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Executive Summary and Policy Recommendations

During the last decade, social achievements in Morocco have been disappointing. Both economic vulnerability and absolute poverty increased : between 1991 and 1999 the total number of poor climbed from 3.4 millions (13.1% of the population) to 5.3 millions (19% of the population). This poverty deterioration occurred against sluggish GDP growth, weak employment performance, growing inequality and high regional disparities. Despite improvement in social indicators, significant gaps remain and disparities by gender are still large. About 50 percent of adults at the national level and over 70% of the rural poor are still illiterate.

The main cause of poverty increase in the 1990s was slow economic growth which resulted in a decline of employment opportunities. Moreover public spending in social sectors was insufficient and established social policies were regressive and failed to lift people out of poverty and reduce inequalities. Broad based economic growth is crucial for reducing poverty in Morocco. It can both directly raise the income of the poor by creating income-earning activities in which they can participate and it will help them indirectly by freeing financial resources which can be invested in priority social sectors. Increasing investment in social sectors will not only contribute, in the long run to higher growth but will also improve the living conditions of the people and reduce inequality.

As Morocco faces the 21st century, it must confront a series of critical policy questions: How can it make progress in the fight against poverty? What growth path can be envisaged while 40% of employment is still in agriculture and where exports are losing competitiveness? What social policies are required to reduce regional disparities and to prepare people for globalization?

The aim of this report is to provide Moroccan policymakers, the Bank audience and other interested parties, how to tackle these pressing social issues and policy questions.

Poverty Increase was accompanied with small improvement in Social Indicators

While the 1980s were marked by a substantial decline in poverty, the 1990s saw a substantial increase in both poverty and economic vulnerability. In 1998/99 about 19% (5.3 millions) of Morocco's population are considered poor compared to 13% (3.4 millions) in 1991 and 21% (4.6 millions) in 1985. During the 1990s, the number of vulnerable people has also increased dramatically: in 1998/99, there were between 9 to 12 millions individuals who, had expenditure levels of only between 25% and 50% above the poverty line (about 3,500DH/year/capita), and who were likely to slip into poverty during episodes of macroeconomic instability (or recession), compared to 5 to 9 millions in 1990/91.

Poverty continues to be mostly a rural phenomenon: almost one Moroccan out of three is poor in rural areas compared to one out of ten in urban areas. And both depth and severity of poverty have increased during the 1990s particularly in rural areas. Looking at the people below the food poverty line the disparities between rural and urban areas are striking: while the number of the very poor in urban areas is estimated at 78 thousands people, about 800 thousand of the 'extreme poor' are to be found in rural areas (compared to 255 thousands in 1990/91). These findings confirm the rural character of poverty and indicate that extreme poverty has almost tripled in rural areas while poverty has almost doubled in urban areas. However, due to increasing urbanization, urban poverty is also becoming a concern: the share of the poor living in urban areas has increased from 27% to 34% during 1990-98.

Nevertheless the increase in consumption-based poverty measures has been accompanied by an improvement in other measures of living standards. Despite this improvement in access to social services during the 1990s, urban-rural imbalances are still important and continue to be a crucial policy issue for poverty reduction strategy. Primary enrollment rate has increased from 63% in 1990 to 77% in 1997, but it remains 20% below the average enrollment rate in LMI. The secondary enrollment rate has also increased marginally, from 36% in 1990 to 38% in 1997 and small improvements have also been obtained in female adult illiteracy. The crude death rate decreased from 7.7 per 1000 population in 1991 to 6.3 in 1998. Life expectancy has also increased from 67 years in 1991 to 69 in 1998. However infant mortality in Morocco is one of the highest in the region and maternal mortality is the second highest in the region. Housing conditions and access to basic infrastructure services such as electricity and potable water have also improved both in urban and rural areas, but disparities among regions are still important and access to potable water and electricity in rural areas is still one of the lowest in the region.

Why Poverty Increased in 1990s?

The decline in GDP growth during the 1990s was driven mainly by the drop of the agriculture growth and the fact that non-agriculture GDP did not expand sufficiently to absorb the effects of a declining agriculture sector. The Moroccan economy's growth rate fell by around 2 percentage points, from an annual average of 4.1% over 1986-91 to 1.9% between 1991 and 1998; and non agricultural GDP growth dropped from an annual average of 4.2% to 2.8%. In fact slow growth rates in services, industry and manufacturing sectors, which were driving forces of growth in the 1980s and are mainly employing the poor, have been the major factors contributing to the decline of non-agricultural GDP growth during 1991-98.

This deterioration in economic growth has led to a decline in living standards of the households and to an increase in poverty. Based on national accounts, real private consumption growth fell by more than 3.7 percentage points in the 90s, from an annual average of 4.1 % over 1986-91 to 0.3 % between 1991 and 1998, and the real private consumption per capita decreased by 1.4% per annum, compared to an increase of 1.9% per annum over 1986-91: as a result real private consumption per capita dropped from 3160 DH in 1991 to around 2860 DH in 1998.

During the 1990s, roughly 84% of the increase in poverty can be attributed to the lack of economic growth, the rest of which can be attributed to the deterioration of income distribution (about 16%). However the impact of lack of growth and deterioration of equality on poverty was different according to regions: In *urban* areas, improvement in redistribution that occurred among the poor dampened the negative impact on poverty attributable to lack of growth. While in *rural* areas both lack of growth and worsening of inequality played equal roles in the increase of rural poverty. However the elasticity of poverty to growth in Morocco is very high compared to other middle-income countries and it has been increasing in the 1990s particularly in urban areas (3.2 in urban and 2.5 in rural areas for 1991-98 compared to 2.7 and 2.9 in 1986-91).

Several features of the economy during 1991-98 are particularly relevant to poverty increase:

- ***Decline in manufacturing exports.*** During 1986-91, the main factor explaining poverty reduction was the fast expansion of job opportunities in the manufacturing exportable sector -mainly clothing

and textiles – which is labor intensive and mainly employs low-skilled labor. Growth in manufacturing exports was mainly explained by strong gains in manufacturing competitiveness, namely due to falling unit labor costs and a depreciating real effective exchange rate. However, during the 1990s these trends were reversed. Weak export performance has been the leading cause of declining output growth in manufacturing and slow employment generation. The substantial slow down of export growth in the 1990s (from 14% growth in 1986-91 to 5% in 1991-98) was the result of the deterioration in competitiveness particularly due to the appreciation of the real effective exchange rate and the increase of unit labor costs in manufacturing.

- ***With slow economic growth, the creation of productive employment has been absent and urban unemployment has worsened.*** During the 1990s, expansion of urban labor force was coupled with a slow demand for workers (3% during 1991-98 compared to 4.6% in 1986-91) mainly due to a contraction in export growth. During the same period, labor productivity in the manufacturing sector, which is key to the expansion of employment outside agriculture, has been growing at a much slower pace (1% p.a. during 1991-96 compared to 6% p.a. in 1986-91). As a result of slow economic growth and sluggish job creation, the unemployment rate in urban areas has been increasing: in 1999 it is estimated at 22.8% compared to 15% in 1991. According to the 1998/99 LSMS, the increase in unemployment is correlated with the increase in poverty, particularly in urban areas. In 1998/99, the unemployment rate among the poor urban reached 31.5%, compared to 30% in 1990/91 and the number of unemployed members inside the households is higher among the poor than the non-poor and has been increasing during the last decade.
- ***Government policies have increased the vulnerability of the agricultural sector to drought.*** During the 1990s, due to climatic conditions, growth in agriculture sector declined by 1.2% p.a., compared to an annual growth of 4% during 1986-91. Since most of the rural poor make their living from agriculture, they have been negatively affected. Moreover, both Government agricultural policies and price evolution of cereals and cattle products have negatively affected small and vulnerable rural producers. In the 1980s the Government promoted the expansion of cereal production on less productive lands instead of encouraging export crops on which Morocco has a comparative advantage. Given the high variability of cereal production to climate conditions, this has led to high fluctuation in agricultural GDP and consequently in rural households revenues. Within this context, the most vulnerable small cereal producers located in marginal zones are negatively affected, either in good or bad production years.
- ***Decline in Worker remittances.*** Worker remittances play a significant role in keeping people out of poverty. Although they benefit more the middle-income groups, their recent evolution during the 1990s may have contributed to some extent to the rise in poverty incidence.
- ***Although social spending has increased during the 1990s they have been insufficient and inefficient to lift people out of poverty.*** During 1991-98, social spending rose from 34.5% to 43.2% of total public expenditure, and as share of GDP it increased from 9.0% in 1991 to 12.5% in 1998. However they are still low in comparison to other countries in the region; they are poorly targeted (i.e., consumer food subsidies and public works); they are inefficient with poor results (i.e., education); and there is no comprehensive safety net in place for protecting the poor (i.e., health insurance, safety net for poor elderly and disabled). Moreover there is very little redistribution in public spending and almost all social programs are designed to benefit the higher-middle income

and the rich more than the poor (education, health, social insurance, active labor policies, etc.). Moreover, urban areas continue to receive a larger share of public funds, explaining to some extent the improvement in income distribution in urban areas during 1990s.

Who are the Poor?

The profile of the poor has not changed during 1990s. Poverty in both urban and rural areas is largely associated with (i) larger household size, higher child/adult ratio and high dependency ratio; and (ii) lack of human capital (in 1998/99 about 64% of the poor have no education and about 17% have only primary education, compared to 52% and 24% respectively for the non poor).

Urban poor household heads are most likely to be either wage earner or self-employed, and work mainly in services and construction; while the rural poor household heads are mainly self-employed and work in the agriculture sector. Unemployment is a luxury for most of the poor, particularly in rural areas, but in urban areas, the increase in poverty during the 1990s is correlated with unemployment increase: in 1998/99, 28% of the urban unemployed are poor and the unemployment among the urban poor (31.5%) is higher than in aggregate (25.7%) and it has increased during the last decade (compared to 30% and 20.6% in 1990/91, respectively). Both public and private transfers represent important components of all household income, and the lack of which would increase poverty and inequality, in both urban and rural areas.

Key elements of a strategy to improve living standards and reduce poverty

Sustained labor intensive growth.

Given the magnitude of the elasticities of poverty with respect to growth, a low rate of growth in a short period of time would have a large impact on poverty reduction, in both rural and urban areas. Since most of the poor live in rural areas pro-rural growth and particularly pro-agricultural sector growth would be the best pro-poor growth policy. But given the agriculture sector is a deadlock this is a difficult task. A recent World Bank report on the Rural Development Strategy of Morocco has indicated that only a radical change in the policy framework would allow the agricultural sector to diversify in line with its comparative advantages. Even under a reform scenario, employment situation in agriculture could deteriorate as productivity growth will be faster than output. Therefore, employment growth outside the agriculture sector will be critical to absorb rural migrants. To achieve at least 6% growth in the future and to create about 200 thousand jobs yearly for reducing unemployment, future growth in Morocco can mainly come from the industrial sector and from sub-sectors where Morocco has specific comparative advantages, particularly an export-oriented manufacturing sector and the traditional service sector (see *Morocco: Sources of Growth*, WB, April 2000). Although these sources of growth may not have the highest impact on the poor, they will still help reduce poverty in both rural and urban areas but at a much slower pace.

Better targeting Government spending to foster progressive policies and reduce inequality

Given that the prospects of pro-poor growth in agriculture seems slim, Government needs to (i) reallocate public funds toward social services and programs benefiting the poor and vulnerable, particularly in rural areas to combat inequality; (ii) improve the efficiency of existing social development and social

protection programs; (iii) increase budget allocation to social sectors particularly given the high number of economically vulnerable people (about 43% of the population in 1998/99) and (iv) better target social assistance programs to the needy.

Education and Literacy. In 1999, the Moroccan Government set up a Royal Commission for education reform whose goals are to (i) increase enrollment at all education level; (ii) close overall gender gap; and (iii) improve efficiency. To achieve these objectives the following will need to be achieved:

- **Universal Lower Basic Education:** This could be achieved, without significantly increasing overall education spending, through (i) reallocating the education budget toward basic schooling (with special priority on serving rural girls) and by increasing the share of lower basic education from 40 percent of the education budget in 1999 to about 50% ; (ii) rationalizing staffing across and within primary and secondary level; and (iii) continuing to work with NGOs and non-formal education programs.
- **Increase Access and Improve the Quality of Upper Basic and Secondary:** Once access to lower basic is increased it is critical to address access to higher basic and secondary. The existing distributional gap between urban and rural Morocco, and between men and women, will not be eradicated unless there is truly equal educational opportunity for all Moroccan children. The cost of increasing access to upper basic and secondary may be substantial, but it could be financed through introduction of cost recovery mechanisms at the secondary and higher education levels.
- **Adult illiteracy reduction:** The Government plans to reduce overall adult illiteracy to around 20 percent over a period of fourteen years. This would require expansion of the adult literacy programs initiated by the Ministry of Social Development to reach about 500,000 people a year, compared to the current level of about 100,000. To achieve this goal, the Government needs to increase the adult literacy budget by three fold (from 30 million DH to about 90 million DH per year).

Health Care. Policies in the past strongly favored hospital construction in the major urban areas, thereby giving low priority to primary health services, particularly in rural areas. The low level of utilization of services indicate the need to increase both availability and the quality of services. To achieve these goals the following priority areas will need to be addressed:

- **Reducing infant and maternal mortality rates:** This would require strengthening maternal and child health programs, especially in rural areas.
- **Improving equity and expanding health coverage:** Redirecting health care services to primary health care and emphasizing on curative interventions services would improve availability and access to health services and reduce rural-urban and inter-regional inequities.
- **Ensuring long-term sector financial sustainability.** Improving the financial sustainability of the health care will require enhancing cost-effectiveness of provision of services and pharmaceuticals, reforming and expanding the coverage of health insurance schemes, introducing compulsory health insurance and putting in place a national health assistance fund for low-income groups.
- **Increasing the financial resources of the public health care and improving the management of the system.** To improve quality and increase access of health services there is a need for an increase in total public health spending and a reallocation of Government expenditure from curative, hospital care to preventive and base care.

Social Insurance System. The social insurance system protects wage earners and their dependents in the formal economy. However the system fails to cover those who need it most, such as those who do not have neither permanent source of income nor a secure job; those who are vulnerable to external shocks and sickness, death of household head, and divorce/repudiation (i.e., self-employed in the informal sector and in rural areas, temporary workers in the private sector, and the unemployed in urban areas). These vulnerable groups in Morocco generally seek help from intra household and informal family support networks. Moreover, since the financial sustainability of the formal pension system is in jeopardy, even the formal urban wage earner, who is among the vulnerable, may not have adequate protection for old-age.

- **Increase the pension coverage:** This is a pressing problem in Morocco as no alternative social safety nets are present for the elderly. International experience is not very helpful in this area. In fact the issue of coverage may be related more to the structure of the economy than to the particular features of the pension system. One way to increase coverage is through a targeted cash transfer program. This type of system offers a basic pension as a safety net to every individual who reaches a certain age. It is financed out of general revenues and can be means tested. Although its cost may be high, in places with a tight family structure, such as Morocco, demogrant pensions have the advantage of providing a safety net not only to the elderly but also to their families.
- **Improve financial sustainability for pension system:** Since there is no unique solution for this problem, the government should explore the feasibility of implementing parametric or structural reforms. Among the first, it is recommended to review eligibility rules, in particular the years of covered work requirement. Among the second type, the government could consider the creation of a second pillar to channel part of the retirement savings. Currently actuarial projections for each of the schemes are being prepared and as a result an estimated cost for implementing various reforms will be obtained.

Social Assistance Programs.

- **Reforming Food subsidies to better targeting the poor.** Parallel reduction of tariff protection and subsidies on food products and introduction of complementary targeted assistance to low-income groups is the best way to improve the efficiency of the program. This would allow the reallocation of budgetary funds freed up by reduced subsidy expenditures to programs benefiting the poor (e.g., literacy, basic services in rural areas, public works programs and assistance programs targeted to the poor). In addition, in the medium term it would allow strengthening agricultural policy by focusing on crops where Morocco has a comparative advantage in order to ensure adequate income for the rural population, including the poor.
- **Expanding existing Public Work (PN) to labor intensive activities.** Despite its weaknesses, currently the public works (PN), which are largely targeted to rural areas, are the most efficient programs in reaching the poorest among the unemployed and those who are affected by transitional shocks, such as drought. Given the recent increase in poverty, PN could: (i) provide large scale employment programs in rural areas while ensuring that labor intensive methods are enforced and programs are targeted to the most disadvantaged regions; (ii) act as an advisory to other Government agencies in selecting projects that use labor intensive methods; and (iii) contract-out projects to the private sector; which would allow PN to focus its resources on rural works,

specifically the labor intensive activities and on the most disadvantaged regions rather than scattering its resources throughout the country as it does today.

- **Radical restructuring of the in-kind Welfare Program (EN):** To improve the efficiency of EN, since 1999, Government has launched a two-year restructuring effort piloted in four provinces to introduce fundamental changes in service delivery. The objective of this effort is to test the impact of the changes and examine restructuring alternatives. However the results of this piloted restructuring are not yet available. However an extensive restructuring of EN still needs to be launched in order to (i) better identify target groups and their needs; (ii) better focus EN activities, improve cost-effectiveness of the programs and increase beneficiary coverage; and (iii) strengthen its institutional capacity to monitor the impact of its activities.

