as the Ministry of Artisan and Social Affairs/Catholic Relief Service (MASA/CRS) and the World Food school feeding program--and to a lesser extent public health nutrition programs. As noted earlier, food subsidies deliver less food energy to the nutritionally vulnerable in rural areas and less to the poorest consumers than to middle-income households. Only 16% of the benefits of food subsidy programs goes to households in the three lowest income deciles.

3.39 Inefficiencies in education are reflected in operationally deficient facilities, high rates of grade repetition, and large numbers of school dropouts. These large numbers of dropouts have been traditionally high and represent a considerable and frustrating expenditure of time and money, especially for poor families. High rates of grade repetition have led to considerable structural inefficiencies, such as the almost nine years of educational investment needed to produce a single fifth-grade elementary school graduate in the existing educational system.

3.40 In rural areas, educational policies are particularly weak because they do not address obstacles to participation. Educational participation carries with it various costs, which may be monetary, in-kind, or cultural. The real cash costs of public schooling entail incidental school fees, textbooks and other materials, and clothing. Additional cash costs may include transportation, food and lodging, and the loss of income from children's wages. This last consideration is most acute in rural areas, where 22.6% of boys and 31.0% of girls under the age of 15 were employed in 1987, in contrast to the 2.1% employment rate of urban boys and girls of the same age. These costs can be a burden to disadvantaged families and constitute a serious obstacle to the education of their children. Recent studies indicate that direct costs of schooling per child could represent between 5% (at the primary) and 10% (at the secondary level) of annual household cash expenditures for rural families. Culturally, the costs to the family can include the perceived loss of reputation, especially for girls from traditional families, as well as, the loss of Islamic values in favor of secular or Western values. If the goal of universal primary education is to be met, the distribution of educational services must attempt to overcome these obstacles.

3.41 In terms of employment policies and programs, the government has developed a system for workers' protection (minimum wages, labor regulations, and social security). Such protection, however, excludes the large proportion of the population in the informal sector, temporary employees (women in particular), and non-wage laborers. The government has also financed the creation of new (temporary) jobs through Promotion Nationale (P.N.). Critics claim that some P.N. projects may not be properly selected. The programs are short-term and do not aim at counter-balancing cyclical fluctuations in employment. Additionally, the government assists with vocational and technical training, the responsibility for which is mainly in the hands of the Ministry of Equipment and the Vocational Training Office (OFPT). A recent review of vocational training programs identified the need for greater fiscal accountability, as well as, improved relevance, efficiency, and flexibility of such programs. Other identified problems include poor interministerial coordination, insufficient labor market information for accurate occupational analyses and projections, limited involvement of employers in the development and operation of training, and the need to improve the skills of trainers, many of whom are uncertified or lack experience.

3.42 Most employment creation programs are not targeted at the poorest segments of the population. For example, eligible workers for the P.N. program are defined as "18 to 50 years old, anywhere from unskilled workers to qualified workers, with priority given to the unemployed and to those from the poorest regions of the country". No written eligibility criteria or data with regard to eligible poor workers exists; the selection of the beneficiaries is left entirely to the discretion of local administrators.

#### Accessibility Problems

3.43 A large proportion of the population is dispersed in small settlements very far from or unconnected to rural centers. In a recent study (Ministère de la santé, 1987), analysts estimated that 56% of the rural population is located more than six kilometers from basic health services. The most problematic region in terms of accessibility to health facilities is the Nord-Ouest, followed by Centre-Nord, and Tensift. In these regions, 45%, 42%, and 40% of the population, respectively, live more than 10 kilometers from a health facility. Similar accessibility problems have been observed in the case of educational services. It is not uncommon for primary and lower secondary school children to walk 6 to 10 kilometers to the nearest school; boarding facilities are limited. Additionally, in terms of nutritional programs, school feeding under the World Food Program now reaches only 18% of primary school children. The lack of facilities (including canteens) in rural schools means that the most vulnerable children can not participate.

3.44 Accessibility problems are exacerbated because of the unequal distribution of social services. For example, per capita expenditures on health are much higher in urban than in rural areas. Many poor rural areas lack basic health infrastructure. In contrast to the other six regions, the Nord-Ouest spends a proportion of the total health care budget that far exceeds its share of the total population. The number of inhabitants per physician is the highest in Sud (12,500), followed by Tensift (11,000), and Centre-Nord (8,300). The bed/population ratio is lowest in Centre-Nord (0.72

per thousand), followed by Oriental (0.75), and Tensift (0.84). Ambulatory care, as a percentage of the operating expenditures, is lowest in Centre-Nord, followed by Tensift, and Sud. These data show that spatial distribution of health expenditures and resources is biased against the regions with the highest ultra poverty rates.

3.45 There are substantial disparities in the distribution of educational resources between urban and rural areas. Per capita government expenditures on education are significantly higher in urban than in rural areas. Schools are still in short supply in rural areas. Those that exist are ill-equipped compared to urban schools. Few rural primary schools have water; the absence of sanitary facilities is often quoted as a disincentive for parents to send their girls to school.

3.46 Further regional differences can be indirectly traced through educational participation rates. In 1987-88, only 34% of rural girls and 69% of rural boys were newly enrolled in Grade 1, compared to 85% and 89%, respectively, in urban areas. The Centre region with 26.6% of Morocco's total population contributes disproportionately high percentages of all primary schoolers (29%), secondary schoolers (33.8%), and vocational training students (35.9%). Conversely, Centre-Nord, Sud, and Tensift have relatively low enrollments, especially in rural areas.

3.47 Such disparities are reflected in the quality of education. Academic performance on standardized examinations is generally higher in urban schools. The percentage of primary school instructors, formally certified at the requisite level, was also higher in urban than rural schools (98% versus 89% in 1988). Conversely, the student-teacher ratio in rural schools is generally lower than in urban schools. However, international findings show that student achievement is positively correlated to teacher training levels, but the effect of reducing the student-teacher ratio is still a subject of debate. Thus, while low density rural areas are receiving relatively more teachers, these teachers are less likely to be certified and it is the latter factor that appears to be more important for educational quality and achievement outcomes.

3.48 Urban-rural disparities are even more apparent in vocational training. Almost 90% of all public vocational training enrollments are in urban areas. On the positive side, however, the greatest portion of rural vocational training is available at the post-primary "specialization" level (45.2% of total rural vocational training, in contrast with 28.1% of urban training)-- the level most likely to be accessible to the poor.

3.49 The spatial distribution of employment programs shows different patterns but is equally skewed. For example, P.N. is devoting an overwhelming proportion of its resources to creating employment and developing projects in the Saharan provinces, at a relatively high cost per job created. With less than 1% of the total population, the lowest percentage of rural population of all the regions (15%) and one of the lowest unemployment rates, these provinces received 18.6% of all the jobs generated and 26.1% of all the loans mobilized by the P.N. from 1981 to 1985. Besides strategic importance of these provinces, there is one other possible explanation for this allocation

pattern: the southern region as a whole holds a higher percentage of poor among its rural residents and has the second highest rural unemployment rate in the country. If P.N. projects were aimed at such poor residents (who may in fact live in southern provinces other than the Saharan ones), the pattern might be partly justified.

#### CHAPTER IV - POLICY RECOMMENDATIONS

4.01 Policy recommendations for better addressing the needs of the poor are organized as follows. First, we outline the basic components and priorities of the recommended social sector strategy. Second, we elaborate on the framework for selecting cost-effective policy packages to address priority poverty problems. Third, we recommend better targeting and institutional reorganization as options for improving efficiency of production and distribution of social services. Fourth, we present more specific sectoral policies, including health, nutrition and food subsidies, education, and employment policies. Fifth, we present implications for Bank social sector lending. Finally, we discuss directions for future research.

##### A. Social Sector Strategy

4.02 Social sector strategy should be guided by three principles in order to be cost effective in reducing poverty and improving the living standards of the poor. First, given Morocco's fiscal constraints, intersectoral and intrasectoral prioritization is necessary to address the survival and income-earning needs of the poor. Second, packaging of sectoral and subsectoral policies on the basis of backward and forward linkages is needed in order to avoid the wastage of limited resources and maximize benefits from social spending. Third, spatial and intergroup targeting are required to avoid leakages of benefits.

4.03 To identify priority problems, we utilized the comparison of survival and income-earning indicators as a tool of analysis. Those with negative deviations were given particular attention as to their structural causes and policy ramifications (see table 10). Such analysis shows that child and maternal mortality, access to safe water, male and female illiteracy, urban unemployment, and child labor are the most critical poverty issues. Based on additional causal analysis, rural underemployment was also found to be important, but no comparators were available. Social sector research and strategy should focus on these problems. Since their incidence varies considerably by location, social sector strategy should incorporate spatial inequalities.

4.04 A preliminary assessment of backward and forward linkages for the key indicators shows that multiplier effects of social programs may be higher in the short-run for investments in literacy, employment, and productivity improvement. Evaluation of backward linkages indicates that investments in these sectors should be integrated with basic health and nutrition. In the

**Table 10: AGGREGATE NEEDS ASSESSMENT TABLE <sup>a/</sup>**

Type of indicator	Current value	Comparative indicator	Percentage deviation
Child death rate per 1,000	32	12.5	-156
Maternal mortality per 100,000	585	284	-106
Severe malnutrition (%)	9	5	-80
Infant mortality per 1,000	91	85	-7
Access to safe water (%)	57	62	-8
GNP (per capita, 1986, US\$)	590	750	-21
Illiteracy (age 15+, %, 1985)			
Males	55	32	-72
Females	78	50	-56
Primary school enrollment (% of age group, 1984-86)			
Males	96	107	-10
Females	62	85	-27
Urban open unemployment (% , 1987)	14.7	5	-194
Males	13.4	5	-168
Females	18.5	5	-270
Rural open unemployment Males (% , 1987)	8.4	5	-68
Rural child labor (% of rural employed, 1986)	13.5	0	-
Males	10.2	0	-
Females	17.5	0	-
Urban child labor (% of urban unemployed, 1986)	2.9	0	-
Males	1.9	0	-
Females	5.9	0	-

<sup>a/</sup> For descriptions of comparative indicators and sources of data see tables 2 and 4.

long run, investments in education and family planning seem to contribute to improvement in many other social sectors.