CHAPTER I

WHAT HAS HAPPENED TO POVERTY DURING 1990-98 AND WHO ARE THE POOR?

While 1980s was marked by a substantial decline in poverty, the 1990s saw a substantial increase in both the incidence of poverty and the economic vulnerability. In 1998/99 about 19% (5.3 millions) of Morocco's population are considered poor compared to 13% (3.4 millions) in 1991 and 21% (4.6 millions) in 1985. Poverty continues to be mostly a rural phenomenon: almost one Moroccan out of three is poor in rural areas compared to one out of ten in urban areas. And both depth and severity of poverty have increased during 1990s particularly in rural areas. Incidence of poverty has increased in all regions, with the notable exception of the oriental region. The poor continue to be characterized by larger household size, high dependency ratio, and low education level. Poor households are more likely to be either wage earner or self-employed and most of poor work in the agriculture, services and construction sectors. Overall unemployment is a luxury and most of the poor can not afford it, particularly in rural areas. But in urban areas, the increase in poverty seems to be correlated with unemployment increase. Among the inactive, most of the poor are to be found among households where heads are disabled and elderly. Both private and public transfers have substantial poverty and redistributive impact.

Table 1 – POVERTY LINES (DH/PERSON/YEAR) FOR 1990-91 AND 1998-99

		1990-91			1998-99		
		food	Lower	Upper	Food	Lower	upper
Urban	(i)	1442	2106	2725	1962	2727	3597
	(ii)		2027	2674		2881	3922
Rural	(i)	1442	2042	2439	1878	2532	3075
	(ii)		1963	2384		2553	3037
National	(i)	????	????	????	?????	?????	????
	(ii)						

Note: (i) Estimated by applying CPI to poverty lines. This means that 1990/91 poverty lines are obtained by deflating 1984/85 poverty lines, while 1998/99 poverty lines are obtained by deflating 1990/91 poverty lines.
(ii) Estimated by applying food component of CPI to food poverty line, and re-estimating the food demand model to calculate the allowance for non-food goods.

Source: Direction de la Statistique.

A. Defining Poverty

1.1 People are classified as poor if their consumption expenditure fall below a poverty line. Given the arbitrariness associated with the choice of poverty lines, we suggest to use different lines in order to make the analysis more robust. Therefore, three poverty lines have been constructed: (i) a food poverty line representing the cost of a basket of goods which satisfy minimum basic nutritional needs, (ii) a lower poverty line which makes an allowance for non-food goods, and (iii) an upper poverty line making a more generous allowance for non-food goods. The methodology used to construct the poverty lines follows the one implemented in the 1994 report on poverty in Morocco.¹ Table 1 shows the poverty lines for 1990/91 and 1998/99. These lines identify three categories of poor, namely the 'extreme poor' (that is, people who fall below the food poverty line), the 'very poor' (people below the lower poverty line), and the 'poor' (people below the upper poverty line). In order to allow for proper comparisons with previous estimates of poverty for 1990-91 in Morocco, as well as with estimates concerning other countries, the analysis will use the upper poverty line (denoted by (ii) in Table 1).

¹ For the details see Annex I describing the methodology for constructing the poverty lines for 1998/99.

B. Poverty Incidence and Changes in Poverty between 1990-1998

1.2 In last decade both the incidence of poverty and the economic vulnerability of the population have increased.² According to 1998/99 data a substantial share of the population in Morocco can be defined as 'economically vulnerable'. In 1998/99 the incidence of poverty at the national level is estimated at 19.0%, (about one out of five Moroccans fall below the poverty line). The poor amount to 5.3 millions, compared to 3.4 millions in 1990/91 (corresponding to 13.1% of the population) and 5.7 millions (21.1%) in 1984/85.³ During 1990-99, the number of vulnerable has increased dramatically (on average, by 30%). In 1998/99, raising the poverty line by 25% increases the incidence of poverty to 32% of the population (corresponding to 8.8 millions of poor) and if the poverty line is raised by 50%, poverty incidence increases up to 43% (corresponding to 12 millions of poor). Finally, if the poverty line is doubled the incidence of poverty becomes pervasive, reaching 61% of the population at the national level. Thus, in 1998/99, there are from 9 to 17 millions of individuals who are likely to slip into poverty during episodes of macroeconomic instability and can be considered "economically vulnerable". While in 1990/91, if the poverty lines was increased by 50%, the percentage of the population in poverty would have increased from 13% to 35% (corresponding to about 9 millions of poor) and if the poverty lines was doubled about 50% of the population would be considered poor (about 13 millions of poor).

Table 2 – POVERTY INCIDENCE FOR 1990-91 AND 1998-99

	1990-91			1998-99		
	Urban	Rural	National	Urban	Rural	National
Headcount Index (%)						
Extreme Poor	0.5 (0.24)	1.9 (0.36)	1.2 (0.23)	0.5 (0.20)	6.6 (0.66)	3.3 (0.33)
Very Poor	2.8 (0.78)	10.7 (0.91)	7.0 (0.61)	4.2 (0.47)	16.5 (0.95)	9.8 (0.52)
Poor	7.6 (1.10)	18.0 (1.17)	13.1 (0.82)	12.0 (0.75)	27.2 (1.13)	19.0 (0.67)
Number of Poor (thousands)						
Extreme Poor	59	255	314	78	844	923
Very poor	336	1,455	1,791	633	2,119	2,752
Poor	912	2,448	3,360	1,811	3,496	5,307

Notes: Standard errors multiplied by 100 in parentheses, under the hypothesis of simple random sampling.

Source: Staff estimates.

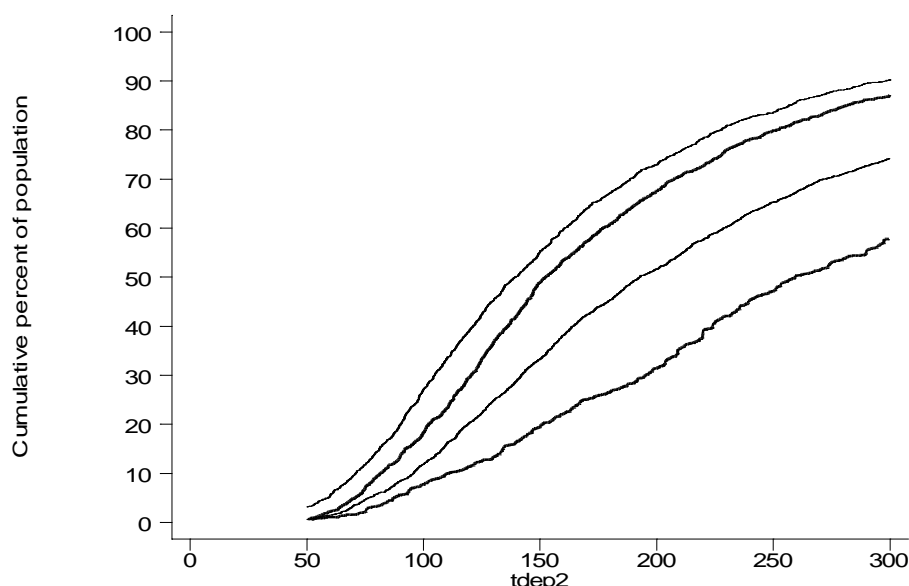
1.3 Table 2 shows that poverty in Morocco continues to be mostly a rural phenomenon: in 1998/99 more than one fourth of the population living in rural areas are poor, as compared to one-tenth in urban

² Increase in poverty can not be attributed to climatic conditions which were comparable during the two years of the surveys. Correlation between agriculture performance and poverty will be analyzed in more detail in chapter II.

³ See Kingdom of Morocco. Poverty, Adjustment, & Growth, Report No. 11918-MOR, January 1994.

areas. Although the rural population represents 46% of the total population, 66% of the poor live in rural areas (compared to 73% in 1990/91), a percentage which rises to 77% for the very poor and over 90% for the extreme poor. Looking at the people below the food poverty line the disparities between rural and urban areas are striking: whilst the number of the very poor in urban areas is estimated at 78 thousands units, about 800 thousand of 'extreme poor' are to be found in rural areas (compared to 255 thousands in 1990/91). These findings confirm the rural character of poverty already emphasized by both the 1990/91 and the 1984/85 survey, thereby showing the high persistence of rural poverty. It also confirms that extreme poverty has almost tripled in rural areas while poverty has almost doubled in urban areas. The magnitude of the standard errors associated with the headcount indices in Table 2 suggests that there are no apparent reasons to doubt that the observed changes in poverty may be due to sampling variation as opposed to genuine variation of poverty.

Figure 1 – POVERTY INCIDENCE CURVES FOR 1990-91 AND 1998-99



Notes: The upper (lower) thick line refers to rural (urban) in 1990/91; the upper (lower) thin line refers to rural (urban) in 1998/99

1.4 To assess the robustness of the results, a common procedure is to plot the poverty incidence curves for urban and rural areas in 1990/91 and 1998/99 (Figure 1). According to Figure 1, it does not really matter where the poverty line is drawn: independently of the point chosen on the horizontal axis (*i.e.* for any given poverty line) the percentage of population enjoying that expenditure level (*i*) is always higher in urban than in rural areas, and (*ii*) is higher in 1990/91 than in 1998/99. These results are strikingly clear-cut and fully confirms two main conclusions, namely that (*i*) poverty has increased over the 1990-1998 years, and (*ii*) poverty in Morocco is by far higher in rural than in urban areas.

C. Depth and severity of poverty during 1990-98

1.5 Although the headcount index discussed above is easily understood, it does not provide information neither on the distance separating the expenditures of the poor from the poverty line (*i.e.*, how poor the poor are), nor on the inequality of the expenditures among the poor (*i.e.*, whether a poor becomes poorer or richer has no effect on the head count index). Table 3 gives alternative measures of poverty. The poverty gap index indicates the depth of poverty, *i.e.* the amount of expenditure that would be needed to raise every poor person up to the poverty line, thereby eliminating poverty. The poverty severity index reflects the changes in the inequality among the poor by weighting the poor according to their distance from the poverty line, *e.g.* an increase in the severity index indicates that the distribution of expenditure below the poverty line has worsened.

Table 3 – DEPTH AND SEVERITY OF POVERTY FOR 1990-91 AND 1998-99

	1990-91			1998-99		
	Urban	Rural	National	Urban	Rural	National
Poverty Gap Index (%)						
Extreme Poor	0.07 (0.04)	0.22 (0.04)	0.15 (0.03)	0.06 (0.02)	1.29 (0.17)	0.63 (0.08)
Very Poor	0.43 (0.11)	1.79 (0.18)	1.15 (0.11)	0.64 (0.10)	3.88 (0.30)	2.13 (0.15)
Poor	1.47 (0.25)	3.80 (0.29)	2.7 (0.20)	2.49 (0.21)	6.68 (0.38)	4.42 (0.21)
Poverty Severity Index (%)						
Extreme Poor	0.02 (0.01)	0.04 (0.01)	0.03 (0.01)	0.00 (0.00)	0.41 (0.07)	0.19 (0.03)
Very poor	0.13 (0.04)	0.46 (0.05)	0.31 (0.04)	0.16 (0.03)	1.38 (0.14)	0.72 (0.07)
Poor	0.44 (0.09)	1.15 (0.11)	0.82 (0.07)	0.79 (0.09)	2.51 (0.19)	1.58 (0.11)

Notes: Standard errors multiplied by 100 in parentheses, under the hypothesis of simple random sampling.

Source: Staff estimates.

1.6 According to Table 3, both the depth and the severity of poverty have unambiguously increased over the 1990-98 years, particularly in rural areas. In 1998-99 the estimated cost of raising the consumption level of every poor person to the (upper) poverty line is 4.4% the cost that would be incurred by giving every poor, regardless of how poor, a consumption level equal to the poverty line (compared to 2.7% in 1990/91).⁴ In other words, there would be sizable gains from a more effective targeting of pro-poor policies. As far as the severity of poverty is concerned, the estimates point to a worsening in the distribution of welfare among the poor: between 1990/91 and 1998/99 the index has almost doubled, both at the national level and within urban and rural areas.

⁴ Poverty gap provides also important information to policymakers because it indicates the potential gains by targeting poverty alleviation programs *vis à vis* sharing out transfers to every poor by an amount equal to the poverty line.

D. Inequality

1.7 Table 4 shows the cumulative distribution of consumption in urban and rural areas by decile for 1990/91 and 1998/99. Looking at 1998/99, the richest 50% of the population makes 75% of the total expenditure, while the top 10% accounts for more than 30% of the total expenditure on consumption. Overall, the same pattern of inequality is to be found in both urban and rural areas, although the former is slightly more unequal than the latter. The data on the distribution of expenditure shares across population deciles are consistent with both the Gini coefficient and the mean logarithmic deviation (MLD). Less than 20% of the aggregate inequality is due to differences between the mean expenditures between urban and rural areas: 80% of the observed inequality at the national level would disappear if – *ceteris paribus* – the disparities within each areas would be eliminated.

Table 4 – PER CAPITA EXPENDITURE BY DECILES FOR 1990/91 AND 1998/99

	1990/91			1998/99		
Decile	Urban	Rural	National	Urban	Rural	National
1	2.6	3.6	2.7	2.9	3.3	2.6
2	6.6	8.5	6.6	7.0	8.1	6.5
3	11.7	14.5	11.4	12.1	14.0	11.3
4	18.2	21.2	17.0	18.0	20.7	17.1
5	25.1	28.9	23.8	24.9	28.5	23.9
6	33.8	37.5	32.3	33.0	37.5	31.9
7	43.3	47.7	41.7	42.6	47.9	41.4
8	55.1	59.7	53.8	54.5	60.3	53.2
9	70.8	74.9	69.2	70.2	75.7	68.8
10	100.0	100.0	100.0	100.0	100.0	100.0
Mean expenditure (DH/person/year)	9,224	4,623	6,780	10,157	5,087	7,826
Gini	.377 (0.012)	.312 (0.011)	.393 (0.008)	0.377 (0.006)	0.316 (0.008)	0.395 (0.005)
MLD	0.260 (0.017)	0.171 (0.008)	0.285 (0.013)	0.256 (0.009)	0.171 (0.008)	0.284 (0.008)

Notes: Deciles refer to households' per capita expenditure. MLD denotes the mean logarithmic deviation. Asymptotic standard errors in parentheses.
Source: Direction de la Statistique, ENNV 1990/91, ENNV 1998/99.

1.8 To what extent the increase in poverty in Morocco during the 1990-98 may be attributed to increased inequality? Unambiguously, Table 4 shows that relative inequality hardly changed during the period 1990-98. In fact, neither changed the levels of inequality at the national level, nor changed the inequality within each areas. These findings suggest that Morocco during the 1990s appear as a highly static society, where lack of mobility adds to unequal living conditions (as measured by the per capita expenditure on consumption).

1.9 The implications of the flat distributive trend emerged with reference to Morocco in the 1990s are very important, as they rule out that inequality can explain the observed increase in poverty. If it is agreed that two factors can explain poverty increases over time, namely average income decline and inequality increase, then Table 4 ultimately suggests that in the case of Morocco during the 1990-98

years, the trend in per capita expenditure (income) is most likely to be responsible for the increase in poverty.⁵

E. Who are the poor in 1998?

1.10 Regional Poverty Profile.⁶ Morocco has become a predominantly urban society: in 1999 about 54% of the population lived in urban areas, compared to 49% in 1991. Although about two-third of the poor live in rural areas, there are marked disparities in poverty among the regions. Along with increasing urbanization the share of urban poor increased from 27% in 1990/91 to 34% in 1990/91. Based on the new poverty lines for 1998/99, the incidence of poverty is highest in the center north (particularly, in Fes-Boulmane and Taza-Hal Hoceima), center south (Meknès Tafilk) and north west regions (Gharb – Charda – Beni Hssen): in these regions the poor often represent a share as high as 30% of the total population in the region. The incidence of poverty is lowest in Grand-Casablanca (5%), Chaouia-Ouadigha (9.7%), and Régions Sud (9.9%). The major contribution to aggregate poverty comes from the region in Tensift-Al Haouz with 15% of the total poor living there. Concentrating on rural areas, the elimination of poverty within the three poorest regions (Tensift, Taza-Hal Hoceima, and Souss-Massa-Daraa) would reduce the total number of the poor by 42%. As for urban areas, large cities receive 62% of all poor.⁷

1.11 It is interesting to note that between 1990/91 and 1998/99 the incidence of poverty increased in all regions, with the notable exception of the oriental region. Because of the discontinuity intervened in the definition of regions in 1994, it is safer not to push the comparisons too far. In terms of the incidence of poverty, however, it is sufficiently clear from the data that some regions did better than other. As far as rural poverty is concerned, for example, the incidence of poverty increased dramatically in the center and north west, whereas it did not change in the oriental region. As for urban poverty, the most dramatic increase has occurred in north west again, whereas the Tensift region saw a relatively less severe increase.