4.05 To improve targeting, social investment should be directed toward vulnerable population groups and territories. The highest risk groups are: rural women and children, adult illiterates, urban unemployed, rural underemployed, small farmers, and working children. In terms of priority territories, it is clear that basic health, child malnutrition, primary school enrollment, illiteracy, and child labor are much worse in rural areas and subregions with the highest ultra poverty rates.

#### B. A Policy Framework

4.06 In an environment of fiscal constraints and persistent pockets of poverty, the careful selection of appropriate social sector policies is imperative. An analysis of backward and forward linkages can facilitate such policy formulation. In order to maximize direct and indirect benefits, social investments should be directed to sectors with high forward linkages; in order to avoid the wastage of scarce social funds, backward linkages also must be taken into account. Conducting such an analysis, however, requires the construction of a Social Input-Output table in order to identify the necessary inputs for the production of desired outputs in each social sector.

4.07 Such a basic input-output matrix for Morocco is presented in Table 11. This table reflects the backward and forward linkages associated with the poverty-related problems identified in Table 10. In order to take full advantage of this analytical framework, the quantification of necessary inputs and resulting outputs would be necessary. Although such statistics were not available for this study, the forthcoming Living Standards Measurement Survey (LSMS) should provide sufficient information to perform such a quantitative analysis. In the meantime, Table 11 provides a preliminary means for assessing poverty issues in Morocco and identifying appropriate social sector policies. The inputs required by each sector (backward linkages) are listed vertically on the left side of the table; the outputs (forward linkages) are listed horizontally along the top. The following is a more detailed discussion of these linkages.

4.08 Column 1, and row 1 of Table 11 show the backward and forward linkages, respectively, for health. These are based on econometric analysis of Moroccan data at the provincial level and some aggregate indicators. The results of this analysis have revealed that the determinants of a critical health indicator, infant mortality, are: health-related factors, such as the availability of medical personnel and facilities; poor nutrition; family-planning related factors, such as female marriage age; female illiteracy, income earning related factors, such as land cultivated per household and participation of women in economic activities. Forward linkages presented in row 1 show that investments in basic health contribute to improved child nutrition, better literacy and educational attainment, and higher income earning capacity besides direct improvements in health.

4.09 Although the linkages presented in all the other columns and rows of Table 11 are not based on evidence from Morocco, we present them in order to

**Table 11: NATIONAL INPUT-OUTPUT TABLE FOR SOCIAL SECTORS**

OUTPUTS									
		Basic Health	Nutrit.	Shelter	Sanitation	Family Plann.	Adult Lit.	Educ. 4	Income Earning
INPUTS		1	2	3	4	5	6	7	8
Basic health	1	X	X				XY	XY	XY
Nutrition	2	X	X				X	X	X
Shelter	3	X		X				X	
Sanitation	4	X	X		X				
Family Planning	5	XY	XY	Y	Y	Y	Y	Y	Y
Adult literacy	6	X	X		X	X	X	X	X
Education	7	XY	XY	Y	Y	XY	Y	X	Y
Income	8	XY	XY	XY	XY	XY	XY	XY	XY

Note: X - short-term inputs  
Y - long-term inputs

Source: World Bank data

provide a full description of the SIO and to show how it works. These linkages are based on findings from other third world countries with similar poverty problems. Such input-output relationships are very basic and are most likely valid for Morocco as well.

4.10 Column 2 and row 2 show backward and forward linkages, respectively, for nutrition. Improvements in nutritional status require besides nutritional inputs, basic health inputs, such as infectious disease prevention, family planning, and female education and literacy which allows mothers to follow appropriate nutrition and child care practices. Improved nutrition can, in



turn, contribute to improved health, ability to learn, and income earning capacity.

4.11 Column 3 and row 3 show backward and forward linkages, respectively, for shelter. Improvement of shelter conditions requires besides direct investments in shelter, family-planning, educational, and income earning inputs. Improvements in shelter conditions can in turn contribute to improved health, nutrition and ability to learn.

4.12 Column 4 and row 4 describe the backward and forward linkages, respectively, for sanitation. Improvements in sanitation conditions require besides direct investments in sanitation infrastructure, family planning inputs, adult literacy, education, and income earning inputs. Investments in sanitation programs will contribute not only to improved sanitation conditions but also to improved health and nutritional status.

4.13 Column 5 and row 5 show backward and forward linkages, respectively, for family planning. As shown in column 5, improvements in family planning practices require investments not only in family planning programs, but also in adult literacy and income earning programs, that will allow the working and illiterate women to attend such programs. If high birth rates are reflection of the fact that additional children are considered as means for improving the income situation of the family, then an increase of the income earning capacity of the adult members will induce couples to apply family planning practices.

4.14 Column 6 and row 6 show backward and forward linkages, respectively, for adult literacy. Adult literacy requires short-run inputs, such as health, nutrition, and income earning programs that will facilitate the participation of rural women in such programs; and long-run inputs, such as investments in primary and secondary education. As row 6 shows, investments in adult literacy programs will not only reduce adult illiteracy but also improve maternal and child health, nutritional status, educational attainment, and in combination with vocational and technical training the income earning capacity of the poor.

4.15 In the Moroccan context, the multiplier effect of adult literacy programs must, however, be adjusted for by the low success rate of previously implemented programs. The success is defined here as the literacy retention rate some time (a couple of years) after completion of the program - which, when combined with the relatively higher (than primary school) cost of producing one literate person, results in a low cost/benefit ratio. Therefore, although linkages apparently would make a strong case for adult literacy programs, it is probably more cost effective (because of higher certainty of results) to continue efforts toward universal primary education (where reaching grade 5, last year of primary cycle, is used as proxy for literacy/numeracy). This is particularly true in Morocco where low initial enrollment rates and substantial drop out rates are observed throughout the primary cycle in rural areas. For example, one rural girl out of eight and two boys out of eight in the relevant age group reach 5th grade, which, in other terms, means that 13 out of 16 (81 percent) of 11-year olds in rural areas do not reach a literacy level that ensures retention.

4.16 As shown in column 7 and row 7, respectively, backward and forward linkages for education are similar to adult literacy except that most of the forward linkages are long term. The reason is that benefits of formal education are only realized when people become adults, enter the job market, and become parents.

4.17 Column 8 and row 8 show backward and forward linkages, respectively, for income-earning policies. Improvement of the income earning capacity of the poor requires besides investments in employment creation programs, basic health and nutritional inputs, adult literacy, educational and productivity improvement inputs. Family planning can in the long-run contribute to improvements in income by reducing labor supply and household size (allowing thereby for higher income per person). As row 8 shows, improvements in income earning capacity can contribute to improvements in all social sectors, that is, basic health, nutrition, sanitation, shelter and education.

4.18 In sum, the social input-output table shows that literacy and income-earning programs may have the highest short-term forward linkages with most of the social sectors. This means that the multiplier effects of social programs may be higher in the short-run for investments in literacy, employment, and productivity enhancement programs. Backward linkages indicate that investments in these sectors should be integrated with basic health and nutrition. Investments in family planning and education seem to have long run forward linkages with most other social sectors. However, derivation of more concrete policy directions requires an analysis of costs of inputs and quantification of benefits in comparable terms. The former is considerably easier than the latter. Some examples of input costs are the following:

- a) Cost of a supplementary feeding and nutrition surveillance for one at risk infant for two years (avoiding many years of under-achievement at school and beyond): 0.5 SMIG;
- b) Cost of a complete series of vaccinations against the principal causes of avoidable childhood mortality: less than 0.1 SMIG per child;
- c) Cost of family planning services to an at-risk mother (in rural area, mothers from the poorer segments of society have an average of 9 pregnancies): 0.3 SMIG per participant per year;
- d) Cost of doubling the classroom materials available to every Moroccan child in primary school: 0.1 SMIG per year;
- e) Cost per adult for evening courses to learn to read and write (keeping in mind the rate of failure): 0.3 SMIG;
- f) Compare these costs to the annual cost of scholarship and subsidized services (not even counting the cost of teaching itself) for the average Moroccan university student, 19 SMIGs.

4.19 Further information for policy planning can be derived by reviewing the input-output linkages among different household members. For example, maternal health is an important input to infant and child health. Also, the income-earning ability of adult members is shown to be a critical factor for education both for children and adults. To illustrate, as long as household income remains low for poor Moroccan farmers, poor rural children will not be allowed to attend school, the opportunity cost of their labor being too high. Therefore, human capital and child health policies will be ineffective if they are not integrated with policies improving the health status of mothers and the income-earning capacity of adult members of poor households.

4.20 Table 11 should be refined in two ways to enhance its usefulness for more specific social sector planning. First, separate tables should be constructed for urban and rural areas and regions. Such a refinement is necessary since empirical evidence from Morocco has uncovered significant differences in social sector input requirements between urban and rural areas. If appropriately constructed, the resulting tables should also capture the impact of social investments in urban areas on social sector outputs in rural areas and vice-versa. Second, social input-output tables should be expanded to illustrate subsectoral backward and forward linkages, allowing for better policy targeting. For example, the income-earning sector in Table 11 can be expanded to include various economic sectors, such as agriculture, manufacturing, and services.

4.21 Policy Implications. The above analysis has important policy implications because it indicates that by taking advantage of backward and forward linkages among various social sector policies, social expenditures can become more cost-effective than they currently are. Improvements could be rendered by:

- a) Using the conceptual framework as an organizational tool to identify and discuss priority poverty problems and to determine appropriate targets for the improvement of critical social indicators.
- b) Constructing refined regional and urban and rural social input-output tables for poverty-related activities and estimating backward and forward linkages between different social sectors based on LSMS data.
- c) Using the identified backward and forward linkages basis for cost/benefit analysis of alternative policy options. Backward linkages can be used to identify the costs of effective poverty policy packages. On the other hand, forward linkages can be used to identify positive or negative externalities.

4.22 It should be emphasized, however, that a permanent annual living standards measurement survey and detailed cost-benefit analysis is necessary for more rigorous application and quantification of the basic framework.

### C. General Options

4.23 Reflecting this report's sectoral orientation, our recommendations are provided on a sector-specific basis. However, two suggestions are common to all sectors: better targeting to meet the needs of the poor and institutional changes to improve the effectiveness of social services.

#### 1. Better Targeting: Priority Population Groups and Territories

4.24 While social sector programs and policies in Morocco are intended to benefit those in need, they are often not targeted to poor households. In addition, they often serve political aims which can conflict with welfare aims. Significant potential through targeting exists for increasing social benefits to conventional poor and ultra poor households without further straining limited resources. Briefly, the targeting of social funds can be improved by:

- Increasing the growth of government spending on social programs and services benefiting the poor.
- Targeting in kind (i.e., barley versus wheat flour subsidies) to reach the needy and reduce benefit leakage to higher income households.
- Targeting programs in priority areas (regions, subregions, provinces, or communities) that contain a large percentage or a large absolute number of poor. In areas with a small proportion or a small number of poor households localized targeting will be needed.

4.25 The use of innovative channels to identify and reach conventional and ultra poor households in a cost effective manner should be encouraged. Working through NGOs and other community groups may be one such channel. Such groups may be less costly politically and can increase coverage and reach remote areas at a lower cost due to a local knowledge base, familiarity with clients, and established service mechanisms--albeit at a more modest level. There are, in fact, more active NGOs in Morocco than is generally recognized. Still, their number and coverage remains low compared to many other developing countries. The term NGO covers a wide and diverse group of organizations in Morocco: from large government-sponsored networks to small neighborhood associations and from international church-related efforts to locally-based focus groups. The NGO sector is involved in a wide spectrum of activities such as health, education, agriculture, family planning, environment and small-scale enterprises. Some efforts have been directed towards women in development, but these lag behind those in other countries.

4.26 Local organizations have been receiving increased attention from the government lately. This is due primarily to growing financial hardships, but also reflects the continuing pervasiveness of poverty and the perception that NGOs are better suited to carrying out certain aspects of poverty reduction. The government has demonstrated interest in NGOs through several

recent, preliminary actions. For instance, the 1988-1992 development plan includes the formation of a committee to promote cooperatives. Also, a post was created in 1987 for an Advisor to the Minister of Health to help coordinate the Ministry's work with various NGOs. Additionally, a NGO unit was recently created in the Ministry of Foreign Affairs to better liaise and coordinate with foreign NGOs.

4.27 Relationships with larger, government-funded groups will be easier to foster and will provide access to wide networks to reach rural communities. Relationships with smaller NGOs will be more difficult to develop, but will reach even more remote communities using a grassroots approach to development. Only limited research has been conducted by the Bank on the NGO sector (see Indigenous Non-Governmental Organizations in Morocco and Tunisia Report, August 1988). Further research is merited by the Bank and the Government in order to better understand and take advantage of the unique targeting opportunities offered by NGOs for addressing the localized needs of the poor.

## 2. Institutional and Organizational Changes

4.28 In line with the recommendation for improved targeting, we recommend substantial institutional, organizational, and administrative changes to be undertaken to correct for inefficiencies in the production and distribution of public social services. The over-centralization of administration contributes to inefficiencies, such as high administrative costs, delays in project completion, and programs poorly adapted to local conditions. To improve the effectiveness of social programs, the transfer of certain responsibilities from the federal government to local authorities and agencies may be necessary.

4.29 This recommendation is well aligned with the government's recent initiation of reforms to strengthen municipal operations and further decentralization efforts. Historically, municipalities or communes of which there are 859 (760 rural and 99 urban) have been limited by a small resource base and restrictive control of their operations. Currently, municipal expenditures account for only 5% of combined central and local spending, a ratio significantly lower than that of other countries in the region.

4.30 The government now plans to give greater autonomy and provide additional support to the communes primarily through the transfer of 30% of VAT proceeds. These proceeds alone would more than double resource availability if existing municipal funding were maintained. The stated goal of this effort is to enhance the efficacy and efficiency of existing municipal services. In addition, the government plans to increase the number of communes by 75% to a total of 1,500 in order to better address the needs of remote and under-served populations. We strongly support further decentralization and increased resource allocation to municipalities as defined by this plan. However, caution must be heeded with regard to the pace and level of these changes. Most importantly, these allocations should be made with the needs of the poor in mind; rural areas are particularly under-served--per capita municipal expenditures are more than three times as high in urban compared to rural areas.

4.31 Social sector planning in Morocco already suffers from insufficient data. In order to effectively transfer responsibilities to local authorities and to promote better targeting of services, two guidelines should be adhered to. First, data must be collected more efficiently and systematically than is currently the case. This may require additional equipment and trained personnel. Second, improved dissemination of information and communication is necessary in order to prevent duplication of efforts and to insure efficient service delivery.

#### D. Sectoral Policy Recommendations

4.32 In the following section, we present a summary of the sectoral recommendations for health, nutrition and food subsidies, education, and labor based on the four sectoral studies, as well as, on recent Bank work in Morocco. A more detailed discussion of sectoral policies is contained in sector working papers in a separate volume.

##### Health

4.33 In order to adequately address the health needs of poor Moroccans, we recommend a strategy aimed at the development of a strong district health system based on primary health care, which generally can be expected to better correspond to the health needs of the poor than tertiary services. Special attention should be given to the following elements :

4.34 (a) The level of resources. In health, more than in any of the other sectors evaluated in this report, available resources are insufficient to adequately meet national health needs, including those of the poor. Historically, the level of public health expenditures in Morocco has been low relative to international comparators. Moreover, public health expenditures have been in decline since 1971--between 1980 and 1984, the MOPH's operating budget declined by 4 % in real terms. Subsequently, it has shown modest recovery, rising by 1% between 1984 and 1987 over the 1980 base. In 1988, allocated funding represented a 1% increase over the previous year, below both inflation and population growth rates. Little relief can be expected from the private sector which, while taking on increasing importance in the provision of health services, is unlikely to be accessible to the poor for some time to come. Hence, if Morocco is going to address adequately the health needs of its poor and ultra poor, it will have to be done through the public health system and a reversal of present budget trends will need to occur.

4.35 (b) The allocation of resources. A larger share of resources and in particular of any new resources coming into the sector, should be channelled into primary health care where particular emphasis might be given to high risk provinces (with a high incidence of poverty and high levels of infant and child mortality and morbidity from infectious diseases and malnutrition) that require special efforts to effectively extend primary services to the poor. At the same time, alternative sources of financing for the tertiary sector should be explored, especially through increased cost recovery, which may allow the release of budget resources and facilitate the reallocation process. So far, the share of the MOPH's operating budget allocated to hospital care has been growing--by 1.8 % over the 1980-87 period.

Moreover, in each of the seven regions, hospital-based services now consume 75-90 % of the non-personnel operating budget for health care. Clearly, a change in this trend could have a significant impact on overall health status.

4.36 (c) Decentralization. While the effectiveness of district health systems and their delivery of primary care will always depend on support from the national level, they are unlikely to have the desired impact on people's health when they lack the freedom to respond to local epidemiological and operational variations. Nor is intersectoral collaboration--focussing specially on improvements in basic education and sanitation, in availability of potable water, in personal hygiene, in the status of women, in housing conditions, in occupational safety, in health education so important for adequately addressing risk factors for health--or community involvement, likely to be very successful without the leeway that only independent decision-making at local levels can afford. District health services should therefore be given sufficient autonomy to make decisions on the degree of coverage and the form that the application of primary health programs should take in their catchment areas. This, in turn, will require that appropriate professional skills and managerial ability are available, as well as, information systems that will allow staff to effectively use health resources at their disposal and to monitor and evaluate the effects of their health interventions.

4.37 (d) Community Participation. The stimulation of community involvement is an essential element in defining community health concerns and in integrating them with individual clinical treatment. It should have as its aim to include the community in making decisions about its health needs and health services, to stimulate community leaders and community-level organizations around agreed-upon health objectives and strategies, and in developing local resources and initiatives that are conducive to health.

#### Nutrition and Food Subsidies

4.38 The food subsidy program in Morocco currently consumes the second largest percent (23%) of the social sector budget or DH 3.5 billion (1988). Morocco has also undertaken food supplementation programs and some public health nutrition programs with the support of external funding. Still, over 1.3 million women and children remain at structural nutritional risk. In addition, many territories are considered high risk, most notably those rural areas in the sub-regions Sud 1, Sud-2, Oriental 1, Nordouest 3, and Tensift 1. As such, changes are necessary in existing programs to improve efficiency while addressing the nutritional needs of vulnerable groups.

4.39 In an effort to reduce the burden of subsidy expenditures on the social sector budget, the Government has devoted its efforts to restructuring the system and plans to phase out all subsidies by the year 1990. The funds released by this measure should be reallocated to more cost effective programs, targeted according to income level and nutritional needs. Without these alternative programs, food subsidy removal would result in a 21% decrease in calorie intake in rural poor households and a 12% decrease for urban poor households. The income effect of food subsidy elimination would be more severe for poor households because a higher share of their incomes is

devoted to such expenditures. The combined income and nutrition effects would be between 5% and 7% for ultra poor and 4% for conventional poor, compounded by the further deterioration of their already fragile health status and thus, of their human capital value and ability to work.