1.12 Demographic and Socioeconomic Characteristics of the Poor. The 1998/99 LSMS data suggests almost the same profile as in 1990/91. *First*, in Morocco larger household size is associated with greater incidence of poverty in both urban and rural areas: at the national level, the incidence of poverty rises from 1.8% for households sized 1-2 to 30.9% for households sized 9 or more (poor households size is 7.7 in 98/99 compared to average national 5.9); *Second*, both the child/adult ratio and the dependency ratio are higher in poor households (the former equals 1.08 for the poor, compared to 0.62 for the better off. *Third*, households headed by young breadwinners (aged between 15 and 24) as well as by heads aged 60 years or more have a lower risk of poverty than the average. *Finally*, the gender of the head of the household is not a significant determinant of poverty: 90.9% of poor households are headed by male and 9.1% by female, to be compared with 87.8% and 12.1%, respectively, in the population. Thus, there is no evidence supporting the “feminization of poverty” hypothesis, although it should be noted that this finding requires cautious interpretation.⁸

⁵ For further results on the determinants of the trend in poverty see the analysis in Chapter II.

⁶ The 1998/99 household survey was not designed for a regional breakdown of poverty indices. Therefore it is important that the results discussed in this paragraph be treated cautiously.

⁷ We can not estimate the poverty incidence by province because the LSMS data are not representative at the provincial level.

⁸ Further research is required as (i) since the approach used for calculating poverty lines does not take into account economy of scale for larger households, the result may be spurious, in the sense that households headed by female tend to be smaller in size than

1.13 Education and Poverty. Education has a strong correlation to poverty risk and usually the education of household head plays a key role in determining whether a household is poor or not. In Morocco levels of education are inversely correlated with the incidence of poverty: at the national level the incidence of poverty increases from 3% for households headed by top-educated breadwinners (*supérieur*) to 23% for households headed by persons with no schooling. An estimated 64.3% of the poor have no education, and 17.5% have only primary education, compared to the proportions among non-poor households estimated, respectively, at 52% and 24%. Such pattern is similar both in rural and urban areas albeit stronger in rural ones. Comparing 1990/91 and 1998/99 we find a similar pattern in the relative risks of poverty by level of education: according to 1990/91 LSMS data, the incidence of poverty increases from 2% for households headed by breadwinners with a secondary diploma or higher to 16% for those headed by non-educated breadwinners. In 1990/91, approximately 72% of the poor have no education, and 12% have only primary education.

Box 1.1: Working Children

Although poverty has been increasing during the last decade, child labor has been declining mainly as a result of the increasing school attendance. According to LSMS surveys, in 1998 about 66 per cent of the children aged 7 to 15 were attending school, compared to about 58 per cent in 1991. In parallel, in 1998 about 14 per cent of the children were only working and about 20 per cent were reported as doing nothing, compared to 18% and 25% respectively in 1991.

Increase in male school attendance (72% in 1998 compared to 68% in 1991) was associated mainly with a reduction of the number of working children (14% in 1998 compared to 18% in 1991), while for females, the enrollment increase (59% in 1998 compared to 48% in 1991) was coupled mainly by a reduction in the number of "idle" children (27% in 1998 compared to 36% in 1991). The increase in total school enrollment during 1991-1998 has been largely due to the increase in enrollment by the rural female (37% in 1998 compared to 24% in 1991), which was associated with a reduction of the number children performing household chores (38% in 1998 compared to 50% in 1991). Drop outs and child labor are highly correlated. Particularly in rural areas we observe that by the age of 15, less than 10% of the rural girls are in school (compared to about 30% for rural boys) and almost 60% perform household cores (compared to 20% for rural boys).

The reduction in share of working children is mainly concentrated in non-poor households although school attendance increased in both poor and non-poor household: in 1998, 70% of poor urban children and 40% of poor rural children were enrolled compared to 71% and 34% respectively in 1991. Based on LSMS data, the increase in school attendance was higher for the "middle class" (third and fourth income quintiles) while the reduction in child labor was the smallest among the poor.

Factors that are relevant for the child labor in Morocco are: (i) probability of working increases with the age of the child, particularly for boys, while for girls the probability of doing households chores increases with the age; (ii) level of income does not influence the decision of sending a child to work but has a significant influence on the decision to be "idle"; (iii) in both rural and urban areas, large number of children in the household increase the probability of sending some of them to work and the number of siblings tends to reduce the probability of attending school for boys and girls; (iv) education level of the parents, particularly of the father, reduce the probability of sending children to work; (v) school availability particularly in rural areas does influence the choices of the household for sending their child to school rather than work.

Therefore the most effective policy for reducing child labor in Morocco, is increasing school accessibility in rural areas. For example, if a primary school was available in every Village (Duar), school attendance would rise by 6 per cent points in rural areas. Particularly increased access to school is likely to increase female school attendance. (See Annex B).

1.14 Investment in education is thus one priority in fighting poverty over the medium and long term in Morocco. This is particularly important in order to break inter-generational cycles of poverty and give poor children today the opportunities that their parents never had. At the national level, 27% of all children in age-groups 10-15 are illiterate, while in the poorest regions that percentage may rise to 40% or more (for instance, 42.3% in Taza-Hal Hoceima, 37.8% in Tensift,). These children deprived of even

average; (ii) the result does not rule out that women may be trapped by poverty in other respects; and (iii) women may be under-represented as head of poor households because respondents in the Surveys often cite a male relative as head of household .

a basic education in childhood have very poor labor market prospects for the future. There is very clear link between the poverty of family and the poor achievements of its children. Most of the adolescents who leave school to seek employment before or just after completing the primary level, are from poor families. About 24% of all children between 10 and 15 did not complete even primary education and are no longer in school.

Table 5. Child Work and Enrollment for Poor and Non-Poor
(in %)

	1998				1991			
	Urban		Rural		Urban		Rural	
	Poor	Non-poor	Poor	Non-Poor	Poor	Non-poor	Poor	Non-Poor
School only	70.0	87.2	37.9	51.9	70.7	84.1	34.3	43.2
Work only	6.4	4.3	22.9	22.8	8.0	4.2	22.4	26.5
Neither school nor work	23.4	8.4	37.9	23.9	21.3	11.6	43.2	29.9

Source: LSMS 1990/91 and 1998/99. *Direction de la Statistique.*

1.15 Although poverty has increased during the last decade, child labor has been declining mainly as a result of the increasing school attendance, particularly in rural areas and for girls. However, the reduction in share of working children is mainly concentrated in non-poor households although school attendance increased for both poor and non-poor households (See Box 1.1).

1.16 Employment Characteristics of the Poor. The LSMS data show that both labor market status (the occupational status of the head of the household such as employment, unemployment or inactive status) and the sector of employment correlate with poverty. At the national level amongst the poor 80% are employed, 6% are unemployed, and 14% are inactive (i.e., housewife, elderly, handicapped, etc). This pattern does not change in urban and rural areas: in rural areas, 87.5% of the poor are active, 3.7% are unemployed, 8.8% are inactive; and in urban areas, 64.8% of the poor are active, 10.3% are unemployed, 24.9% are inactive. (Table 6)

1.17 At the national level, the number of income earners per household is low in Morocco: in the average, household sized 5.93 there are only 2.04 monetarily gainful employed members. Reliance on a sole earner for each household means high exposure to risks of illness or loss of employment: there are approximately 1.7 millions single-earner households (corresponding to almost 9 millions of individuals), while 0.5 million households do not have any member classified as active employed. Slightly more than 1 million of individuals live within households where all members are classified as inactive. The latter estimates point to the existence of a sizable proportion of the population that is likely to be chronically poor, *i.e.* likely to be trapped below the poverty line for long periods of time, possibly forever.

1.18 According to both 1990/91 and 1998/99 surveys, urban poor household heads are most likely to be either wage earner or self-employed, as opposed to the rural poor one who are mainly self-employed: according to 1998/99 LSMS, urban poor are living either in households headed by wage-earners (53.2%) or by self-employed (45.3%), while in rural areas, most of the poor are headed by self-employed (68.2%) followed by wage earners (31.1%). The distribution of the poor by sector of activity of the head of the household, at the national level, shows that most of the poor work in the agriculture sector (56.6%) followed by services (25.5%) and the construction (BTP) (12.6%). More specifically in urban areas 58% of the poor have their breadwinner working in services (59.7% self-employed and 40.3% wage-earners), 21% in BTP (92.6% wage-earners and only 7.4% self-employed) and 12.9% in industry. While in rural areas 75.3% of the poor have their breadwinner in the agricultural sector (80.9% self-employed and

18.4% wage-earners), 13.0% in services (51.2% self-employed and 47.7% wage-earners) and 9.4% in BTP.

1.19 Unemployment and the Poor. Overall unemployment is a luxury and most of the poor can not afford it particularly in rural areas. But in urban areas, the increase in poverty is correlated with unemployment increase. While unemployment is mainly an urban phenomenon (urban unemployment is 25.7% compared to 7.2% in rural areas) underemployment is likely to be more relevant for the rural areas.⁹ According to 1998/99 LSMS, in urban areas only about 10.3% of the poor live in households where the head is unemployed and 28% of the unemployed are poor (compared to 12.9% and 20.6% in 1990/91). However, the unemployment among the poor urban (31.5%) is higher than in aggregate (25.7%) and it has increased during the last decade (compare to 30% and 20.6% in 1990/91, respectively). Taking into account unemployed members inside of the household, the number of unemployed is also higher among the poor than the non-poor: in 1998/99, in urban areas the average number of unemployed per household equals 0.83 for the poor and 0.58 for the non poor (compared to 0.75 and 0.44 in 1990/91). Figure 2 shows that the incidence of unemployment has a similar pattern for both 1990/91 and 1998/99, *i.e.* it drops as expenditure levels decrease. In 1998/99, in the lowest decile the number of household members who are unemployed is double with respect to the highest decile (0.1 compared to 0.05). Similarly, in 1990/91 the number of unemployed inside the household decreases from 0.8 in the lowest decile to 0.3 in the highest.

Table 6 – POVERTY PROFILE IN 1998/99 BY EMPLOYMENT STATUS OF THE HOUSEHOLD HEAD

Employment status of household head	% Population			% Poor population		
	Urban	Rural	National	Urban	Rural	National
Employed:						
-Wage earner	42.2	21.0	32.4	34.4	27.2	29.9
-Self-employed	21.6	60.2	39.4	29.3	59.7	49.9
-Employer	3.8	1.2	2.6	0.8	0.0	0.3
-Others	1.4	1.6	1.5	0.2	0.6	0.5
Not Employed:						
-Unemployed	4.4	2.9	3.7	10.3	3.7	5.9
-Disabled & Ill	4.1	3.2	3.7	7.9	2.5	4.3
-Pensioners	8.6	1.6	5.4	4.7	0.6	2.0
-Others	13.9	8.2	11.3	12.3	5.7	8.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: staff estimates.

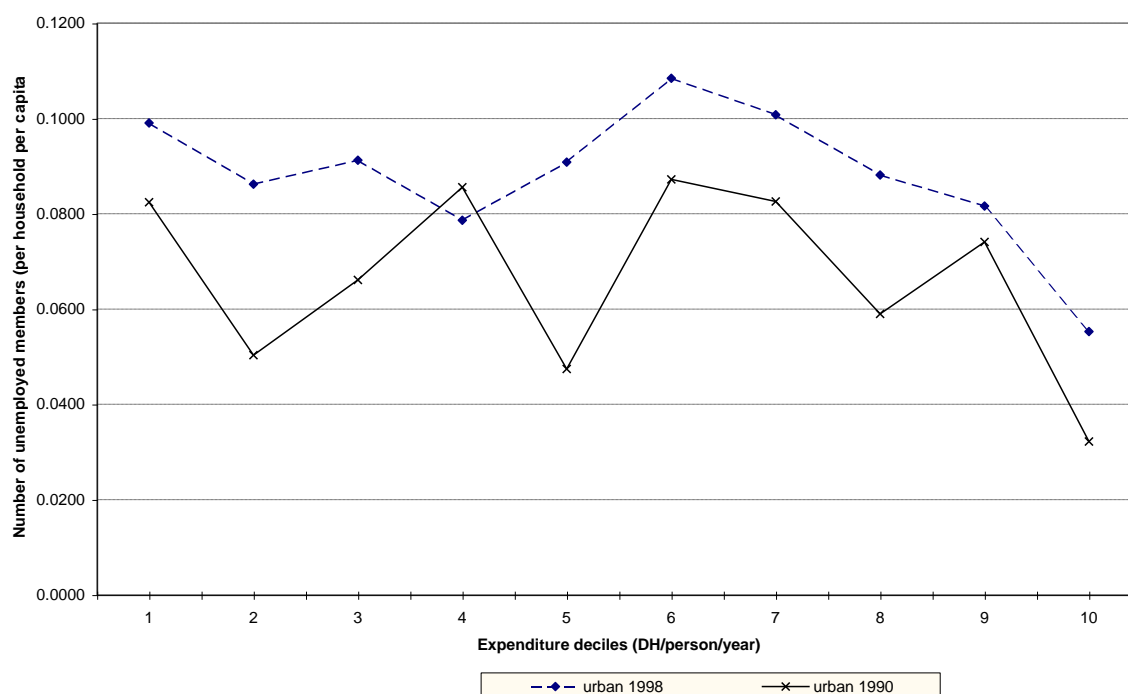
1.20 Inactive and the Poor. Amongst the inactive, poverty is most prevalent for those who are incapable of working and who do not possess any potential for employment: at the national level, within the inactive group, most of the poor are to be found among households where the heads are disabled and elderly (30.5% disabled, 27.5% elderly, 16.4% pensioners and rentiers). In urban areas 31.5% are disabled, 19% are pensioners, and 18.1% elderly; while in rural areas 41.2% are elderly and 28.9% are disabled. On investigating the changes in the composition of the inactive between 1990/91 and 1998/99, the size of the samples only allow for comparisons at the national level.¹⁰ The incidence of

⁹ In respect to underemployment the 1998/99 survey does not provide sufficient information to address this issue.

¹⁰ The 1990/91 data set does not allow for a finer investigation: there are only 58 obs. for the inactive at the national level. Unless you have a story to tell about the increase in the incidence of poverty for the pensioners I would not mind omitting that estimate too

poverty has increased only slightly among the elderly (from 15% to 17.1%) while it has dramatically increased for both the disabled (from 13.5% to 22.6%), and the pensioners (*retraité*) (from 2.5% to 7%). However, the most spectacular change concerns the mix of elderly and disabled among the poor: in 1990/91, of 100 inactive-headed households below the poverty line, 47 were run by elderly and 18 by disabled breadwinners, to be compared with 27 and 30 respectively, in 1998/99. Among the inactive, thus, poverty during the 1990s appear to have hit disabled most severely. Although this information should be treated with caution, it seems that even the pension recipients among the non-employed are also facing the poverty risk and there are not relatively well hedged against economic vulnerability.

Figure 2 – URBAN UNEMPLOYMENT BY EXPENDITURE DECILES FOR MOROCCO, 1990-91 AND 1998-99.



1.21 Income earnings opportunities of the poor. Information on income sources based on 1998/99 LSMS have not been yet processed and are not expected to be available before end June 2000. Thus at this point little is known about how many income sources are pursued by households, or their relative importance. However the most important source of income for the typical Moroccan household is labor. Usually the poor depend on labor income even to a greater extent than the non-poor and the labor is the main income-generating asset of the poor. Once the information on various sources of income would be available the discrepancy between the labor income of the poor and the non-poor as well as the differences in pay between poor and non-poor would be investigated in more detailed. It is also important to evaluate to what extent the difference in labor income for the poor and the non-poor can be explained by differences in the endowments, and especially by differences in human capital.

Table 7– SUMMARY CHARACTERISTICS OF THE POOR FOR 1990/91 and 1998/99

1990/91		1998/99	
NUMBER OF POOR			
(i) Poor:	3.4 million people	(i) Poor:	5.3 million people
(ii) Very Poor:	1.8 million people	(ii) Very Poor:	2.7 million people
(iii) Extreme Poor:	0.3 million people	(iii) Extreme Poor:	0.9 million people
LOCATION			
Rural areas:	73% of all poor	Rural areas:	66% of all poor
Urban areas:	27% of all poor	Urban areas:	34% of all poor
SOCIO-DEMOGRAPHIC CHARACTERISTICS			
Large households (7.5 individuals)		Large households (7.7 individuals)	
High child/adult ratios (1.31 per household)		High child/adult ratios (1.09 per household)	
Lack of schooling (73% of the poor are without schooling)		Lack of schooling (64% of the poor are without schooling)	
OCCUPATIONAL STATUS			
Employed		Employed	
<u>Urban:</u>	49% self-employed, 38% wage-earners.	<u>Urban:</u>	53% wage-earners, 45% self-employed.
<u>Rural:</u>	58% self-employed, 30% wage-earners.	<u>Rural:</u>	68% self-employed, 31% wage-earners.
Unemployed		Unemployed	
<u>Urban:</u>	13.0%	<u>Urban:</u>	10.3%
<u>Rural:</u>	6.4%	<u>Rural:</u>	3.7%
Inactive		Inactive	
<u>Urban:</u>	n.a.	<u>Urban:</u>	32% disabled, 19% pensioner, 18% elderly.
<u>Rural:</u>	n.a.	<u>Rural:</u>	41% elderly, 28% disabled, 21% housewife.
Sector of activity		Sector of activity	
<u>Urban:</u>	65% services, 23% industry, 10% BTP	<u>Urban:</u>	58% services, 21% BTP, 13% industry
<u>Rural:</u>	83% agriculture, 7% services, 5% BTP	<u>Rural:</u>	75% agriculture, 13% services, 9% BTP

Note: The abbreviation n.a. (not available) occurs when the number of observations does not allow for reliable estimates.