4.40 It is therefore the more important that, as the current program is phased out, some of the funds be released to alternative nutritional programs, which will at the same time reduce government costs and protect the most vulnerable groups. Some of the methods first considered for achieving better targeting of food subsidies, such as food stamps, have been discounted as an option in Morocco given the excessive administrative costs associated with them. However, there are more feasible alternatives. An efficient targeting may be achieved cost-effectively by transferring subsidies from preferred to inferior foods. In Morocco, two likely commodities are barley and hard wheat. This policy is self-targeting to the extent that the lowest income groups consume more barley and hard wheat. As indicated by Laraki (1988), a policy of removing existing subsidies on soft wheat, sugar, and vegetable oils, combined with a policy to subsidize a wheat-barley flour mixture has the potential to effectively shift the subsidy toward lower income groups who tend to consume more barley. The multiplier effects of subsidizing barley flour should be quantified for a more refined appraisal of government food price policies. For example, this transfer may have positive employment externalities, as small local farmers are the primary producers of barley. In addition, feasibility studies to test the acceptability of this product would have to be carried out.

4.41 Additional support should also be channelled from food subsidy savings to compensatory programs for vulnerable groups through the expansion and better targeting of existing food supplementation programs. Timing is critical because external funding for the two primary programs is scheduled to phase over to local resources in the near term. CRS/MASA, the main provider of food supplementation, could reach 44% of needy women and children if its efforts were carefully targeted. The program now reaches 580,000 mothers and children. The World Food Program's School Feeding Program reaches 630,000 primary school students or 18% of all children of primary school age. However, the schools receiving assistance tend to be in urban, accessible areas and the criteria for selecting participants is based solely on the perceptions of school administrators. Therefore, many of the neediest are not served. Clearly, better targeting is possible and research should be carried out to identify appropriate mechanisms to better reach vulnerable groups and high-risk areas.

4.42 Finally, public health nutrition programs should be a central component of the nutrition strategy. Prenatal care, well-baby care, and family planning all indirectly improve nutrition. Growth monitoring with nutrition education and nutritional supplements can and should be included in basic health care programs. VDMS and SSB have attempted to bring basic health, including nutritional services, to those who most need it. The ultra poor should receive increased attention from these programs and nutritional services need to focus increasingly on the prevention of malnutrition. The increased resources advocated for basic health services should support the integration of nutritional efforts.



## Education

4.43 Since Independence, Morocco has made considerable progress in increasing overall educational participation, but access to education among the very poor has shown little improvement over the last two decades and gender and regional gaps in adult literacy rates remain virtually unchanged. If this situation is to be altered, a renewed commitment to programs to reach the educationally impoverished is needed. Highest priority should be given to primary education, especially in rural areas and to increased access for girls and young women and for the ultra poor. This prioritization is particularly important given the growing evidence that education may be a key factor in breaking the poverty cycle for the ultra poor: an educational foothold enables ultra poor households to gain access to health care information and human service resources through even minimally literate family members, which in turn leads to greater literacy and job access for subsequent generations. In addition, in order to create a more efficient educational system and at the same time improve educational demand, Morocco needs to better coordinate educational programs with identified manpower needs.

4.44 There are several levels at which the government may address these educational issues. First, budgetary constraints need to be considered; new resources are unlikely since this sector is already receiving the largest portion of the social budget. Secondary and tertiary education still consume the major share of Morocco's educational budget (roughly 65%), even though universal primary education is the government's stated goal. Proposals to shift the overall matrix of budgetary allocations toward primary and vocational education have been made, but have yet to be implemented. There are a number of options which may be considered to reduce the percentage of government support for tertiary education including user fees, privatization of universities, more restrictive entrance examinations, and a reduction in support of foreign scholarships. The government should examine these options and then act upon them accordingly in order to release resources for investment in basic education and appropriate vocational training.

4.45 Still, educational disparities are unlikely to disappear as a function of budgetary reallocation alone. Fostering increased participation will require educational, literacy, and vocational training policies responsive to the different needs of the poor in urban and rural environments. Urban poor tend to require higher levels of education and literacy and more industry-oriented training to become and remain competitive in the job market.

4.46 Enhancing school access for the ultra poor will require attention not only to the differences between urban and rural life but also to cultural and economic differences by gender and across geographic regions (for instance, the importance of child labor in rural areas). Reducing these obstacles requires research as to the underlying reasons for low educational demand among the poorest sectors. The opportunity costs of school participation, especially for the rural poor, must also be addressed. First, tangible costs can be reduced by providing free lunches, convenient schools, and flexible school schedules. Second, better demonstration of the quality and utility of education and literacy is necessary. In rural areas, special

attention should be paid to: i) fostering female involvement; ii) transportation and accessibility to schools; and iii) addressing the problem of low density population and alternative forms of schooling (such as multi-grade teaching).

4.47 In addition, better targeting of educational services could be achieved by transferring administration--such as textbook distribution, school meal programs, and cost recovery--to local governments. Provincial and municipal governments are in a better position to target programs, respond to local conditions, and utilize local production possibilities<sup>1/</sup>. The creation of a working group on education and an office of research and evaluation in the Ministry of Education is recommended in order to assist in collecting necessary data for coordinated policy decision-making and improved outreach and targeting for under-served groups and regions.

4.48 One visible means for judging the utility of education is the post-completion employment rate. Despite continued planning efforts in Morocco over the last decade, the lack of coordination between educational training and employment/income earning opportunities persists. Increased efforts must be made to balance educational supply with demand. This will require major policy changes in the area of formal and non-formal vocational training.

4.49 First, vocational training programs should be tightly linked to economic needs rather than being driven primarily by the supply of school leavers. This means that employers in the productive sectors will need to be involved in all stages of planning, program development and actual training delivery, including the "acid test" - a demonstrable willingness to share in training costs. This also means the development and dissemination of educational and vocational information as well as the existence of effective labor market intermediation services capable of providing assistance to job seekers.

4.50 Second, there is a need to enhance local area initiatives and spur micro-enterprise development and/or income generating activities for various disadvantaged groups in particular in rural areas. This requires providing information on economic opportunities, non-formal training/technical assistance on technical and managerial aspects, as well as easier access to small credit, perhaps through a diversified pool of rural intermediaries acting as agents for banks, as in Indonesia. This means making use of existing education and training structures as appropriate to provide training and commercial and paralegal advice (e.g. simplifying loan applications) related to particular income earning activities.

4.51 Third, there is a need to intensify literacy and non formal training efforts targetted at specific groups with particular needs such as the ultra poor, teenage school dropouts who still have the motivation and capacity for a "second chance" at basic education qualifications, or

---

<sup>1/</sup> The World Bank. Brazil. Public Spending on Social Programs. Issues and Options. 1988.

handicapped people. However the blurring of responsibilities between Ministries has led to the multiplication of initiatives in the area of pre-employment training by structures which have above all a social welfare mandate. This has resulted in the development of a considerable training capacity which unfortunately, because of the weak linkages with employers, is not always used efficiently and results in large budgetary outlays with ambiguous labor market outcomes. A restructuring of these programs to free up resources for most needed basic education programs is in order.

#### Employment and Income-Earning Policies

4.52 Employment programs receive a minimal amount of government support, comprising less than 1% of the social sector budget. Promotion Nationale was created in 1961 and is the largest effort to date, but it affects less than 1% of the population and has been plagued by inefficiencies and mistargeting. Additionally, employment data is even more sparse than in the other social sectors, further hampering requisite analysis. The policy orientation suggested here is, as such, more preliminary than for the other sectors. However, in considering the long-term health of the economy and its prospects for growth, as well as, the developmental needs of the poor, employment policies deserve attention. The government has acknowledged the problems of unemployment and underemployment and has given them priority within the 1988-1992 Five-Year Plan.

4.53 One characteristic of employment in Morocco is evident: the uneven distribution among regions and different social groups of employment problems. Thus, careful targeting will be necessary when devising employment and income-earning policies and should address at least four questions. In which activities can employment grow without badly eroding the wages of the poor? How can the government address the needs of--and foster growth in--the informal sector? Which social groups have high labor market vulnerability? What labor market problems are specific to urban and rural areas? The first question would best be addressed as part of the structural adjustment program, the remainder will be explored briefly here.

4.54 A poverty-oriented employment policy will be successful if it recognizes that the formal labor market is only one of the realms where the poor find job opportunities. It appears that in Morocco, as in many other developing countries, the informal sector absorbs a higher percentage of the poor, especially new rural arrivals in urban areas, than does the formal sector. Employment policies for the poor then should i) address the problem of the lack or inadequacy of productive assets (land, financing, simple machinery, and tools); ii) facilitate the availability of an adequate setting for productive activities (adequate and secure space, good roads and transportation, water and power); and iii) develop creative methods to reach down to the poorest by, for example, using NGOs to identify the very poor producers and using community networks to guarantee financing.

4.55 Several groups were identified as highly vulnerable in the labor market, including children and the inactive sick or infirm who should not be working. These groups should not be the subjects of employment policy but of

a protective social policy. The long-term sick and infirm would benefit from social transfers. Working children will benefit from measures ranging from enforcement of regulations prohibiting child labor to transitional measures, such as adjusting the school calendar to cycles of production in rural districts, as well as, improving on-the-job training for apprentices in the urban informal sector.

4.56 Next in order of vulnerability are workers who go through lengthy spells of being unemployed. The unemployed poor would benefit from a variety of measures including the following: i) looser licensing regulations covering the establishment of productive activities; ii) free or low-cost day care services based on community networks to allow active women to search for jobs and become more attractive potential workers; and iii) innovative credit programs to permit new forms of collateral. Traditional safety-network systems (based on the community, the family, and religious groups) may be examples of ways to guarantee credit for the poor.