1.22 In addition, diversification of income sources is an efficient way to cope with poverty risk. Typically rural households derive their income from multiple sources within the rural economy (agricultural own-production, production for market, sale of labor in rural markets, rental of productive assets such as land or capital goods, sale of crafts and other small-scale manufactures) and from the urban economy as well.

F. Effect of Transfers on Poverty

1.23 Transfers represent an important component of all household's income in Morocco, and particularly the family system does perform a set of functions similar to those performed by a public social security system (see Annex C). According to 1998 LSMS, about 48 per cent of the household

receive *private transfers*¹¹ and about 41 per cent of them give transfers. *Transfers from abroad* are received by a substantially smaller number of households (about 13 per cent), and *public transfers* are received by about 15 per cent of the household and they are mainly targeted to urban areas. The probability of receiving *private transfer* is roughly the same in both rural (about 46% of households) and urban areas (50% of households). In urban areas, however, households are more likely to receive *transfers from abroad* (about 15% versus 10% in rural areas) or *public transfers* (20% versus 8% in rural areas).

1.24 The probability of receiving a *private transfer* is higher for households belonging to the lowest and to the highest income quintile while *public transfers* are more likely to be received by households belonging middle and higher income quintiles.

Table 8: Effects of public and private transfers on poverty by area of residence

Poverty Index	Total	Net of <u>private</u> transfers	Net of <u>public</u> transfers	Net of <u>all</u> transfers
National				
Head count	18.9	22.3	21.4	24.7
Poverty gap	4.4	6.5	8.7	10.8
Urban				
Head count	12	15.2	15	18.7
Poverty gap	2.5	4.6	9.8	12.1
Rural				
Head Count	27.2	30.5	28.4	31.7
Poverty gap	6.7	8.6	7.4	9.3

Source: Staff estimates.

1.25 Both *private and public transfers* are progressive meaning their share declines with income and lack of these transfers would increase inequality, particularly in urban areas. However private transfers are better targeted towards poorer households and have a larger redistributive impact (reducing inequality) than public transfers. For private transfers, poorer household, first quintile, receive almost twice as much as the higher expenditure groups. In absence of private transfers the inequality of income distribution (as measured by the Aktinson index) would increase by 14 per cent. In urban areas private transfers reduce income inequality by about 30 per cent. While in rural areas the impact is smaller, about 10 per cent. *Public transfers* also are progressive and tend to reduce income inequality, but to a much smaller extent than *private transfers*. The impact of public transfers, which are mainly pensions (about 70 per cent), are mainly concentrated in urban areas, where they reduce income concentration of about 12 per cent, but there impact in rural areas is negligible.

1.26 *Public and private transfers* have also a substantial effect on both the incidence and depth of poverty (table 8). At national level, lack of transfers would increase the incidence of poverty from 19% to 24.7% and would more than double the poverty gap (from 4.4% to 10.8%). Therefore the poor would become poorer. *Private transfers* have a larger impact on the incidence of poverty than *public transfers*, particularly in rural areas. But public transfers have a larger impact on the poverty gap than

¹¹ The definition of private transfers (given and received) exclude those originating from Fetta or Zakkat.

private transfers. Although *Public transfers* have a smaller redistributive impact than *private transfers*, they are more effective in alleviating the condition of the very poor in the urban areas.

G. Improving the Statistical Base and Future Poverty Monitoring

1.27 Based on the 1998/1999 Living Standard Measurement Survey (LSMS) data, this chapter has provided (i) an update poverty profile for Morocco in 1998-99, and (ii) an assessment of both the nature and the extent of poverty changes in Morocco over the years 1990-1998. Although comparisons between poverty measures over time are plagued with both conceptual and practical problems the results discussed above appear to be robust to standard sensitivity analysis. Looking ahead, the recommendations for improving poverty monitoring are as follows:

- **Survey data.** To assist poverty choices, it is important to have timely information as well high-quality data collected for poverty analysis. As far as the collection of new data is concerned, it is worth repeating two recommendations which were put forward by a previous report, namely (i) an annual collection of household level core consumption data could be carried out to closely monitoring household consumption and basic social indicators, (ii) a full LSMS type survey could be implemented every five years. Although Morocco's LSMS is certainly well managed, there are margins to improve both the information collected through the questionnaire and its utilization. Particularly, more information is required on: (a) access to social services, including safety net programs, (b) sources of household incomes (wage, transfers, government programs, etc.), (c) labor market conditions and individual earnings, and (d) spatial data on prices. Moreover, in order to make sure that (i) the relevant issues are covered by the survey and (ii) the information collected would answer to the policy needs of the technical ministries, the questionnaire should be consulted with sectoral Ministries (*i.e.*, Health, Education, Agriculture, Social Development, etc.). Finally, the data could be accompanied by exhaustive documentation to be made available to the users both in electronic format and in hard-copy. Particularly, in order to assist analysts in dealing with the raw data the questionnaire could be usefully complemented with a technical-orientated document providing detailed description of the variables collected (labels, codes, format, range of admissible values, etc.).
- **Equivalence scales.** Morocco has not developed a country specific equivalence scale. For this reason this report, in common with previous reports, has used per capita expenditure as measure of welfare. Yet, differences in needs between individuals and differences in household compositions do exist and do affect individual welfare. Thus, some action should be taken to take into account the role of economies of scale. Although it is unlikely that allowing for economies of scale would alter the trend of poverty¹², the use of equivalence scales would provide a powerful tool to improve the identification of the poor, thereby allowing better-targeted policy choices.¹³

¹² For the trend to be reversed large changes in household demographics should take place between the dates that are being compared. In absence of such demographic changes, changes in poverty (as opposed to levels) are unlikely to be affected by the use of per adult equivalent expenditures rather than per capita expenditure, as the differencing would cancel out the scale effect on the levels.

¹³ To illustrate, consider two households with 8 members each: assume that household A is made by 2 adults and 6 children, whereas in household B there are 6 adults and 2 children. Assume also that both households have a total expenditure amounting to DH 8,000. In terms of per capita expenditure household A and B fare equally. Yet, most likely it would be agreed that they deeply differ in their needs. In particular, household A is likely to have higher needs than household B, due to its higher dependency rate. According to most systems of equivalence scales, the adult-equivalent household expenditure would rank the two households so as to be consistent with the above conclusion.

- Permanent poverty committee. To strengthen the analytical capacity for poverty analysis a “permanent group of experts” with representatives of (a) all relevant ministries, (b) Moroccans analysts and data collectors (Direction de la Statistique and *Observatoire* of Living Standards), and (c) nongovernmental users (academics, and selected international analysts concerned with poverty) could be set up. This group could coordinate poverty-related policies and priorities by exploiting the synergies implied by (i) a stable working group and (ii) the sharing of data, methodologies and information.

CHAPTER II

WHAT ARE THE MAIN FACTORS THAT EXPLAIN THE OBSERVED INCREASE IN POVERTY?

Increase in both the incidence of poverty and the economic vulnerability during 1990s show that the performance of the economic and established social policies have been insufficient for lifting people out of poverty. There is close relationship between the poverty increase and the performance of all sectors where the poor are mainly employed. The main causes of the poverty increase were the decline in agriculture growth and the insufficient growth in non-agriculture sector, particularly services and manufacturing exportable sectors. As a result the increase in employment was insufficient to absorb the labor force and unemployment, particularly in urban areas increased. During 1990s, roughly 84% of the increase in poverty has been attributed to lack of economic growth and the rest to deterioration of income distribution (about 16%). Increase in unemployment in urban areas seems to be an important factor in rising urban poverty. Finally decline in worker remittances during 1990s, although benefiting the middle-income groups, may have also played a significant role in rising poverty. Morocco faces the challenge of generating sustained broad based growth and ensuring that the benefits of growth are distributed across all income groups. Therefore Moroccan authorities need to promote economic growth as well as to foster progressive policies to reduce inequality. Given the magnitude of the elasticities of poverty with respect to growth even a small rate of growth in a short period of time would have a large impact on poverty reduction, in both rural and urban areas. However, the best pro-poor policy is a rural biased growth and particularly a pro-agriculture sector growth. But given that prospects for the agriculture sector growth are not very rosy this seems to be a difficult task.

A. Macroeconomic Evolution in 1990's

Table 9 – SELECTED ECONOMIC INDICATORS: MOROCCO 1986-1998

	1986-91	1991-98
Real GDP growth	4.1	1.9
Agriculture	4.0	-1.8
Industry	3.6	3.1
Manufacturing	4.5	2.6
Construction	3.8	1.7
Services	4.5	2.6
Real GDP non-agriculture growth	4.2	2.8
Real per capita private consumption growth	1.9	-1.4
Investment/GDP	22.4	21.5
Real exchange rate		
Real growth in exports	14.3	4.9
Real growth in manufacturing exports	20.2	6.1
Contribution of Export to Non-Agr GDP growth	1.4	0.5
Urban labor force growth	5.0	3.3
Urban Employment growth	4.6	3.0
Unemployment	15.3	17.9

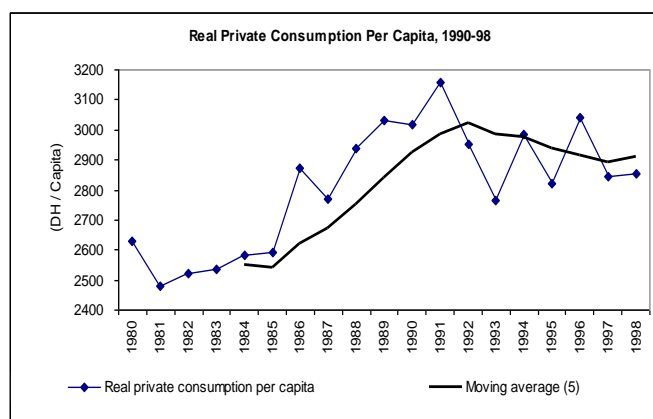
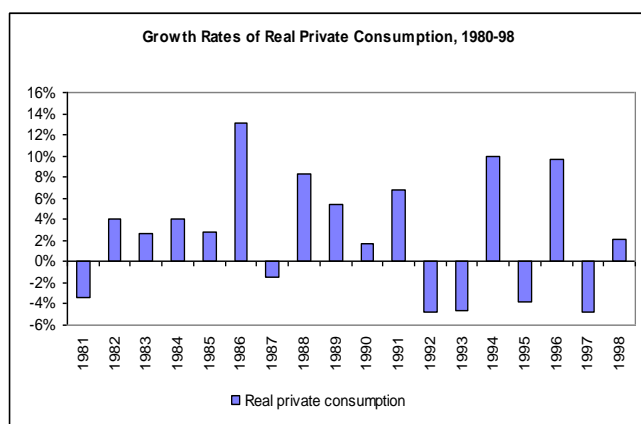
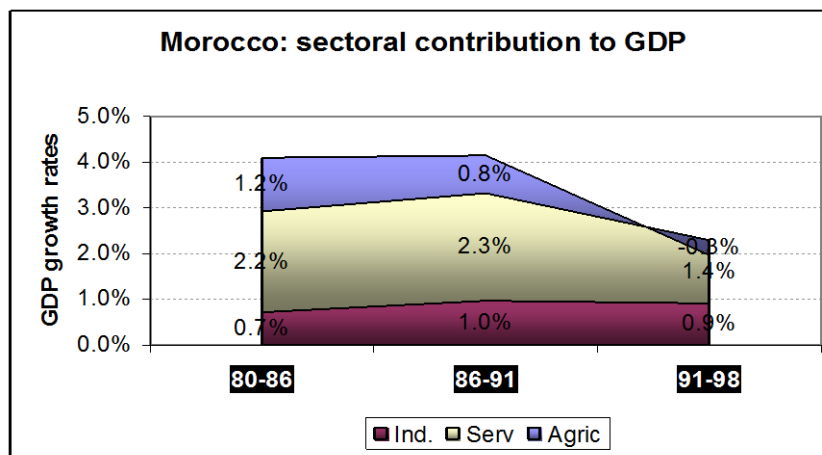
Source: "Sources of Growth", April 2000.

2.01 Overall all macroeconomic indicators are lagging behind in the 1990's compared to 1980s (Table 9). The Moroccan economy's growth rate fell by around 2 percentage points in the 90s, from an annual average of 4.1% over 1986-91 to 1.9% between 1991 and 1998. Particularly preoccupying, between the same two periods, non agricultural GDP growth rate dropped from an annual average of 4.2% to 2.8%. The decline in GDP growth during 1990s was driven mainly by the drop of the agriculture and the fact that non-agriculture GDP was not expanding fast enough to absorb the effects of a declining

agriculture sector. Slow growth rates in services, industry and manufacturing sectors, which were driving forces of growth in the 1980s, have been the major factors contributing to the decline of non-agricultural GDP growth during 1991-98.¹⁴ In addition to agriculture and services, where the poor are mainly employed, the construction sector has also been growing much slower during 1990s.

2.02 In fact the impact of the agriculture sector, on economic growth is increasingly strong and negative. Even it seems that there is a close relationship between performances of the agriculture and non agriculture GDP growth but this conclusion should be considered cautiously (see Annex 2). The contribution of agriculture to GDP growth went from 0.8 percentage points in 86-91 to minus 0.3 percentage points in 91-98. The service sector also contributed to a reduction of the overall GDP growth rate of almost one percentage points, while the industrial sector maintained its contribution unchanged. (see Figure 4). This was mainly due to lower growth in manufacturing in 1990s. With an average growth rate of 4.5 % per year the manufacturing sector had stimulated industrial growth in the second half of the 80's, while its annual average growth has decreased to 2.6 % in 1991-98. This decline prevented sustained growth in the industrial sector, and accounted for a third of the decline of non-agricultural GDP growth between the two periods.

2.03 The decline of the service sector can also be partly attributed to its strong dependence on economic developments in the rural sector through a demand effect, although some other important sub-sectors, such as tourism, which are insulated from agricultural shocks, also performed relatively poorly in the 90s compared to the late 80s.



¹⁴ See "Sources of Growth", WB 2000.

2.04 Deterioration in economic growth has led to a decline in living standards of the households and to an increase in poverty. According to the national accounts, real private consumption¹⁵ growth rate fell by more than 3.7 percentage points in the 90s, from an annual average of 4.1 % over 1986-91 to 0.3 % between 1991 and 1998, and the real private consumption per capita dropped from 3160 DH in 1991 to around 2860 DH in 1998. This decline is equivalent to an annual average decrease of -1.4 %, compared to an increase of 1.9 % over the 1986-91 period. (See Figure 5 and 6).

B. Contribution of Slow Economic Growth To Poverty Increase?

2.05 Two factors can explain poverty increases over time: average incomes decline and /or worsening of income distribution (increase in inequality). According to the inequality analysis in Chapter I, since income distribution has not changed during 1990-98, one can be tempted to conclude that the main cause of the increase in poverty in Morocco was the decrease in real average income (expenditure) per capita. Yet, the use of inequality time series might not be informative about how changes in distribution affect the poor.¹⁶ Therefore it is important to investigate the relative importance of growth and distribution changes by appropriately decomposing the observed trend of poverty.

2.06 At the *national* level relative inequality hardly changed from 1990 to 1998: this result applies to all per capita expenditure deciles (see Table 4 in chapter 1). However, the estimates of inequality measures which are more sensitive to changes occurring in the left tail of the expenditure distribution point to the presence of non negligible redistributive effects among the poor.¹⁷ In fact, the overall inequality trend appears to be masking different patterns of inequality across urban and rural areas, particularly in the lowest deciles (deciles 1 to 3).

Table 10 – DECOMPOSITION OF POVERTY CHANGE INTO GROWTH AND REDISTRIBUTION COMPONENTS FOR 1998/99

Poverty measure	Area	Total change in poverty (%)	Poverty increase due to:	
			Growth (%)	Redistribution (%)
Headcount Index	National	45.0	84	16
	Rural	57.9	48	52
	Urban	51.1	123	-23
Poverty Gap	National	63.7	84	16
	Rural	75.8	45	55
	Urban	69.4	156	-56
Severity Index	National	92.7	72	28
	Rural	118.3	38	62
	Urban	79.5	173	-73

Notes: The residuals of the decompositions have been averaged out (see Ravallion, 1992).

Source: Staff estimates.

¹⁵ Expressed in local currency and deflated by the CPI.

¹⁶ See Datt and Ravallion (1991).

¹⁷ Compare the following estimates of the changes in inequality between 1990 and 1998: at the national level the Gini coefficient increased by 0.5%, whereas the Atkinson measures increased by 0.9%, 2.4% and 5.4% for the coefficient of inequality aversion set equal to 1, 2, and 4 respectively.

2.07 According to LSMS data, over 1990s, inequality in urban areas decreased: in 1990/91 the lowest 3 deciles received 20.9% of total per capita expenditure, while in 1998/99 the same deciles accounted for 22% of total expenditure. This compares to rural areas, where inequality increased, the above percentages being 26.6% in 1990/91, and 25.4% in 1998/99. A question arises on the extent to which the above pattern of inequality affected the pattern of poverty and what are the relative contributions of lack of growth and change in inequality to poverty increase during 1990/91-1998/99.¹⁸

2.08 At the national level, the change in aggregate poverty incidence is largely attributable to the lack of growth in mean (per capita) expenditure, the change in inequality accounting for only 16% of the observed change. The same results is obtained by decomposing the poverty gap index. On the other hand, the decomposition of the severity index shows that although the lack of growth is still responsible for the largest part of the increase in poverty (72%), the worsening of inequality nationally did play a significant role (28%). In urban areas, the change in distribution was an important force offsetting the increase in poverty caused by the lack of expenditure growth. In fact in urban areas, the redistribution that occurred amongst the poor dampened the negative impact on poverty attributable to lack of growth in poor's income. In other words, in the absence of the redistribution which favored the poorest, the increase in aggregate urban poverty would have been much more dramatic than it actually was. On the other hand, in rural areas the decomposition of the poverty change shows that both the growth- and the inequality-component contributed to the increase in poverty: the effect on rural poverty due to the decrease in the mean expenditure was significantly fostered by the changes in the distribution.

C. Rural sector is in impasse

2.09 In Morocco, about 47 % of the total population and over 60% of the poor are in rural areas and earn there living mainly from agriculture and off-farm activities. The economic developments in the agriculture sector during 1990s are therefore key determinants of the living standards of rural households and is potentially the most important factor explaining the recent increase in poverty. During 1990s, both Government agriculture policies and price evolution of cereals and cattle products have not favored small and vulnerable rural producers. Once the agriculture information of the 1998/99 LSMS will be available, the impact of these policies on the poor could be evaluated.

2.10 Overall in 1998, Morocco's economic structure is remaining rather similar to what it used to be in the early eighties and it has been no significant increase in the share of non agricultural sectors. Agriculture continues to accounts for almost 20% of GDP and employs about 40% of the labor force. Even though a real potential in other activities, such as tourism, exists, the economy still lacks diversification away from agriculture. The continuous vulnerability of agriculture to recurrent droughts makes this lack of diversification even more problematic in the context of a rapidly growing labor force and increasing poverty. Furthermore, the large year to year fluctuations have exposed large shares of the rural population to extreme vulnerability.

2.11 Given the past Government policy, today agriculture is in a deadlock. Annex 2 provides a detailed development of the agriculture sector's over the 90's. In mid 1980s, the sector experienced

¹⁸ This is based on the methodology introduced by Ravallion and Huppi (1989) which allows to identify two causes of a change in poverty: a change in the mean expenditure level at given inequality, and a change in the inequality of expenditure at given mean. The former can be interpreted as the "growth effect on poverty" while the latter is the "distributional effect".

phenomenal growth mainly due to the expansion of cereal cultivation, and in particular soft wheat. However, since that time, the tendency has been rather stagnant, and agricultural value added proven to be highly vulnerable to drought-induced fluctuations. This is mainly the result of the agriculture policies in 1980s which, despite inappropriate rainfall climate of Morocco, have promoted expansion of cereal production onto less productive lands in areas with lower and high rainfall variability. Given that cereal production is the major driver of agricultural GDP, its high variability to climate conditions has led to high fluctuation in agricultural GDP. As a result of the incentive structure, agricultural resources are pulled into cereals production instead of export crops on which Morocco has a comparative advantage. Moreover the current agriculture policy framework is not encouraging employment creation in dynamic and labor intensive exportable productions. Therefore, the high variability of cereal production and its impact on economic growth have a strong incidence on households revenues. Within this context, the most vulnerable small cereal producers located in marginal zones are negatively affected, either in good and bad production years. Indeed, since they sell a little portion of their production on the market and auto-consume most of it, in good years, when they have the possibility to sell an increased quantity on the market, they face lower prices, whereas, in bad years, when prices are higher, they possess very little amounts to put up for sale. As one would expect if the local market is insulated from world markets, there is an inverse relationship between area harvested and price: in good years prices tended to fall, and in bad years prices tended to increase.

2.12 Over the 1990's, price evolution of cereals and cattle products – livestock is an important source of revenue and saving for the small farmers – have also negatively affected the income level of rural households. Since 1992, the prices of the main cereals – soft wheat, hard wheat and barley – and animal products have been oriented downward and the price policies have not favored the small and vulnerable rural producers.

D. Export Growth, Employment and Wages

2.13 **Export and Employment Growth.** During 1986-91, the main factor explaining poverty alleviation was the fast expansion of job opportunities in the manufacturing exportable sector -mainly clothing and textiles. During this period, growth in manufacturing exports was mainly explained by strong gains in manufacturing competitiveness, namely due to falling unit labor costs and a depreciating real effective exchange rate, in addition there was preferential access to European markets for Moroccan products. However, during 1990s these trends were reversed. Weak export performance has been the leading cause of declining output growth in manufacturing and slow employment generation. The substantial slow down of export growth in 1990s (from 14% growth in 1986-91 to 5% in 1991-98) was the result of the deterioration in competitiveness particularly due to the appreciating real effective exchange rate and the increase in unit labor costs in manufacturing.

2.14 The expansion in employment during 1986-91 was concentrated in low-skill, low-pay jobs, mainly under the form of temporary jobs. Average wages in manufacturing declined because employment shifted from high-pay industries to low-pay industries. The expansion of low-pay jobs had a significant positive impact on poverty alleviation. Although workers were being paid lower wages, labor force participation rates increased, with a net effect of increasing average household income. But the halt in manufacturing export growth since the early 1990s, also meant a halt in job expansion, particularly for the low skilled labor, and an increase in poverty incidence.

2.15 Increase in Urban Labor Force and Worsening of Urban unemployment. The urban labor force has grown at a faster pace in the past decade compared to the rate of job creation: labor force grew during 1991-98 at around 3.3% per year (compared to 5% per year during 1986-91) while employment grew by 3% (compared to 4.6% in 1986-91). Main supply-side factors explaining rapid labor force growth are high fertility rates, steady inflow of rural immigrants, and higher labor force participation rates (LFPR), particularly by women. Expansion of urban labor force was coupled with a decline in the demand for workers because of a contraction in export's growth, and as a result urban unemployment is increasing.

2.16 Although population growth has declined (1.9% by the end of the 1990s), rural migration continues to put pressure on urban areas. Approximately 220,000 people leave rural areas for the cities every year –an increase of 30% over the previous decade. This can explain to some extent the faster increase in the absolute number of poor in the cities. Although most of the poor still live in rural areas, between 1990/91 and 1998/99 the number of the poor in urban areas went from 0.9 to 1.8 million, a 100% increase, compared to an increase of 43% in rural areas. Urbanization is likely to continue in the next decade: the proportion of the urban population in Morocco (54% in 1998) is still lower compared to the average urbanization in other lower middle-income countries (63%).

2.17 Official estimates show that not only has urban unemployment grown, but total employment has declined in absolute terms since 1997 due to job destruction in recent years.¹⁹ As a result of slow economic growth and sluggish job creation, the unemployment rate in urban areas in 1999 is estimated at 22.8% compared to 18.9% in 1998, 16.7% in 1997 and about 15% in 1991. Overall total number of unemployed (urban and rural) has reached 1.5 million people and female unemployment rate stands at 31%.

2.18 As shown by the 1998/99 LSMS, the increase in unemployment is correlated with the increase in poverty among the unemployed. In 1998/99, the unemployment rate among the urban poor reached 31.5%, compared to 30% in 1990/91) and the number of unemployed members inside the households is higher among the poor than the non-poor and has been increasing during the last decade. About ??% of the poor in the 15-24 age group and about ??% of those in 25-44 age group are unemployed.

2.19 The composition of the unemployed has also changed in the last few years. Most of the unemployed continue to be young and have no previous work experience, but there is a rise in unemployment among household heads at the national level (need to be checked???). However for the poor, unemployment among household heads has declined: in 1998/99 among the urban poor

household heads 10.3% are unemployed (3.7% in rural areas) compared to 13% in 1990/91 (6.4% in

**Table 11: Competitiveness and Employment in Manufacturing
(per annum growth)**

	1986/91	1991/96	1986/96
Wages	0.7%	-0.1%	0.6%
Labor Productivity	6.0%	1.1%	2.9%
ULC	-6.6%	3.1%	0.1%
REER	-1.8%	2.3%	0.3%
Employment Manuf.	8.0%	1.5%	4.2%

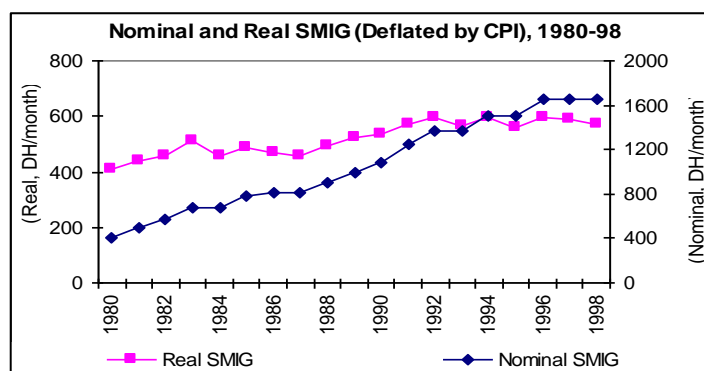
Source: UNEDO & staff estimates using least square growth rate.

¹⁹ See the annual Urban Labor Force Survey (ENPAU)

rural). Unemployment among higher education graduates has jumped from about 20% in the mid 1990s to above 30% in 1999 and the duration of unemployment spells among the better educated is also getting longer. For the poor, the more educated also show higher rates of unemployment: in 1998/99 those with no schooling had the lowest rate of unemployment (??% compared to ??% in 1990/91) but those with primary schooling report a ??% rate (??% in 1990/91) and those with secondary school reached ??% (??% in 1998/99).

2.20 Evolution of Wages.

Average real wages in the manufacturing sector have been stagnant during the 1990s and labor productivity growth, measured as real value added per worker, has slowed considerably from 6.9% p.a. during 1986/90 to 1.1% p.a. in 1991/96. This has also resulted in increased unit labor costs during 1990s,



compared to a large decline of the unit labor cost during 1986/90. The weak demand for labor in the formal economy stems from an overall stagnant product demand for firms' output. At the same time, the growing importance of employment in low-pay industries linked to the export sector depressed average wages. In fact, this employment shift to low pay industries has been so strong that it has offset upward supply-side pressure on wages (coming from gains in the quality of labor and changes in the age distribution of the labor force).

2.21 There is little evidence available on trends in average wages for different categories of wage earners. Information at company level indicate that between 1986 and 1996 indicates that average manufacturing wages have almost increased in parallel with the legislated industrial minimum wage .²⁰ The average wage growth have been contained during this period mainly due to the shift in employment from high-paying to low-paying industries due to the expansion of exports in the clothing and textile sectors. However, during 1986-90 unit labor cost in manufacturing decreased substantially (-9.7% per year) boosting competitiveness in specific sectors like textiles and clothing, but between 1991 and 1996, unit labor cost increased by 3.1% per year, reversing the competitive gains obtained previously.

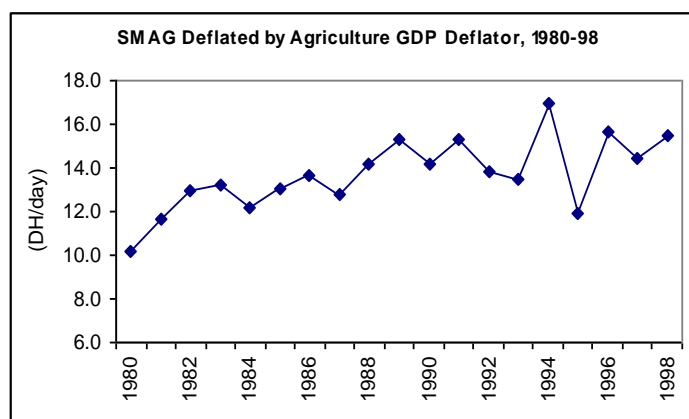
2.22 Evolution of the minimum wage, for both the industrial (SMIG) and agriculture (SMAG) sector, indicates the willingness of the Government to protect a minimum standard of living for low-income earners.²¹ Despite several increased in its nominal value, the purchasing power of the SMIG

²⁰ These wage data are based on UNEDO, which are from manufacturing establishment surveys; however the results seems to be different from the IMF data that are also based on annual survey of manufacturing establishments (Ministry of Industry and Commerce). This discrepancy need to be further checked.

²¹ Minimum wage legislation exist in Morocco since 1936. The level of this threshold is revised by a government decision. But, despite the fact the law specify that the value of the minimum wage is to be reconsidered each time the consumer price index increases by 5 %, revisions are in practice irregular. In fact, modifications are usually political decisions - for example ensuing a bargain with the trade unions. Evolution of both SMIG and SMAG over time is similar and SMAG is about half the SMIG. The last revision took place in July 1996 in which the monthly SMIG (for 26 days) was fixed at DH1660 and SMAG at ????. The SMIG regulation is deemed to be quite well enforced - through an active role of the administration and the trade unions - in the private sector . However,

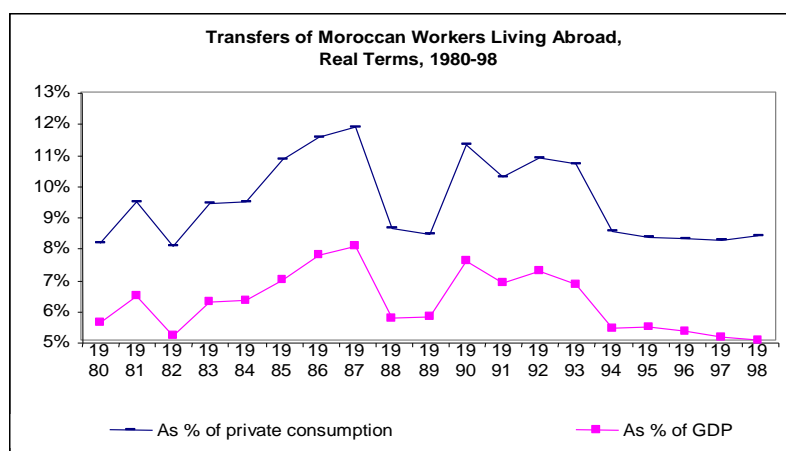
was roughly constant over the 1991-98 period. In both 1990 and 1998, a five person household with one wage earner being paid the minimum industrial wage for a full year's work would have barely made it to the expenditure class just above the poverty line. Evolution of real minimum wages over the 1990s indicates the employees working full time and receiving the minimum wages were somehow protected from poverty. In real terms, today's SMIG is 5% higher than in 1990, and 11% higher than in 1985. Moreover SMIG has become more closely aligned with the manufacturing wage, but it seems that SMIG has a weak influence on the labor market functioning and wage structure.²²

2.25 Similar to SMIG, evolution of the minimum wage in agriculture (SMAG) during 1990s has not reduced the purchasing power of the rural population. Since non farm-related revenues of rural households represent a sizeable share of their total income, the evolution of real wages in the agriculture sector might have a significant incidence on their living standards. If we accept the hypothesis that the SMAG (it is the administered minimum wage in the rural sector) is a good indicator of relative changes in real wages in the agriculture sector, we observe that real wages fluctuated substantially between 1991 and 1998. While the successive increases of the real SMAG in the 1990's are deemed to have played a role in protecting the poor, its purchasing power remains unchanged during 1991-1998, at approximately 15.5 DH per day (1998-99 poverty line is around 10 DH per day).



E. Role of Worker Remittances.

2.26 Worker remittances are an extremely important part of current account revenues for Morocco, accounting for about 16% of the revenues in 1990s. As discussed earlier (Chapter I), they also play a significant role in keeping people out of poverty. Although they benefit more the middle-income groups, their recent evolution during 1990s may have contributed in some extent to the rise in poverty incidence, in both urban and rural areas.



2.27 During 1990s, worker remittances growth has slowed significantly compared to 1980s. During 1994-97 period they fell by 0.9% per-annum. They have also declined as share of total private consumption and GDP. Whereas in 1991 these transfers were equivalent to about 10.5 % of total

the firms have some legal room to circumvent its application. Indeed, according to the age of the worker, employers are entitled to pay a lower wage. The reduction rate ranges from 80 % of the SMIG for the 17-18 years old to 50 % for the 14-15 years old.