4.57 Third are underemployed, or unpaid workers, and temporary or casual workers. These groups would benefit from measures to augment the demand for goods produced by the family or that facilitate skill improvements. Measures may include: i) training in the home or in the community by NGOs or government social workers to improve productivity; ii) land reallocation in rural areas and infrastructure improvements such as irrigation and rural electrification that are more accessible to the poor; and iii) better marketing networks for family production units.

4.58 These policies may be combined in different ways according to the region's labor market problems. Our study emphasizes: i) stimulating urban employment in the Oriental, Centre-Sud, and Centre regions; ii) stimulating rural employment creation in the Oriental, Sud, and Centre-Sud regions; iii) stabilizing urban employment and productivity increases in the Sud and Centre-Sud regions, and iv) stabilizing rural employment and productivity increases in the Oriental, Sud, and Centre-Sud regions.

#### E. Implications for Bank Lending in Morocco

4.59 The analysis developed in this report provides a useful means to assess the poverty orientation of the current Bank lending program in Morocco. It also gives guidance as to effective lending policies for the future. Existing Bank efforts, most notably in health and education, are in fact appropriately directed at meeting the country's most pressing social needs. To address the magnitude and diversity of these needs, however, more emphasis has to be given to inter- and intrasectoral targeting. In addition, more attention should be given to cost-effective programs with high forward and low backward linkages; finally, more resources need to be channelled into poverty-related programs than is presently the case. In the following sections, we discuss present and future Bank lending programs covering health, nutrition and food subsidies, education, and employment.

### Health and Nutrition

4.60 In the health sector the Bank is providing support for the Ministry of Public Health (MOPH) in a pilot effort in three provinces emphasizing basic health services and primary care. The main benefits of this first health sector project (1985) are to provide the government with a cost-effective model for primary care including family planning while raising the capacity of the MOPH to improve logistics and to control the costs of the health-care delivery system. The project includes strengthening of primary care in three provinces through training and management, improvement and extension of infrastructure, and the provision of essential drugs.

4.61 A minimum (core) program in the health sector to address the most severe problems of the poor should give particular attention to family health that emphasizes safe water, sanitation, MCH services, including nutrition and family planning activities, as well as, to health promotion activities. Health promotion needs to be reinforced, especially through targeted outreach programs and appropriate adjustments in school and work place health efforts. While many of these issues are being addressed through the current sector program, further implementation of intersectoral strategies are required. The role of NGO's in local service delivery should be promoted aggressively through future funding.

4.62 Short- and medium-term targets for key health indicators need to be defined. Survival indicators that hold the highest benefits in terms of forward linkages are access to safe water, infant and maternal mortality rates, attended births, and availability of basic health services. These targets should be developed at local levels. Flexible mechanisms should be introduced to allow the timely provision of adequate resources to the most vulnerable groups, namely mothers and children, as well as, to under-served rural areas. The Bank should give high priority to adequate and safe rural water supply.

4.63 In nutrition, better targeting is crucial. While existing food subsidies receive the second highest share of all social expenditures, only about 16% of their benefits accrue to the poor. Clearly, there is scope for better targeting of subsidies. In this context, further study of the costs and benefits of alternatives, such as subsidies on inferior goods (barley flour), needs to be undertaken by the government. Compensatory programs should be targeted to those at greatest nutritional risk. Moreover, micro-nutrient deficiencies need to be addressed, especially in vitamin A, iron and iodine. One means would be through the fortification of selected staples, which have low unit cost. The integrated and political nature of the food subsidy/nutrition issue requires attention through broader policy lending, such as through the next SAL with inputs from agriculture, finance and nutrition specialists.

4.64 A second health project which was approved in 1990 will reinforce priority health programs nationwide in primary care and at the first level of referral, strengthen the administration and management of services and promote

sector and policy reforms which address longer term issues related to the structure of public and private sector health service delivery systems.

4.65 Financial resources to improve general health conditions of the poor should come from two basic sources: better use of existing resources and expansion of the funding base. New resources could be obtained from the expansion of health insurance coverage, local financing arrangements, and introduction of user charges in tertiary level facilities. An effort should also be made through the future Structural Adjustment Loan (SAL) to assure growth of the overall health budget from its present very low base.

### Education

4.66 The Bank has supported education development in Morocco through eight education/training loans since 1963, four of which are ongoing. Bank lending in the sector, consistent with government needs and priorities, has shifted from reinforcing specific types of educational institutions to strengthening employment-oriented skills training and more broadly, supporting structural reforms to improve the efficiency and financial viability of education at all levels. The first five projects, which have closed, supported expansion and improved the quality of primary and secondary education, teacher training, and technical training at secondary and post-secondary levels. In 1985, the Bank supported far-reaching policy changes throughout the education system. In particular, the Education Sector Reform Program aimed at improving equity in education by devoting a larger share of resources to primary and lower secondary education and improving educational efficiency and quality. In addition, two vocational training projects (FY85 and FY87) extended Bank involvement in middle-level skills training to meet industrial-sector manpower needs.

4.67 The education reform provided a framework for specific investment programs related to developing various levels of education. A Rural Primary Education Project approved in 1989 is designed: to increase rural participation, particularly for females; to improve the quality of education; to strengthen planning, monitoring, and evaluation capacity; and to improve the effective utilization of resources in primary education. A Secondary Education Project is currently under preparation. At the higher education level, while the Bank provides policy advice through sector work, further lending is dependent upon reforms, particularly in regard to access and financing.

4.68 While most of the above programs have addressed development prospects of the poor directly and/or indirectly, there are three areas for future Bank involvement in education that may specifically benefit the poor. First, allocation of a larger share of expenditures to primary and lower secondary education should be addressed through the future SAL program, while specific efforts should be directed at the development of privately funded higher education programs. Second, Quranic, private, and public-modern pre-schools should be supported because of their significant role in helping children and families gain access to and achievement in, primary schooling. Third, non-formal vocational training, including large-scale functional literacy, deserves special attention for school dropouts, seasonal

agricultural workers, and those in the urban informal sector to enable them to capitalize on their existing education and skills.

### Employment

4.69 The Bank has not been involved directly in employment-specific programs or projects, although the concern with micro-enterprise and informal sector issues has been raised in the context of earlier project and sector work. Employment programs undertaken by the government have benefitted only a small portion of the population and have not been particularly successful in reaching the poor. Four areas deserve further study and possible funding:

- i) Small-scale enterprises. Review administrative, financial, and technical barriers that limit the development of small-scale enterprises.
- ii) Informal sector and rural employment. Analyze productivity improvement policies, that is, access to credit and technology in the informal sector and access to productive inputs in rural areas. An important step forward in this direction has been taken in the informal sector credit component of the FY 1989 Agricultural Credit Project (CNCA).
- iii) Distribution of assets. The unequal distribution of land and capital contributes to the persistence of poverty in Morocco. Redistribution policies have not been addressed in this study because of lack of data, but this issue deserves attention because of its great potential in reducing poverty.
- iv) Improvement in the productive capacity of the ultra poor through health, nutrition, and education programs.

### Macro Adjustment Policies and Social Priorities Program

4.70 We suggest incorporating in the next Structural Adjustment Loan an explicit monitoring framework and safeguards for vulnerable groups. These measures are needed to improve human capital of the labor force and competitiveness of the Moroccan economy.

4.71 The purpose of the monitoring framework is to support improvements in the social conditions of the low income population in terms of targets for literacy, basic health status, and poverty incidence. The framework would make it possible to compare the country's performance in those areas to expected results through indicators representing both the budgetary effort directed at them and the effectiveness and efficiency of the public services deployed.

4.72 The problem of illiteracy illustrates the need to monitor changes in social conditions and to develop closer links between medium- and long-term productivity objectives and short-term budgetary allocations. We estimate that there will be more illiterates in Morocco by the year 2000 than there are today, even if they will represent a smaller proportion of the

population (around 50%). To achieve universal primary school enrollment, with today's education cost structure and efficiency, within 20 years, hardly a revolutionary goal, it would be necessary to increase education's share of the national budget from its 28% base to around 35% by the year 2000 and 40% by 2010. Such a dramatic increase in the education budget can not be sanctioned by the Education Ministry alone. The same goes for any radical shift in unit costs, i.e., in the salary and career structure of teachers, hence the civil service. Rather, alternative solutions have to be found through intensive inter-ministry coordination monitored at the highest level.

4.73 The monitoring framework should have four components. First of all, the creation of a high level task force under the authority of the Prime Minister, responsible for formulating and monitoring implementation of the priority social performance indicators for the periods ending 1991, 1995 and 2000. We propose using at least the following indicators: adult illiteracy rate and school enrollment rate (at least for the first and sixth years, boys and girls); infant and maternal mortality rates, contraceptive prevalence rates, percentage of deliveries attended); and percentage of population below a minimum income, calculated on the basis of minimum food needs and other necessities (information on precise methodology already given). These indicators will be collected and updated annually, on the basis of the Standard of Living Surveys already launched by Statistics in collaboration with the Bank and the UNDP.

4.74 Second, the task force would ask the departments responsible for providing social services to adopt a series of key effectiveness and efficiency indicators in the production of social services. On the one hand, this would involve assessing whether the available social services are being fully utilized (attendance rates, classroom usage, etc.), and consequently determining whether it is possible to act upon the demand so as to expand access to those services. On the other hand, it would involve evaluating the cost of the inputs permitting the achievement of a certain result in terms of social performance (e.g., average teacher cost per hour of instruction), and determining how advantage might be taken of the nature and composition of the inputs to improve the efficiency of the services.