²² There are evidence that increase in SMIG reduce wage inequality in the short term, but, due to its effect on other wages, this impact is limited. However, on the long term, the incidence of the SMIG on inequality is weak. See "Benhayoun and Bazan (1991)".

private consumption, or around 7 % of GDP, they have drop off, respectively to 8.4 % and 5 % of private consumption and GDP, in 1998 (see Figure 3). In real per capita terms, the transfers fell by – 4.2 % on average per year during 1991-98, as compared to –0.4 % over 1986-91. Decline in worker remittances is mainly due to the recession in the EU as well as to the exchange rate and interest rate policies of the Government which have made Morocco less attractive for migrants savings.²³

2.28 Indeed, the shrinking of these transfers may have led numerous households to fall below the poverty line. Preliminary information on worker remittances from abroad, shows that they are most likely to play a relevant role in keeping people out of poverty.²⁴ *Transfers from abroad* (i) are regressive because higher expenditure groups receive a higher amount of transfers; (ii) are not targeted to the less well off; and (iii) are relevant especially for urban household. Although remittances benefit more the middle and higher expenditure groups, lack of such transfer would affect the poverty incidence. In fact they play a significant role in keeping the well-off households above the poverty line. In 1998/99 about 1 million people would have dropped into poverty if they were not receiving the remittances, compared to about 180,000 people in 1990/91. At the national level, lack of transfers from abroad in 1998/99 would increase the incidence of poverty from 19% to 23% (in urban area it would increase from 12% to 16% and in rural areas from 27% to 31%).

F. Public Finance in the Social Sectors

2.29 The level and composition of public investment and public recurrent spending are important determinants of the quantity and the quality of the social and economic infrastructure. In turn, that infrastructure affects the standard of living of the poor as well as their ability to overcome some of the consequences of poverty, such as obstacles to developing human capital.

2.30 In the last decade or so, Moroccans authorities successfully protected the social sectors. From 1991 to 1998, in real per capita terms the government total expenditure increased by about 4.9% per year. Over the same period, the total social expenditure increased by 7.4% (in real per capita terms), thereby gaining in importance by about 2.5% per year.²⁵ As a share of total public expenditure social spending have increased remarkably, from 34.5% in 1991 to 43.2% in 1998 (Figure 6). Social expenditures also rose as a share of GDP, from 9.0% in 1991 to 12.5% in 1998. However, public expenditures in social sector remain low in comparison to other countries in the region: Tunisia and Algeria spend about 18% of the GDP in social sectors. Spending are particularly low in health and housing, and contrary to many other countries in the region Morocco does not have a comprehensive targeted cash transfers for the poor and vulnerable (elderly, disabled, poor unemployed, etc.). In addition the returns on existing social programs are poor, particularly in terms of education indicators, suggesting that efficiency has been low.

2.31 The increase in social sectors spending is mainly driven by the increase in social security expenditures (health insurance and pension system) which reached 19.8% of total social expenditures in 1998 compared to 13.3% in 1991. But these programs are based on contributive schemes and cover mainly the "middle and higher income" wage earner in the formal sector. On the other hand, during the period

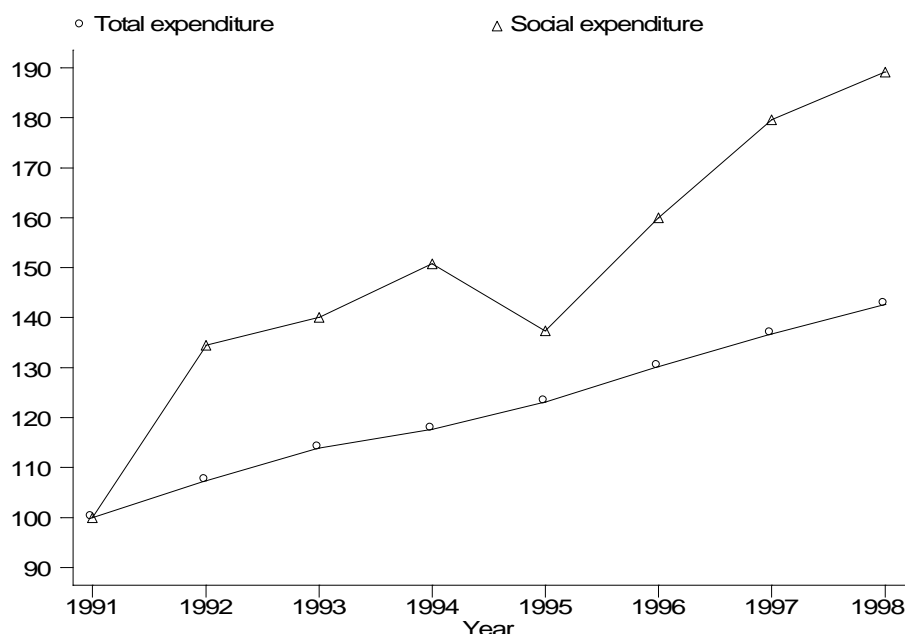
²³ See "Sources of Growth", WB 2000.

²⁴ See preliminary note prepared by Observatoire des Conditions de vie, 2000; and Annex C.

²⁵ Social expenditures include: education, health care, basic infrastructure, social security, active labor programs, vocational training, consumer food subsidies, public works (PN), welfare program (EN), rural development programs, and alphabetization.

1991-98, spending in social services that play an important role for improving human capital and reducing economic disparities have declined. Public spending on education decreased substantially as a percentage of total social expenditure: it decreased from 55.9% in 1991 to 47.3% in 1998 (the share of the expenditure on primary education fell from 35.1% in 1991 to 29.9 in 1998, the expenditure on secondary education from 10.7% to 9.7%, while expenditure on higher education from 10.1% to 7.7%. Public spending on health increased slightly as a percentage of government total expenditure (from 3.4% in 1991 to 3.7% in 1998), though it decreased as a share of social spending, from 9.9% in 1991 to 8.7% in 1998. Consumer food subsidies, which are not really targeted to poor, declined from 14.9% of the social expenditures in 1991 to 13.0% in 1998. Finally, despite the poverty increase during 1990s, assistance programs (Public Works and the welfare program - Entraide Nationale) were reduced as share of total social sectors expenditures.

Figure 6 – EVOLUTION OF REAL GOVERNMENT EXPENDITURE PER CAPITA (1991=100)



2.32 Of course, public spending on social services will improve the social conditions of the poor provided that it actually reaches the poor. Moroccan Government is well aware that the public expenditures choice have a direct impact on household living standards and they play an indirect role in poverty reduction. Particularly in recent years, the Government has paid a greater attention to the worsening of social conditions of the poor and few rural programs have been initiated to improve access to potable water and electricity in rural areas. The allocation and the distribution of selected government social expenditures (education, health, consumer food subsidies, public works, social welfare, social security system), accounting for over 90% of social expenditures, and their effectiveness in addressing the special needs of the poor, will be discussed in Chapter 3.

G. Policy Implication

2.33 ***High Elasticities of Poverty with Respect to Growth***. The lack of economic growth and the worsening of inequality are among the key forces behind the increase in poverty during the last decade. Calculation of the elasticities can show the potential for future reductions in poverty in Morocco.

2.6 According to table 12, all poverty measures are found to respond elastically to higher mean consumption (holding the Lorenz curve constant).²⁶ For a given poverty line and area, the growth elasticity is highest for the distributionally sensitive measures of poverty and lowest for the headcount ratio. As far as the latter is concerned, however, it is found that 1998/99 elasticities are even higher than those for 1990/91 (2.7 and 2.9 for urban and rural sectors, respectively), thereby making the potential future reduction the incidence of poverty depending heavily on Morocco's ability to promote economic growth.

Table 12 – ELASTICITIES OF POVERTY TO GROWTH. MOROCCO, 1998/99.

Poverty measure	Elasticities		
	Urban	Rural	National
Headcount Index	3.2	2.5	2.7
Poverty Gap	3.8	3.1	3.3
Severity Index	4.3	3.3	3.6

Notes: The table shows the elasticities of poverty with respect to mean expenditure on consumption (see Ravallion and Huppi, 1991).

Source: Staff estimates.

2.34 Given the magnitude of the elasticities of poverty with respect to growth, a small rate of growth in a short period of time would also have a large impact on poverty reduction, particularly so in urban areas. It should be noted, however, that the same increase in mean expenditure would have very different impact on poverty, depending on the associated movement in income inequality. Because an increase in the latter would deteriorate the poverty measure, it is important for Moroccan authorities not only to promote economic growth but also to foster progressive social policies to insure that inequality will be reduced.

2.35 ***Pro-poor growth policy***. The experience of Morocco over the 1990s suggests that growth in consumption expenditure was associated with minor changes in the distribution of expenditure across households. According to LSMS data, the growth rate in real per capita expenditures fell by 13% from 1991 to 1998, while the national expenditure inequality changed by a negligible percentage (the Gini coefficient changed by less than 1% during the decade). Assuming that a distributional-neutral pattern of growth will continue in the future, we can investigate how future growth may change poverty incidence in Morocco. In order to support the argument that as far as poverty is concerned what matters is not only the *aggregate* growth rate, but also the *composition* of growth, we have assumed three simulations to show the poverty results when growth is biased towards a specific sector of the economic: (i) distributional-neutral pattern of growth; (ii) pro-rural growth; (iii) pro-agricultural growth. For each simulation two scenarios are

²⁶ Some results from the previous section (on factors contributing to poverty increase) can be used to estimate the elasticity of poverty to any future distributionally neutral growth in mean consumption. Although one should be cautious in drawing policy implications from this analysis, mainly because distributionally neutral growth does not imply growth with distributionally neutral policies.

considered: a “low-case” where per capita household expenditure growth rate is set equal to 1% per year, and a “high-case” where it is assumed a more optimistic growth rate of 2.5% (roughly equivalent to 6% annual GDP growth rate).

2.36 The results suggest that the prospects for poverty reduction through economic growth in Morocco are quite promising. Overall, the results show that in Morocco, expenditure growth rates have a large impact on poverty: under the “high case” scenario, the headcount index would decrease at a remarkable rate of 8.2% per year. Taking into account the rate of growth of the population (according to projections, around 1.6% per year), the number of poor would fall by 6.6% per year. For instance, in 2005 there would be a poverty incidence of 11.8%, with the number of poor being around 3.3 million. For the “low-case” scenario, the decrease in the incidence of poverty would be equal to 3.5% per year, implying that in 2005 the poor would still number approximately 4.7 million, *i.e.* 16.6% of the total population. Similar results are obtained for the poverty gap index and the severity index (see Table 13).

Table 13 – Simulated Effects of Alternative Economic Growth Scenarios on Poverty

	Rate of growth in per capita expenditure (% per year)	Rate of reduction in national poverty index (% per year)		
Growth scenario		Headcount Index	Poverty Gap	Severity Index
Distributional-neutral growth				
Low case	1.0	3.5	3.2	3.5
High case	2.5	8.2	7.8	8.5
Pro-rural growth				
Low case	1.0	7.0	6.6	7.6
High case	2.5	12.7	15.3	17.4
Pro-agricultural growth				
Low case	1.0	5.3	6.9	7.8
High case	2.5	13.4	15.5	16.9

Source: Staff estimates.

2.37 However, since the poor are mainly located in rural areas a sectoral biased growth toward the rural population would have a much higher impact on poverty. For the “pro-rural growth” simulation, assumptions are as follows: (i) per capita expenditure of households living in urban sectors does not change, and (ii) the aggregate growth rates of 1% (“low case”) and 2.5% (“high case”) are entirely due to the growth in expenditure of households belonging to the rural sector. Such a pattern of growth, biased towards the rural households, would reduce the incidence of poverty at impressive rates under both the low- and high-scenario. For instance, mean per capita expenditure growing at 2.5% per year would reduce the headcount index by 12.7% per year: even taking into account the population growth, such a estimate implies that it would take less than 6 years to halve the number of the poor at the national level. The poverty gap would fall at 15.3% per year, implying about a 2-3% per year drop in the poverty gap itself.

2.38 Finally for the “pro-agricultural sector growth” simulation, the results show that when the growth benefits households with the main breadwinner employed in agriculture, then the impact on the incidence of poverty is impressive. For instance, the “high case” with mean expenditure growing at 2.5% per year would see the headcount index falling at 13.4% per year. But given that prospects for the

agriculture sector growth are not very rosy this promoting a "pro-agricultural sector growth" seems to be a difficult task.

CHAPTER III

HOW ARE THE POOR SUPPORTED BY PUBLIC SPENDING IN SOCIAL SECTORS?

Although Government spending in social sectors is about 12% of GDP, established social policies are insufficient and inefficient for lifting people out of poverty, despite recent rural programs initiated in the last few years. Overall there is very little redistribution in Morocco and almost all social programs are designed to benefit the rich more than the poor (education, health, transfers, social security, etc.). To expand access of the poor to basic social services, reduce gender and urban rural disparities, increase the redistributive effects of the public spending as well better targeting the economically vulnerable, Government needs to reallocate and improve the efficiency of public expenditures towards services and programs benefiting the poor and vulnerable. This will require: (i) increasing the budget share of lower basic education and improving the efficiency and access for both higher basic and secondary levels; (ii) redirecting health care services to primary health care and emphasizing preventive and rapid curative interventions; (iii) investing in rural basic infrastructures (potable water, electricity, rural roads); (iv) increasing the coverage of social insurance system (health and pension) while improving their financial sustainability; (v) reforming the consumer food subsidies; (vi) expanding labor intensive public works; (vii) restructuring the welfare programs; and (iv) introducing targeted assistance programs for the poor (health insurance scheme, cash transfers to elderly and disabled poor, targeted food programs, etc.).

A. Access to Social Services during 1990-98

3.1 The consumption-based poverty measures, as discussed in the preceding chapters, do not adequately account for other dimensions of welfare. Welfare is related to both the amount of private goods consumed and the benefits from publicly provided goods (education, health, basic social infrastructure, housing, assistance programs, etc.). Social indicators then can be seen as a measure not only of the population's well being but of the effectiveness of the government's past

3.2 In Morocco, the increase in consumption-based poverty measures has been accompanied by an improvement in other measures of living standards. Despite this improvement in access to social services during 1990s, urban-rural imbalances are still important and continue to be a crucial policy issue for poverty reduction strategy. Moreover, the percentage discrepancy between some social indicators in Morocco and the lower middle income countries (LMI) is still large (see Table 14). For example, although the primary enrollment rate in Morocco has increased from 63% in 1990 to 77% in 1997, it remains 20% below the average enrollment rate in LMI. The secondary enrollment rate has increased marginally, from 36% in 1990 to 38% in 1997, thereby deviating negatively from the LMI by as much as 73%. Marginal improvements have been also obtained in female adult illiteracy.

3.3 The health status of the Moroccan population has improved during the last decade. The crude death rate decreased from 7.7 per 1000 population in 1991 to 6.3 in 1998. Life expectancy has also increased from 67 years in 1991 to 69 in 1998. However infantile mortality rate in Morocco is one of the highest in the region and maternal mortality ratio is the second highest in the region. Housing conditions and access to basic infrastructure services such as electricity and potable water have also improved both in urban and rural areas but disparities among regions still important and access to potable water and electricity in rural areas is one of the lowest in the region.

Table 14 – COMPARATIVE BASIC SOCIAL INDICATORS (1997)

	Morocco	Jordan	Iran	Tunisia	Algeria	Turkey	Egypt	Portugal	Greece	Middle East North Africa	Lower Middle Income	% difference from LMI in 1997	% difference from LMI in 1990
Income													
GNP per capita, \$US	1260.0	1520.0	1780.0	2110.0	1500.0	3130.0	1200.0	11010.0	11640.0	1754.0	1280.0	-1.6	-38.0
Population													
Total fertility rate (%)	3.1	4.9	2.8	2.6	3.8	2.5	3.4	1.4	1.3				
Population growth rate (%)	1.4	2.7	1.4	1.3	1.9	1.3	1.5	-0.1	-0.1				
Urban population (%)	53.3	72.6	60.0	63.4	57.2	71.9	45.1	36.5	59.5				
Health													
Life Expectancy at Birth	66.6	70.1	69.2	69.5	68.9	69.0	66.3	75.3	78.1	65.1	66.6	0.0	-5.0
Infant Mortality Per 1000 Births													
Maternal Mortality rate													
Married women using contraceptives	59.0	53.0	73.0	60.0	57.0	63.0	55.0	66.0	–				
Education													
Primary School Gross Enrollment Rate													
Total	76.6	–	90.0	99.9	76.0	99.9	95.2	99.9	99.9	86.4	90.7	-18.4	-38.0
Female													
Secondary School Enrollment Rate													
Total	37.7	–	81.2	94.9	68.5	58.4	75.1	89.7	91.4	61.7	65.1	-72.7	-38.0
Female													
Adult Illiteracy													
Total	54.1	12.8	26.7	33.0	39.7	16.8	47.3	9.2	3.4	41.4	24.1	124.5	120.0
Female	67.3	18.2	34.2	53.0	52.3	26.1	59.3	11.7	5.1	53.6	32.7	105.8	112.0
Basic Infrastructure													
Potable Water													
Rural													
Electricity													
Rural													

Source: World Development Report (1999), Social Indicators of Development, LSMS Direction de la Statistique.

3.4 According to LSMS data, access to social services among the poor and particularly in rural areas has also improved over the period 1990-98. As shown in table 15, in 1998/99, about 90.9% of the urban and 12% of the rural population had access to piped water (compared 76%% and 6.3% in 1990/91). About 85.8% of the urban and 15.9% of the rural population had access to electricity (compared to 90.4% and 12.7% in 1990/91).

Table 15 – SELECTED SOCIAL INDICATORS FOR MOROCCO 1990/91 AND 1998/99

	1990/91		1998/99	
	Urban	Rural	urban	rural
Active people per household	1.7 2.1	2.7 2.9	2.0 2.5	2.9 3.2
Activity rate, those aged 15 or more (%)	48.8 56.6	64.8 62.9	52.4 52.5	66.3 64.4
Activity population with a second job (%)	2.1 2.9	6.2 7.3	2.7 2.1	6.2 5.1
Literacy rates, those aged 10 or more (%)	63.3 52.7	28.2 22.0	66.3 50.9	33.2 26.5
Female literacy rate, aged 10 or more (%)	51.4 —	12.8 8.6	54.5 40.0	17.0 10.9
Female net primary enrollment rate (%)	78.7 79.0	28.3 17.8	82.8 73.8	46.8 36.3
Women who had a prenatal visit (%)	65.4 —	24.4 —	75.9 53.2	36.8 28.4
Women who gave last birth at home (%)	43.0 —	84.0 —	28.0 47.0	78.7 87.6
Women aged less than 50 using contraceptives (%)	54.3 —	34.1 —	62.8 56.0	45.8 41.9
Population living in shacks (%)	10.9 33.7	71.6 86.4	10.4 23.2	71.4 84.9
Population with piped potable water (%)	76.0 32.4	6.3 0.9	90.9 57.9	12.0 4.9
Population with electricity (%)	90.4 61.8	12.7 2.2	85.8 65.1	15.9 11.0
Population with garbage pickup (%)	84.8 75.7	2.0 1.2	85.1 77.2	2.4 0.5

Notes: In each cell, figures in boldtype refer to the whole population while figures in parentheses refer to the poor.

Source: 1990/91 and 1998/99 LSMS, Direction de la Statistique, Morocco.

B. Education and Literacy

3.5 Since independence Morocco has devoted special efforts to reduce illiteracy and promote schooling at all levels of learning. Effective delivery of quality education services is critical for building the strong human capital base that Morocco needs in order to (i) achieve rapid economic growth and job creation in an increasingly competitive international environment, and (b) address domestic income disparities by enhancing opportunities among the less well-off. Despite substantial public spending on education (about 5 percent of GDP), (i) outcomes remain unsatisfactory and serious inequities persist between urban and rural enrollment rates, particularly for girls, and (ii) relevance of the quality of general education has suffered from lack of investment and materials and outdated curriculum and teaching methods.

3.6 In Morocco, about 97% of students are enrolled in public schools, which are under the responsibility of the Ministry of Education (MEN) and the Ministry of Higher Education (MEST). Morocco's education system has been designed as nine years of basic education²⁷, and three years of general secondary education. The private sector accounts for the remaining 3% of enrollment. Its role appear to be modest across all educational levels as it accounts for about 2% in primary level, reaching a maximum of 5% in secondary level. In addition, a vocational training system allows to partially accommodate basic or secondary dropouts. According to 1998/99 LSMS, about two-third of those attending vocational centers are in the public sector.

3.7 **Access.** Net primary enrollment rate has increased from 54.4% in 1991 to 68.4% in 1998 and particularly among rural girls (10.6% in 1991 compared to 44.4% in 1998). Net secondary enrollment rate has reached 31.2% in 1998 compared to 25.9% in 1991 and for girls it has increased to 28% from 21.5% (compared to 30.4% in 1991 and 35.1% in 1998 for boys). In rural areas, the percentage of pupils attending basic schooling in 1998 ranges from about 48% for the lowest per capita expenditure quintile to 77% for the better off in highest expenditure group, compared to 88% and 89% in urban areas.

3.8 Factors which may have contributed to the increase in rural girls enrollment during the last few years include various programs that target the rural areas for increasing girls enrollment, such as food aids programs financed by UNDP, aids to families in few selected BAJ provinces and programs of school supplies financed under the BAJ in 14 provinces. However, once these programs will be ended the sustainability of the enrollment increase in rural areas may be jeopardized.

3.9 Because of better access to literacy programs, the decrease in illiteracy rate during 1990-98 has mainly took place in urban areas: the illiteracy rate among those aged ten or more has decreased from 55% (40% in urban areas, 68% in rural areas) in 1990/91, to 48% (34% in urban areas, 67% in rural areas) in 1998/99. However, the breakdown of the illiteracy rate by gender shows the persistence of large disparities. For instance, in 1998/99 the illiteracy rate for rural women was 83%, compared to 87.2% in 1990. Among the poor, 49.1% of those living in urban areas are illiterate, a percentage rising to 73.5% in rural areas. That figures compare to 24.1% and 60.2%, respectively, for the better off.

3.10 According to 1998/99 LSMS data, the main impediments to enrollment for the poor are poverty, mainly in urban areas; and difficulties to access school facilities, mainly in rural areas (see Figure 3): 68% of poor school-age children in urban areas advocate poverty as the main reason for non attending school, compared to 48% in rural areas. Moreover, in rural areas, lack of physical access to school justifies 36% of non-enrollment for school age children (compared to 4% in urban areas). Socio-cultural factors also justify the non-enrollment mostly for girls in rural areas. The mean distance to the primary school show also that the poorest households have relatively longer distance to travel, particularly in rural areas. Other factors affecting low school attendance of poor include number of children in the household and lack of sanitary facilities in schools (particularly for girls).

²⁷ The basic and secondary education system include: (i) first six-year of lower basic ("Fondamental 1", students aged 7 to 12); (ii) second three years of higher basic ("Fondamental 2", students aged 13 to 15); and (iii) last three years of secondary & technical education (student aged 16 to 18).

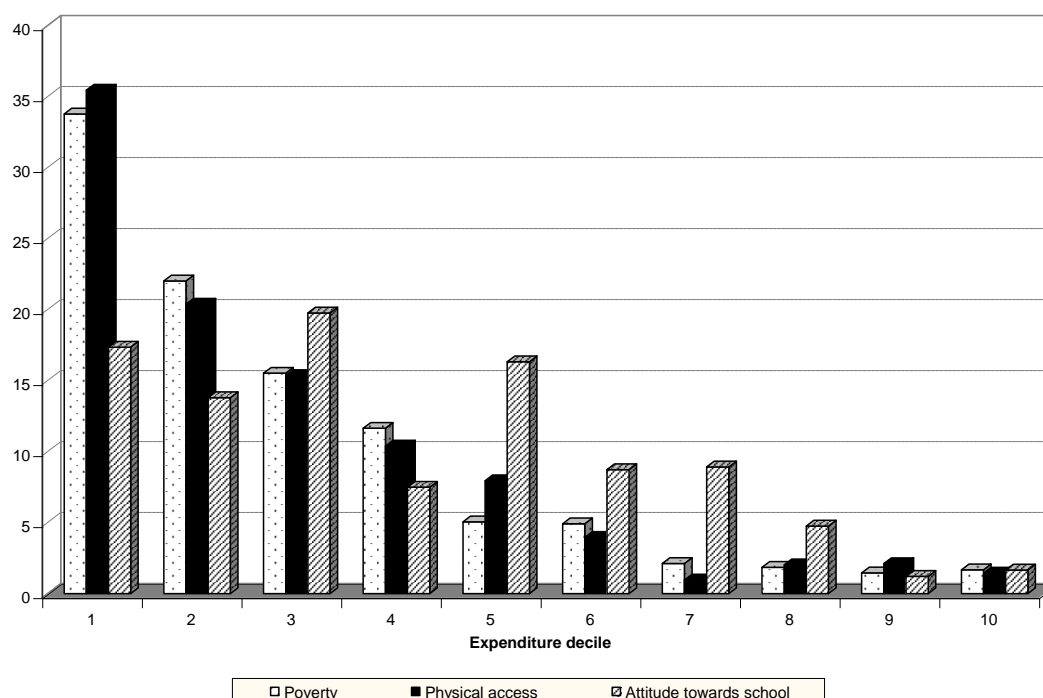


Figure 3 – IMPEDIMENTS TO ENROLLMENT BY EXPENDITURE DECILE MOROCCO 1998/99.

Source: LSMS 1998/99. Refers to children aged 7-15 who have never been enrolled in school.

3.11 Budgetary Cost. Over the last decade, public spending in Morocco in the education sector has increased slightly, from 5.0% of GDP in 1991 to 5.9% in 1998. As a share of total government expenditure it has also slightly increased (from 19.2% to 19.7% during the 1991-98 period). In real per capita terms, the public spending on education has decreased slightly during the first half of the 1990s (on average, -1% per year from 1991 to 1996), but increased thereafter (+4.4% from 1996 to 1998). Over the same period, the shares of the Ministry budget have remained by and large stable: the first cycle of basic schooling accounts for about 40%, the second cycle for 22%, secondary schooling for 21%, and higher education for 17%. A functional analysis of public spending in education shows that the burden placed by teaching and non-teaching staff wage bill makes up to over 90% of the total operating budget for all education levels.

3.12 Over the last decade or so the Government has increased the expenditure of public resources to secondary and higher education relative to primary education. Between 1991/92 and 1998/99, real costs per student decreased by about 4% in the first cycle of primary education, while they increased in the second cycle of primary education (7.8%) and in secondary education (10.5%). For the primary education level as a whole, the real cost per student decreased by 1.5%. In 1991/92 the cost per student enrolled in secondary education was about three times as much as the cost per student in primary education, to be compared with 3.5 times in 1998/99. This is unlikely to have happened in response to increase in enrollment at those levels, given that enrollment increased relatively more in basic (+29.9%) than in secondary education (24.2%). As far as higher education is concerned, in 1998/99 the cost per student enrolled in higher education (17,500 DH) was about six times as much the cost per student in basic schooling (3,300 DH) and slightly less than twice the cost per student at the secondary level (10,500 DH).

3.13 Education Costs and their impact on the poor. Although education is free, the 1998/99 LSMS confirms that families incur non-negligible costs (for books, writing materials and food in school). In absolute terms, the households' expenditures for education increase with total expenditure, both in urban and in rural areas (see Table 11). On average, the yearly per capita expenditure on education for urban households (263 DH) is more than five times as much as for rural households (50 DH). As a share of total expenditure, at the national level the expenditure for education shows some tendency to be progressive, *i.e.* the households in the poorest deciles spend a lower share (1.6%) on education than those in the richest deciles (2.7%). However, the pattern of the budget shares for rural households is unambiguously regressive, being that the poorest spend on education about 1.5% of their total budget, compared to 0.5% for the richest. As far as the poor are concerned, they allocate a larger share of their expenditure to education than the better off: in urban areas, the budget shares on education for the poor and the better off are 2.5% and 2.4%, respectively, compared to 1.4% and 1.1% in rural areas.

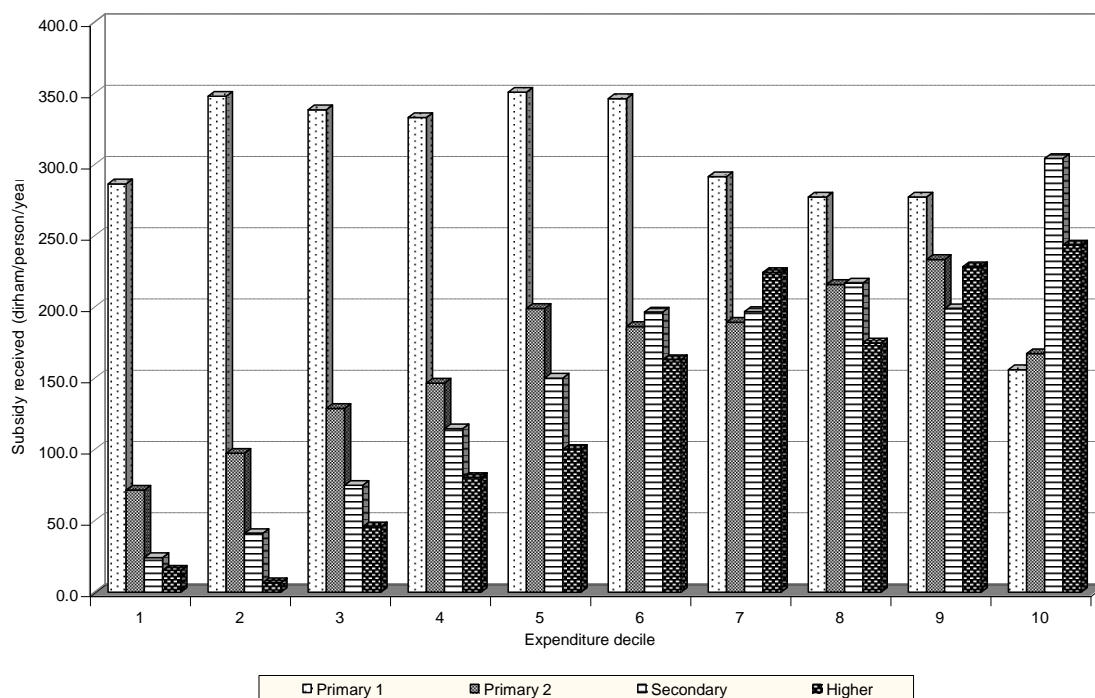


Figure 4 - DISTRIBUTION OF SUBSIDIES TO BASIC, SECONDARY AND HIGHER EDUCATION 1998/99.

Source: staff estimates.

3.14 Distribution of Education Subsidies. Figure 4 shows how government spending (net of cost recovery) on primary, secondary and higher education is distributed on per capita basis across expenditure per capita deciles for Morocco in 1998/99. Two different patterns characterize education subsidies: (i) the incidence of public spending on the lower basic is highest for the poorest expenditure group, with a tendency to fall as income rises, (ii) with considerable disparities, government spending for the upper basic as well as for both secondary and tertiary education is regressive, *i.e.* public spending steadily increases as income increases, thereby favoring the better off. In the aggregate –

when public spending for all education levels is considered - total government expenditure is found to be strongly regressive: on average, the poorest 10% receive per capita subsidies that are half as much the subsidies accruing to the households around the median (398 DH and 801 DH per capita per year respectively), while per capita subsidies for the richest 20% of the population are around 905 DH per year.

3.15 The extent to which the education subsidies benefit the households across total expenditure deciles strongly depends on the levels of education. Overall the better off receive proportionally a larger share of public expenditure than the poor; but at lower basic level government expenditures are unambiguously pro-poor.

3.16 According to 1998/99 LSMS data (i) the pattern of subsidies for the lower basic is strongly progressive: the subsidies accruing to the poorest decile amount to 13.9% of total household expenditure, compared to 0.6% accruing to the richest decile; (ii) subsidies for upper basic are benefiting almost uniformly the first six deciles, showing some tendency to fall for the top 40% of the population; (iii) subsidies for both secondary and higher education are unambiguously regressive: the bottom 30% receives subsidies for higher education amounting to 0.7% of their total expenditure, compared to 1.6% for the top 30%. In order to investigate the trend of the incidence of benefits, further analysis is needed to compare 1998/99 and 1990/91 LSMS data.

3.17 Table 16 shows that the better off receive proportionally a larger share of the public expenditure in education. However, as noted above there are important differences in the extent of the bias across education levels, with spending in both cycles of primary education being strongly pro-poor, and spending in higher education having the strongest bias towards the rich. Thus, Table 16 allows to conclude that (i) overall, public spending in education is pro-poor, and (ii) if the breakdown by educational level is taken into account, it turns out that the above result is mainly driven by the pro-poor characteristic of the primary education, which more-than offset the pro-rich characteristics of the subsidies for both secondary and higher education.

Table 16 – DISTRIBUTION OF BENEFITS AND THE POOR: INEQUALITY RATIOS FOR MOROCCO, 1998/99.

Program	Inequality ratio
Primary 1	236.8
Primary 2	132.7
Secondary	75.3
Higher	54.5
Total education	149.1

Note: The table reports the inequality ratios (see text) for different levels of education. For a inequality ratio, values greater than 100 denote that public spending benefits are pro-poor, whereas values less than one denote that benefit favor the better off.

Source: staff estimates.

Reform Options.