4.75 Third, the proposed task force would have to monitor and supervise the financing allocated to the social programs, in terms of investments and operations. The proposed levels of financing should be based on preservation of minimum thresholds of financing for operating expenses, in order to maintain adequate levels and quality of service. Thus the 1990 and 1991 budget should already be able to establish and maintain a floor, in real terms, for (a) non-wage operating expenses of basic education; (b) the same for the ambulatory public health services; and (c) net food allowances received by the most vulnerable groups (indicators to be fine-tuned on the technical side).

The fourth and last point of this program would consist of expanding existing knowledge in certain areas through specific studies under the task force's responsibility. Examples might be:



- a study of the advisability and feasibility of introducing legal provisions relative to the fortification of certain basic food items and/or the sterilization of water;
- a study on the hiring, career planning, and remuneration of civil service teaching personnel.

4.76 The next SAL cycle should include an explicit review of the channels through which the poor are affected by structural adjustment, namely: trade and exchange rate system, tax structure, agricultural pricing policies, social sector programs, fiscal policies and wages and administered prices. The SAL should also incorporate safety-net programs covering both essential nutritional needs and transitional unemployment. Finally, we propose that the next support for agricultural sector loans should address land policy issues, including land consolidation and the development of an efficient land market.

#### F. Directions for Further Research

4.77 The successful design and implementation of the recommended social sector strategy will be enhanced by specific information about the poor, such as an LSMS survey. Additional empirical analysis will also be extremely useful. The important sectoral issues that should be addressed by the survey can be summarized as follows:

4.78 Further information is needed to identify which factors contribute most to the major health problems of the poor. Additional data, such as health status, health expenditures, income, and the specific location of ultra poor and conventional poor households are required to identify the types of health services needed, the relationship between health status and earning capacity, and the willingness to pay for quality of health services. The latter will help in evaluating the cost-effectiveness and feasibility of cost recovery policies and in financing preventive health care for the poor.

4.79 The exact contribution of nutritional inputs to the health and income earning status of the poor has not been evaluated. Additional data must be collected regarding nutrition, health, and income of various household members to test the validity of Lipton's hypothesis. The consumption patterns of the ultra poor households (which may be different than those of the bottom 30% of the income distribution) should be studied to evaluate future food subsidy reforms.

4.80 Additional information will be needed to estimate the contribution of human capital variables--such as literacy, primary education, and vocational training--to the health status, income, and productivity of the poor. Inclusion of the literacy survey with direct measurement of literacy would be an important asset in the forthcoming LSMS. Estimation of the price elasticity of demand for education and literacy for poor households will help in evaluating the effectiveness of policies subsidizing education expenditures of poor households.

4.81 To design effective policies to raise the income levels of the poor, the government will need information about the sources of primary and secondary income of poor households. Data needs to be collected on the employment or self-employment status (formal and informal) of all family members, economic activity, period of employment, type of compensation (wage, non-wage), income-earning ability of asset holdings, and access to credit and capital.

4.82 The LSMS data and empirical analysis are essential inputs for completing social input-output tables. These tables can then be used for interministerial discussions, identification of backward and forward linkages among social sectors, evaluation of policies through detailed cost-benefit analysis, and selection of the most cost-effective poverty policy packages.

ESTIMATION OF POVERTY AND ULTRA POVERTY THRESHOLD

1. The estimation of a poverty threshold is a complex procedure. Due to time, data and budget constraints, rather than estimating poverty thresholds using data from the 1985 Household Consumption Survey (HCS), this study uses previously estimated poverty thresholds on the basis of the 1970 HCS. These thresholds were calculated by a 1977 World Bank study on the basis of the cost of a minimum basket. In order to derive the rural poverty threshold for 1985, we inflated the 1970 rural poverty threshold with the 1985 food price index<sup>1/</sup>. In the case of the urban areas, we first inflated the food expenditure component of the 1970 urban poverty threshold and then used a food budget coefficient (68.5%<sup>2/</sup>) to determine the 1985 urban poverty threshold.

2. The 1970 urban and rural poverty thresholds were derived by the 1977 World Bank study as follows: First, the average physiological need for calories and proteins was calculated at 2,307 calories and 60 grams respectively, taking into account the distribution of the Moroccan population by sex and age groups and the influence of such factors as the percentage of pregnant women or nursing mothers. Second, using these quantities of calories and proteins, essential food needs were defined and the necessary expenditures per person to satisfy these needs were calculated. The cost of a food budget to provide 100% of necessary calories and proteins in rural areas was estimated using two distinct methods. By the first method, calculation of the cost was based on per capita consumption of rural agricultural wage laborers, since this group consumed 100% of necessary calories and 107.6% of necessary proteins. By the second method, the minimum cost of a nutritionally balanced basket was estimated, using a linear programming model designed to minimize the cost of the food budget while conforming with nutritional constraints. The estimated minimum cost proved to be remarkably similar to food expenditures of rural agricultural laborers.

3. Third, the rural poverty threshold was derived by dividing the cost of the minimum basket with a food budget coefficient (78.4%). This food budget coefficient represented the food consumption patterns of the poorest 20% of

---

<sup>1/</sup> Due to lack of data, it was not possible to use separate food indices for rural and urban areas.

<sup>2/</sup> In the 1977 World Bank study, a food budget coefficient equal to 62% was used for the derivation of the poverty threshold once the cost of the minimum basket was estimated. However, it is noted that this coefficient may have contributed to an overestimation of the poverty threshold, because according to the 1970 HCS, the food budget coefficient of very poor households in urban areas ranges from 62% to 75%. In order to diminish the risk of overestimating the urban poverty threshold, we used the midpoint of this range (68.5%) as the food budget coefficient.

households. A similar procedure was used for the estimation of the 1970 urban poverty threshold.

4. The derivation of the 1985 urban and rural ultra poverty threshold was based on the assumption that food consumption of this group is at most 80% of the minimum basket (Lipton, 1988). Thus, based on the estimated 1985 cost of minimum basket in urban and rural areas, we calculated the respective maximum food expenditure for ultra poor households. Given that the food budget coefficient increases as income decreases, we arbitrarily assumed that food budget coefficients of ultra poor households are 5% higher than those of poor households. Based on the maximum food expenditure and these food budget coefficients, we estimated the urban and rural ultra poverty thresholds at DH 1845 and DH 1318 respectively. We present the calculations in more detail below.

**POVERTY AND ULTRA POVERTY THRESHOLDS**  
(In 1985 Dirhams)

	Ultra-poverty threshold		Poverty threshold	
	Urban	Rural	Urban	Rural
Food expenditures	1355	1100	1694	1376
Non-food expenditures	490	218	779	379
Threshold per person/year	1845	1318	2473	1755

**URBAN AREAS**

Poverty threshold

Cost of minimum basket 1970: DH 437 <sup>a/</sup>  
 Food Price Index 1985 (basis 1970): 387.5  
 Cost of minimum basket 1985: DH 1964  
 Food expenditure as percentage of total income: 68.5 <sup>b/</sup>  
 1985 urban poverty threshold (in 1985 DH):  $1694/68.5 = 2473$

Ultra-poverty threshold

Food expenditure (80% of minimum basket):  $1694 * 0.80 = 1355$   
 Food expenditure as percentage of total income: 73.4  
 Urban ultra poverty threshold (in 1985 DH):  $1355/73.4 = 1845$

**RURAL AREAS**

Poverty threshold

Cost of minimum basket 1970: DH 355 <sup>a/</sup>  
 Food Price Index 1985 (basis 1970): 387.5  
 Cost of minimum basket 1985: DH 1376  
 Food expenditure as percentage of total income: 78.4 <sup>b/</sup>  
 1985 rural poverty threshold (in 1985 DH):  $1376/78.4 = 1755$

Ultra poverty threshold

Food expenditure (80% of minimum basket):  $1376 * 0.80 = 1100$   
 Food expenditure as percentage of total income: 83.5  
 Rural ultra poverty threshold (in 1985 DH):  $1100/83.5 = 1318$

Notes: <sup>a/</sup> Estimated by a 1977 World Bank study on the basis of the 1970 Household Expenditure Survey.  
<sup>b/</sup> The food budget coefficients have been estimated from this survey on the basis of the consumption pattern of the lowest 20th percentile.

**COMPARISON OF MOROCCAN HEALTH OUTCOME INDICATORS  
WITH THOSE OF OTHER LMI COUNTRIES <sup>1/</sup>**

COUNTRY	Per Capita Income	Mortality			Life Expectancy	
		Infant (1984)	Child (1984)	Maternal (1980-87)*	Male (1984)	Female (1984)
Pakistan	\$350	116	116	600	52	50
Senegal	380	138	27	530	45	48
Sri Lanka	400	37	2	90	68	72
Philippines	560	49	4	80	61	65
Morocco	590	91	32	585	57	61
Zimbabwe	760	77	7	150	55	59
Egypt	760	94	11	80	59	62
Peru	1000	95	11	310	58	62
Tunisia	1140	79	8	na	60	64
Algeria	2590	82	8	130	59	62
AVERAGE	\$853	85.8	12.5	283.88	57.4	60.4
Morocco deviated by: <sup>2/</sup>	-31%	-6%	-148%	-106%	-1%	1%

Source: Financing Health Services in Developing Countries: An Agenda for Reform (Washington, D.C.: The World Bank, 1987) except for data marked with \* which come from J.P. Grant, UNICEF, The State of the World's Children (New York: Oxford University Press, 1989). All Moroccan data are the most recent available from the Ministère de la Santé Publique.

<sup>1/</sup> In addition to Algeria, a neighboring middle income Maghreb country, four LMI (low-middle income) countries with GNP lower than in Morocco and four LMI countries with GNP higher than in Morocco have been selected.

<sup>2/</sup> To obtain percent deviations, Morocco's figures for each variable were subtracted from the average and the difference was divided by the variable's average. The negative sign represents under-achievement.

### REFERENCES

- Berg, E. (ed). 1988. Policy Reform and Equity. Extending the Benefits of Development. San Francisco: ICS Press.
- Burki, Shahid Javed. 1980. "Sectoral Priorities for Meeting Basic Needs". Finance and Development, Vol, 7, No. 1, pp 18-22.
- Cant, R. G. 1976. "Territorial Indicators and National Planning." in The Use of Socio-Economic Indicators in Development Planning, edited by UNESCO. Paris: UNESCO Press
- Chenery, Hollis and others. 1974. Redistribution with Growth. London: Oxford University Press.
- Cornia, G. A., R. Jolly and F. Stewart. 1987. Adjustment with a Human Face. Oxford: Clarendon Press.
- Cornia, Andrea Giovanni. 1987. "Economic Decline and Human Welfare in the First Half of the 1980s." in G. A. Cornia, R. Jolly and F. Stewart editors, Adjustment with a Human Face. New York: Oxford University Press.
- Direction de la Statistique. 1976. Résultats du Recensement Général de la Population et de l'Habitat de 1971. Ministère du Plan.
- Direction de la Statistique. 1985. Consommation et Dépenses des Ménages, 1984-85. Premier Résultats. Vol. 1: Rapport de synthèse. Ministère du Plan.
- Direction de la Statistique. 1987. Situation Démographique Régional au Maroc: Analyses Comparatives. Royaume du Maroc. Direction de la Statistique.
- Direction de la Statistique. 1988. Annuaire Statistique du Maroc. Ministère du Plan.
- Direction de la Statistique. 1988. Comptes et Agrégats de la Nation (1980-1985). Ministère du Plan.
- Direction de la Statistique. 1988. Situation Démographique Régionale au Maroc, Analyses Comparatives. Centre d'Etudes et de Recherches Démographiques.
- Division des Statistiques. 1972. La Consommation et les Dépenses des Ménages au Maroc. Ministère du Plan.
- Grant, J. P. 1988. The State of the World's Children. UNICEF: Oxford University Press.
- Hirschman, A. O. 1968. The Strategy of Economic Development. New Haven: Yale University Press.

**REFERENCES cont'd**

- Isenman, P. 1980. "Basic Needs: The Case of Sri Lanka." World Development, Vol. 8, pp 237-258.
- Laraki, K. 1989. "Food Subsidy Programs: A Case Study of Price Reform in Morocco." LSMS Working Paper No. 50.
- Lewis, J.P. (ed). 1988 Strengthening the Poor: What Have We Learned? Oxford: Transaction Books.
- Lipton, Michael. 1988. The Poor and the Poorest. Some Interim Findings. World Bank Discussion Papers, No. 25. Washington, D.C.: The World Bank.
- McGranahan, D.V. et al. 1972. Contents and Measurements of Socieconomic Development. Vol. 8 pp. 237-258.
- Pleskovic, B. and P. Sivitanides. 1990. "Priorities for the Poor: A Conceptual Framework for Policy Analysis." Washington D.C.: The World Bank
- Sawhill, V.I. (1988). "Poverty in the U.S.: "Why is it so Persistent?" Journal of Economic Literature, Vol. XXVI, pp. 1073-1119.
- Streeten, P. S. and J. Burki. 1978. "Basic Needs: Some Issues." World Development, Vol. 6. No. 3, pp 411-21
- Streeten, P. and others. 1981. First Things First. London: Oxford University Press.
- Swearingen, D. 1987. Moroccan Mirages. Princeton: Princeton University Press.
- UNESCO. 1976. The Use of Socio-Economic Indicators in Development Planning. Paris: UNESCO Press.
- The Economist Intelligence Unit. 1987. Morocco to 1992.
- The World Bank. 1980. Poverty and Human Development. Oxford University Press.
- The World Bank. 1988 a. World Development Report 1988. Oxford University Press.
- The World Bank. 1988 b. Doukkala-II Appraisal Report.
- The World Bank. 1988 c. Brazil: Public Spending on Social Programs. Issues and Options.
- The World Bank. 1988 d. Philippines: The Poverty Challenge in the Philippines.
- Zuckerman E. 1989. Adjustment Programs and Social Welfare. World Bank Discussion Papers. Washington D.C.: The World Bank.



MOROCCO  
MAROC

REACHING THE DISADVANTAGED:  
SOCIAL EXPENDITURE PRIORITIES  
IN THE 1990's  
*L'INSERTION DES DEFAVORISES  
DANS LA VIE ECONOMIQUE:  
PRIORITES EN MATIERE DE DEPENSES  
SOCIALES POUR LA DECENNIE 90*

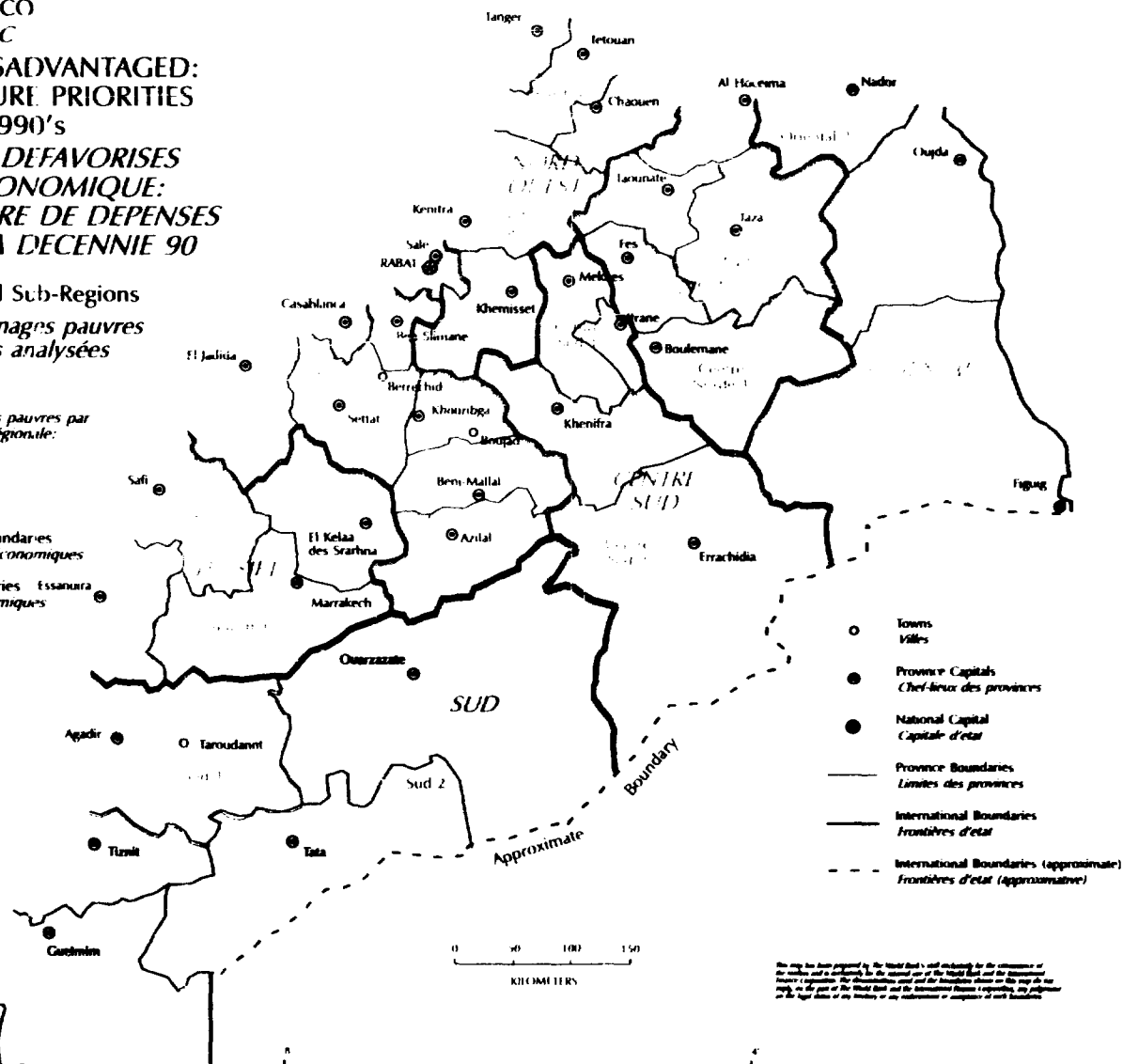
Poverty in Selected Sub-Regions  
*Répartition des ménages pauvres  
dans les régions analysées*

Poverty by Sub-Region:  
*Pourcentage des ménages pauvres par  
rapport à la population régionale:*

16% - 23%  
24% - 30%  
31% - 37%  
38% - 44%

Economic Sub-Region Boundaries  
*Limites de sous-régions économiques*

Economic Region Boundaries  
*Limites de régions économiques*



This map has been prepared by the World Bank's staff exclusively for the information of the public, and is not intended to be used for any other purpose. The boundaries shown on this map are only approximate, and the information shown is not intended to be used for any other purpose. The World Bank and its staff assume no responsibility for any errors or omissions in this map.

POVERTY IN MOROCCO BY SUBREGION

Map 1

MOROCCO  
MAROC

REACHING THE DISADVANTAGED:  
SOCIAL EXPENDITURE PRIORITIES  
IN THE 1990's

L'INSERTION DES DEFAVORISES  
DANS LA VIE ECONOMIQUE:  
PRIORITES EN MATIERE DE DEPENSES  
SOCIALES POUR LA DECENNIE 90

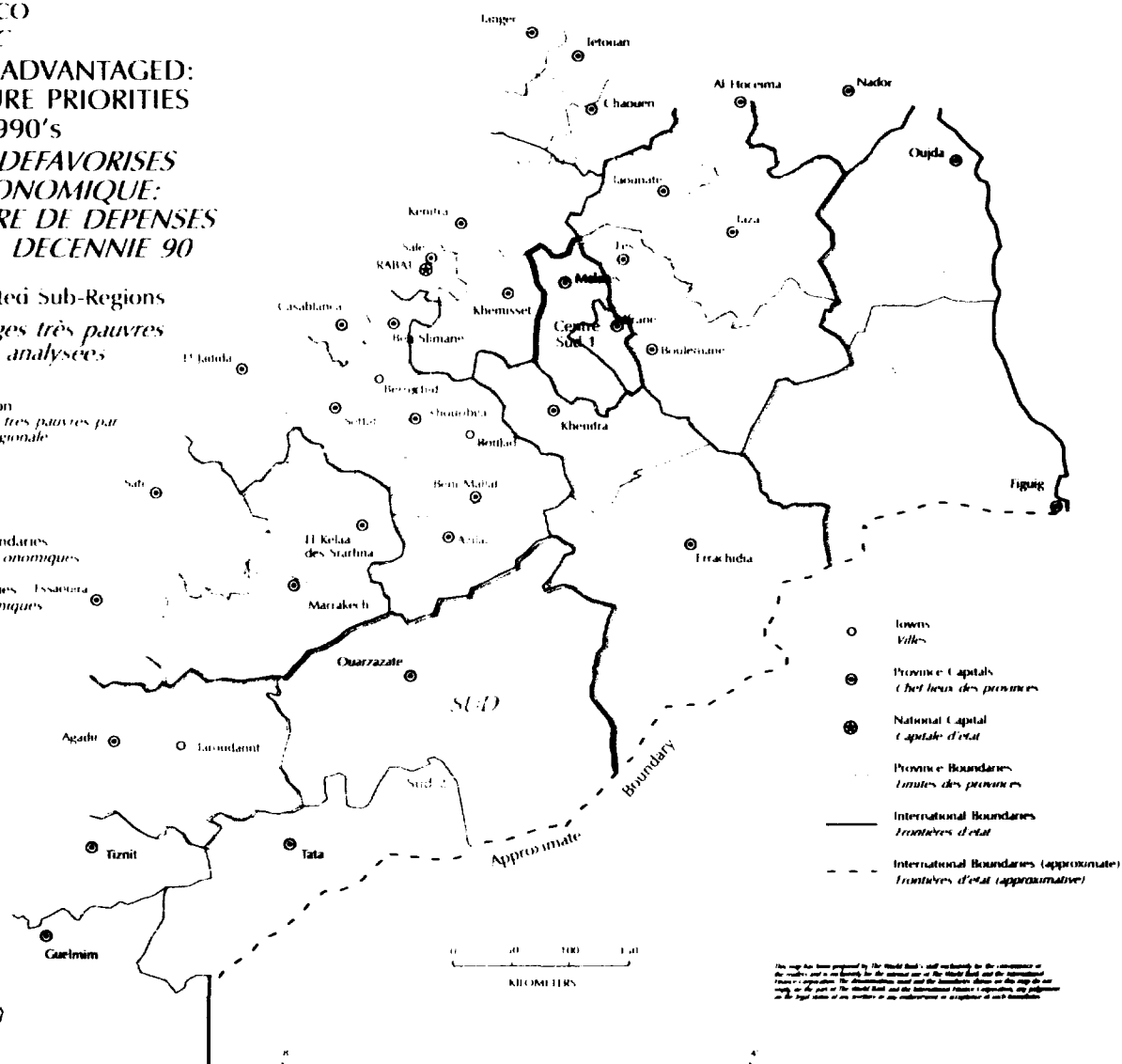
Ultra-Poverty in Selected Sub-Regions  
*Répartition des ménages très pauvres  
dans les régions analysées*

Ultra Poverty by Sub Region  
*Pourcentage des ménages très pauvres par  
rapport à la population régionale*

5% - 10%  
11% - 16%  
17% - 22%  
23% - 29%

Economic Sub-Region Boundaries  
*Limites de sous régions économiques*

Economic Region Boundaries - Essaouira  
*Limites de régions économiques*



This map has been prepared by The World Bank, and published by the consent of the member states on behalf of the national map of The World Bank and the geographical Institute's cooperation. The information used and the boundaries shown on this map do not imply on the part of The World Bank and the International Finance Corporation any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries.

ULTRA POVERTY BY SUBREGION

Map II

MOROCCO  
MAROC

REACHING THE DISADVANTAGED:  
SOCIAL EXPENDITURE PRIORITIES  
IN THE 1990's

L'INSERTION DES DEFAVORISES  
DANS LA VIE ECONOMIQUE:  
PRIORITES EN MATIERE DE DEPENSES  
SOCIALES POUR LA DECENNIE 90

Social Indicators  
Indicateurs Sociaux

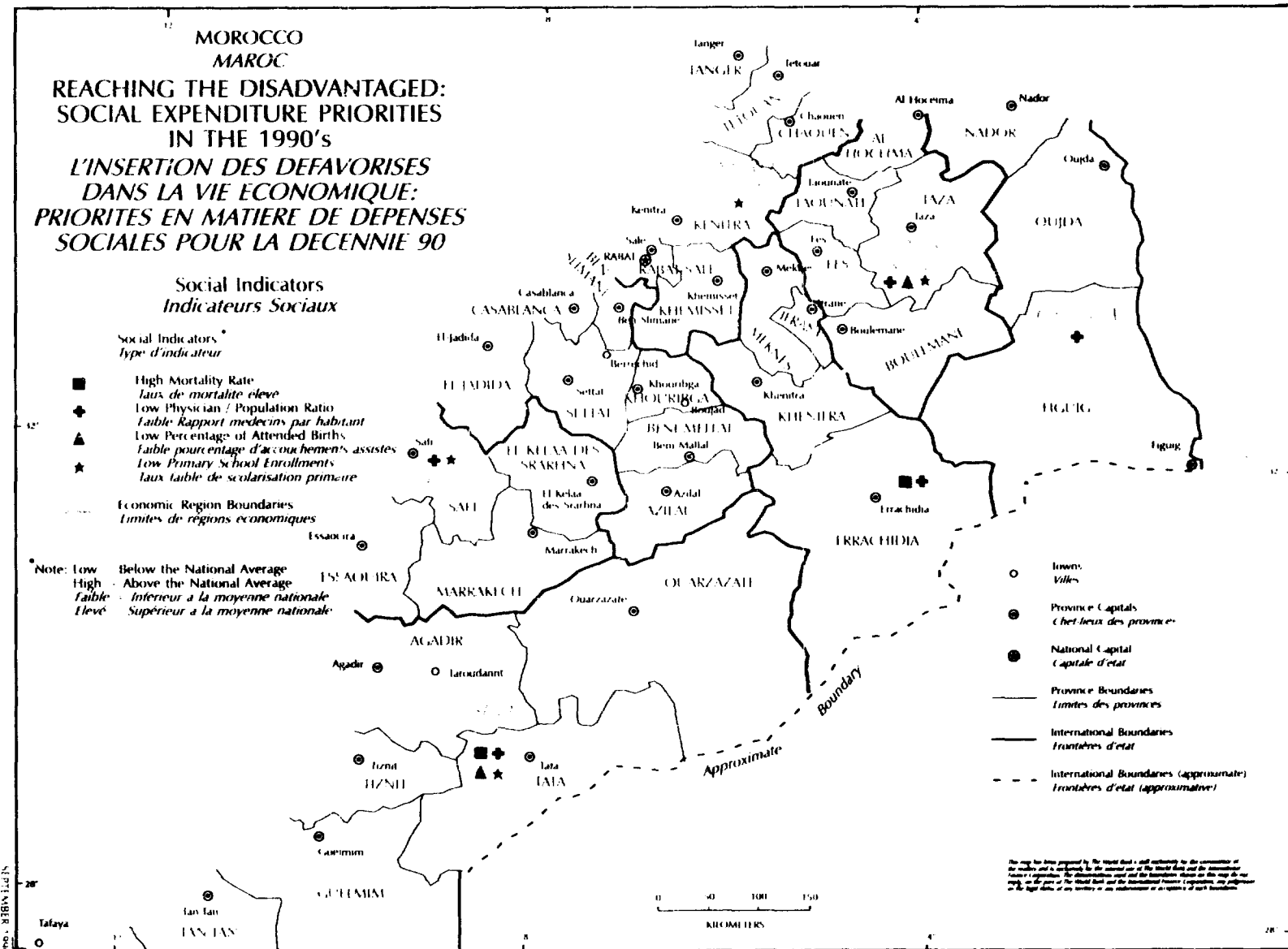
Social Indicators  
Type d'indicateur

- High Mortality Rate  
Taux de mortalité élevée
- ◆ Low Physician / Population Ratio  
Faible Rapport médecins par habitant
- ▲ Low Percentage of Attended Births  
Faible pourcentage d'accouchements assistés
- ★ Low Primary School Enrollments  
Taux faible de scolarisation primaire

Economic Region Boundaries  
Limites de régions économiques

Note: Low Below the National Average  
High Above the National Average  
Faible Inférieur à la moyenne nationale  
Élevé Supérieur à la moyenne nationale

- Towns  
Villes
- Province Capitals  
Chef-lieux des provinces
- National Capital  
Capitale d'état
- Province Boundaries  
Limites des provinces
- International Boundaries  
Frontières d'état
- - - International Boundaries (approximate)  
Frontières d'état (approximative)



This map has been prepared by the World Bank staff exclusively for the convenience of the reader and is not intended to be used for any other purpose. The information contained herein is for informational purposes only and does not constitute a recommendation or endorsement of any product or service by the World Bank or any other organization. The World Bank and the International Finance Corporation are not liable for any errors or omissions in this map or for any consequences arising from its use.

REGIONAL INDICATORS

MAP III