3.18 The Government is determined to improve education sector performance over time and its main strategic objectives for the medium term (by 2005) are: (i) to achieve universal lower basic education (where enrollments are currently 60 percent), a 75 percent enrollment rate in upper basic education (currently 45 percent) and a 50 percent rate in secondary education (currently 22 percent); (ii) to close

the overall gender gap, and raise rural girls' lower basic enrollment to 50 percent (compared to 44 percent in 1998); and (iii) to improve efficiency (more multi-grade and double shift classes in primary schools, and higher student/teacher ratios) . To achieve these goals the Government has set up in 1999 a Royal Commission for education reform which proposed a reform program that would allow: (i) increasing enrollment rates and reducing gender and regional gaps; (ii) improving efficiency by reforming human resources management; (iii) raising quality by strengthening teacher training programs and upgrading curricula and teaching methods, both in basic and secondary education as well as in post-secondary education institutions; (iv) involving communities and parents' associations in order to improve school level performance; and (v) launching the process of decentralizing MEN functions by gradually delegating management of basic education to regions and municipalities. To facilitate implementation of the reform program, the Government has begun to build consensus in favor of reform among various partners through organizing constructive dialogue with key players, particularly teachers and unions.

- ***Universal Lower Basic Education:*** This emphasis on lower basic schooling will require additional resources and an increase in the primary education budget relative to secondary and higher education. This could be achieved, without significantly increasing overall education spending, through (i) reallocating the education budget toward basic schooling (with special priority on serving rural girls) and by increasing the share of lower basic education from 40 percent of the education budget in 1999 to about 50% ; (ii) rationalizing staffing across and within primary and secondary level; and (iii) continuing to work with NGOs and non-formal education programs while evaluating their outcomes. Reaching under-represented groups may be relatively costly and would require: (i) continuing building school facilities in remote rural areas; (ii) designing the school facilities in order to attract girls; (iii) hiring local teachers (particularly women); (iv) adapting to the extend possible school schedules to local habits and culture; (v) providing extra services and additional incentives to attract rural children, particularly girls (i.e. school meals, free books, cash transfers for attending school, etc.); and (vi) fostering school autonomy in order to give accountability and ownership at local level. A rough estimate of the cost of putting into basic school the ????? million eligible children would be about ??? million DH. A more limited program which targets only the rural areas, would require about ??? million DH. This could be achieved through expanding BAJ experiences in other poor rural provinces.
- ***Increase Access and Improve the Quality of Higher Basic and Secondary:*** Currently the main reasons for high drop outs at 12 years of age, is lack of access to upper basic education (mainly in rural areas) and lack of incentive and value-added in staying in school. Improving the quality and increasing access to higher basic as well as secondary education would help: (i) keeping children out of labor market; (ii) giving the opportunity of continuing school for those who finish the lower basic education; and (iii) increase the skills of the future labor force. Once access to lower basic is increased it is critical to address access to secondary. The existing distributional gap between urbanized and rural Morocco, and between men and women, will not be eradicated unless there is truly equal educational opportunity for all Moroccan children. The cost of increasing access to upper basic and secondary may be substantially high but it could be financed through introduction of cost recovery mechanisms at the secondary and higher education level and through reallocation of the savings into the basic (lower and upper) education.
- ***Adult illiteracy reduction:*** The Government plans to reduce overall adult illiteracy to around 20 percent over a period of fourteen years. This would require expansion of the adult literacy

programs initiated by the Ministry of Social Development to reach about 500,000 people a year, compared to the current level of about 100,000. To raise the literacy rates the Government has begun to support through public funds the use of flexible mechanisms by emphasizing on partnerships with NGOs, the private sector, and civil society as well as other government agencies (e.g., MEN). Moreover the Directorate of Literacy of the Ministry of Social Development will monitor performance targets (such as numbers of adult illiterates reached) for service provision contracted out to other public/private agencies and local NGOs. Based on these new mechanisms the cost of adult literacy is estimated at about 180 DH per person.²⁸, therefore a rough estimate of expanding the literacy program to half a million people a year would be about 90 million DH per year, about three times the current budget (about 30 million DH).

C. Health Care System

3.19 Morocco's health system is similar to that of many developing countries in which the Government – largely through the Ministry of Public Health (MOH) – is responsible for basic public health activities, management and regulation of the sector, and is a major provider of services as well as the social safety net for the poor.²⁹ The Ministry of Public Health delivery system is organized in two networks: basic care and hospital care. The former includes rural dispensaries, rural community health centers, rural local hospitals, and urban health centers. The hospital network is composed of general and specialty hospitals. In principle, all Moroccans are eligible to receive health care in MOH facilities, (clinics, health centers, dispensaries, diagnostic centers, and public hospitals), either free of charge, if indigent, or by paying subsidized fees for the better off.³⁰

3.20 In terms of formal health insurance, Morocco does not have a compulsory system, but it has a voluntary system for several categories of the population including mutual insurers for civil servants, certain categories of professionals (largely in banking), and public enterprises; mutual and private health insurance for private sector enterprises and individuals; and a compulsory social security system (CNSS – *Caisse Nationale de Sécurité Sociale*) which does not provide medical insurance but does provide some limited health benefits for children through its family allowance system. Formal health insurance coverage is quite limited, covering about 15% of the population, three-fourths of whom are civil servants. Among civil servants, about 80% are voluntarily enrolled in CNOPS (*Caisse Nationale des Organismes de Prévoyance Sociale*). The coverage of CNOPS is urban biased and only a small portion of the rural population is covered (Numbers from LSMS??).

3.21 **Access.** The 1998/99 LSMS data indicate that access to health services varies by household living standards. At the national level, the percentage of those who recalled having consulted any medical facility is around 45% in the poorest expenditure quintile, compared to 77% for those in the richest quintile: the same disparity is to be found within both urban and rural areas (see Table 17).

3.22 Most of the poor choose the public health care services while the better-off opt mainly the private sector. Among the sick or injured, the relative majority (52.8%) sought for treatment in the

²⁸ This cost include (i) the cost of literacy course which is about 130 DH for a 200 hours course; and (ii) the books, estimated at 100DH but is expected to be reduced to 40DH.

²⁹ See "Morocco Health Financing Brief", WB 1999.

³⁰ In principle the poor can obtained a "Carte d'Indigence" through local governments, which will provide coverage for health care services in public facilities. However the system is not efficient and many abuses are reported.

private sector, consisting of health care services delivered by private doctors and paramedics.³¹ However, the data reveal that there is strong evidence of self-selection. The non poor clearly opt out of the public sector: in urban areas, 75% of individuals in the richest expenditure group chose private health care (compared to 23% for the poorest), while in rural areas the percentage is 61% (compared to 28% for the poorest).

3.23 Morocco's health delivery system has improved substantially over the past 30 years, but this progress has been uneven across the territory. The travel time and the costs in seeking medical care represent serious access obstacles for households in many of Morocco's rural areas. Aggregate data at the national level mask large urban-rural differentials in terms of availability and use of health services. On average, rural residents are 21 km from a public health facility (31 km from a private one), while urban residents are 5 km from public- and 11 km from private facilities. On average, the rurals' travel time to reach a public health facility (51 minutes) is three times as much as for individual living in urban areas (22 minutes). According to 1998/99 LSMS data, about 50% of urban respondents were able to reach the health facilities on foot, compared to 14% for the rurals (65% of individuals living in rural areas needed a vehicle). In fact 1998/99 LSMS shows that – *within* each area – health facilities are located closer to the poor than to the better off. (Table 17).

Table 17 – ACCESS TO HEALTH SERVICES BY AREA OF RESIDENCE AND EXPENDITURE QUINTILE, 1998/99

	Urban		Rural		National	
	<i>Quintile I</i>	<i>Quintile V</i>	<i>Quintile I</i>	<i>Quintile V</i>	<i>Quintile I</i>	<i>Quintile V</i>
% who consulted health facilities	59.5	80.0	40.0	73.9	45.1	77.2
Sector:						
- (%) Public	76.1	20.5	66.8	38.5	70.6	29.3
- (%) Semi-public	0.5	4.7	5.0	0.2	1.6	3.1
- (%) Private	23.4	74.8	28.2	61.3	27.8	67.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Person consulted:						
- (%) Doctor	89.1	89.9	68.4	85.6	73.3	89.3
- (%) Pharmacist	2.9	8.1	5.3	7.0	3.8	7.7
- (%) Nurse	4.7	0.2	19.1	3.9	16.7	0.8
- (%) Other	3.3	1.8	7.2	3.6	6.3	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Distance (km)	6.9	13.7	17.8	34.4	14.7	14.9
Health insurance coverage (%)	5.2	41.2	1.1	7.4	1.6	33.6

Notes: Quintiles refer to households per capita expenditure.

Source: staff estimates.

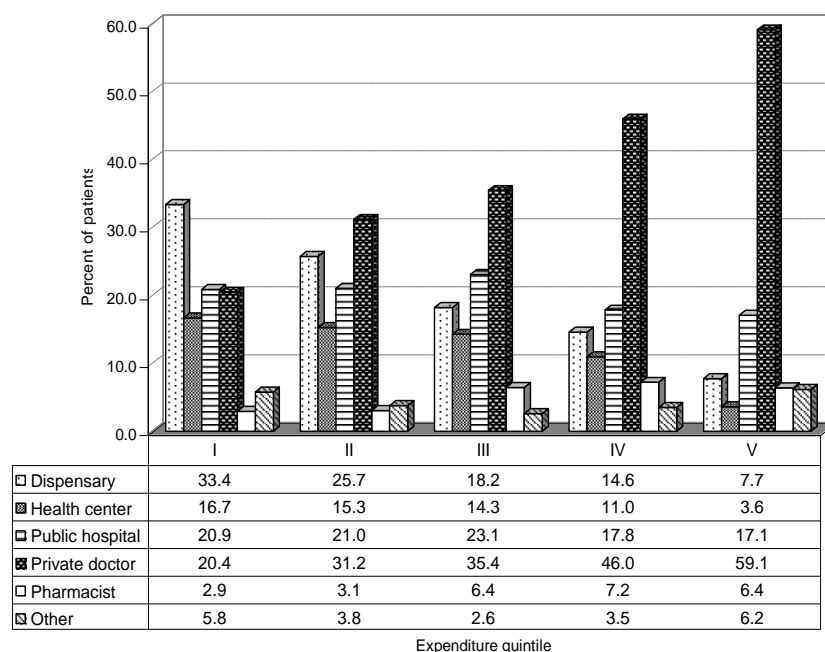
3.24 Based on 1998/99 LSMS data, utilization of public/private health facilities and the type of treatment sought by individuals differ *within* expenditure quintiles (Figure 5). For instance, of all those reporting ill in the poorest quintile, about one-third took treatment from primary basic dispensaries (either public or private), about 20% from public hospitals and private doctors, 17% from primary health centers, 3% from private pharmacists, and about 6% from other facilities (self-treatment, traditional healers, *mutualistes*, etc.). The data also shows that (i) with the only exception of the poorest

³¹ Both are often public sector employees who set up private practice after hours. Physicians enjoying dual status (i.e. working two and a half days in public hospitals and the rest of the week in their private practice) have a strong incentive to maintain a long waiting list in the public hospitals and promise to their clients immediate treatment at their clinic.

quintile, health care provided by private doctors is predominant across all expenditure quintiles (Figure 5). The reported illnesses treated by private doctors are also an increasing function of per capita expenditure, ranging from 20% for the poorest to 60% for the richest; (ii) Visits to private sectors exceeded those to public hospitals for all quintiles, and also increased more steeply across household expenditure quintiles; and (iii) recourse to both dispensaries and primary health centers drops systematically from the 1st to the 5th quintile.

Figure 5 - UTILIZATION OF HEALTH FACILITIES BY EXPENDITURE QUINTILES, MOROCCO 1998/99.

Source: 1998/99 LSMS.



3.25 LSMS data confirms that both the inefficiencies and low quality of the public health system are clearly perceived by the households. In urban areas, about 60% of the poor sought for treatment either in public hospitals (32.4%) or in dispensaries (27.4%), to be compared to 33% for the non poor. In rural areas, dispensaries are the most common choice by the poor (35.8%): it is worth noting that a relatively high percentage of the poor (20.8%) were treated by private doctors, compared to 15.3% by public hospitals (see Table 18).

3.26 **Budgetary costs.** Overall, Government health expenditures in Morocco are well below those found in other comparable income countries. Public health expenditures in Morocco were estimated around 0.9-1.2% of GDP between 1990-98, compared with 2.6% in other MENA countries.

Throughout 1991 to 1998, total public health expenditure in Morocco grew at a real average annual rate of 2.9%. Since about 86% of the public health spending is for operating expenses, this increase was largely driven by the increase in salaries (+3.7% per year over the same period). If the pattern of growth of the population is taken into account, health expenditures have increased by 1.25% per year: again, this result is mainly driven by the evolution of wages (+2.0% per year on a real per capita basis). A noteworthy characteristic of the functional distribution of health expenditures concerns the evolution of the expenditure for equipment, which has decreased substantially over the last decade (-2.4% per

year).³² Moreover a disproportional share of the MOH expenditures are for hospitals (54%) and only 25% of its budget is allocated to preventive care.

Table 18 – UTILIZATION OF HEALTH FACILITIES AND THE POOR (%)

	Urban		Rural		National	
	Poor	Non-Poor	Poor	Non-Poor	Poor	Non-Poor
<i>Dispensary</i>	27.4	13.0	35.8	17.5	31.6	14.3
<i>Primary health center</i>	15.2	7.8	19.4	12.6	17.3	9.3
<i>Public hospital</i>	32.4	20.0	15.3	15.7	23.8	18.7
<i>Private doctor</i>	17.5	48.2	20.8	44.6	19.2	47.1
<i>Pharmacist</i>	2.3	6.4	2.6	5.6	2.4	6.2
<i>Other</i>	5.2	4.5	6.3	4.1	5.7	4.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Poor are defined as those individuals who fall below the upper poverty line, as defined in Chapter 1.

Source: staff estimates.

3.27 As a share of total government expenditures, health expenditures have increased slightly, from 3.4% in 1991 to 3.7% in 1998, while as a share of total social expenditures health expenditures have decreased from 9.9% in 1991 to 8.7% in 1998. Budgetary health care expenditures represent 33% of total health expenditures, voluntary mutuals and private health insurance account for about 19%, and direct out of pocket payments from household account for the remaining 48%.

3.28 **Health costs for the Household.** The 1998/99 LSMS data show that the expenditures for health vary with household standard of living, ranging from about 2% (as a household budget share) for the poorest households to 6% for the richest. Table 15 shows that households' expenditures for health increase constantly with total expenditure, both in urban and in rural areas. On average, the yearly per capita expenditure on health for urban households (511 DH) is more than two times as much as for rural households (189 DH). As a budget share, the expenditure for health is strongly progressive, being that households in the poorest deciles allocate to health a lower share (2.2%) than those in the richest deciles (5.8%). The same pattern is to be found both in urban and rural areas.

3.29 As far as the poor are concerned, although health care should be free for the indigent, the 1998/99 LSMS show that out-of pocket payments for health services are far from being negligible. At the national level, the household budget share on health for the poor is 2.4%, compared to 4.3% for the better off. In urban areas, the budget shares on health for the poor and the better off are 3.1% and 4.7%, respectively, compared to 2.1% and 3.7% in rural areas.

3.30 **Distribution of Health Subsidies.** In order to measure the extent to which the households benefit from the public spending on health, two main pieces of information are needed, namely (i) the pattern of use of health facilities across household expenditure groups, and (ii) the estimated unit costs to the government. Unfortunately, at the time of writing, neither pieces of information are available: the relevant sections of LSMS questionnaire have not been processed by the Moroccan Statistical Office, nor have the MOH estimates of the unit costs by level of services. Nevertheless, preliminary estimates

³² This pattern is consistent with the presence of quality problems concerning the health facilities, particularly the lack of critical equipment and supplies. Much equipment is over 15 years old: 40% of operating theatres, 22% of reanimating equipment; 39% of lab equipment, and 32% of radiological equipment. For more details, see Morocco Health Financing Brief.

of the pattern of utilization of public health facilities (see Table 59) can provide useful insights. The following observations can be made about each treatment option:

- **Public hospitals.** The 1998/99 data indicate that at the national level as well as for both urban and rural areas, public hospitals are predominantly used by the richest. The poor use public hospital relatively little. The richest urban 20% of the population has MOH benefits 7 times higher than the 20 percent poorest urban individuals (see Table 59). In urban areas the access to public hospital increases with the expenditure quintile, thereby showing a markedly regressive structure; in rural areas there is also a tendency for access to hospital to increase with income, though it is less pronounced than in urban areas.
- **Health centers.** The LSMS data indicate that for rural areas, primary health centers are mostly used by low- and middle expenditure households. The richest rural 20% use health facilities relatively little. On the other hand, in urban areas visits to health centers increase markedly with expenditure levels: the richest urban 40% of the population benefit 5 times as much as the 20% poorest urban individuals.
- **Dispensaries.** Table 59 shows that two different patterns characterize the urban and rural areas. Within the former, access to dispensaries by expenditure deciles is unambiguously regressive: among the poorest 20%, only 8.5% took treatment from public dispensaries, compared to 26% for the richest 20%. On the other hand, in rural areas the utilization of dispensaries is strongly pro-poor: the data show a systematic pattern, according to which the poorest benefit 5 times as much as the richest.

Table 59 – UTILIZATION OF PUBLIC HEALTH FACILITIES FOR MOROCCO 1998/99 (%)

Expenditure quintile:	1 (poorest)	2	3	4	5 (richest)	
<i>Urban areas</i>						
Dispensary	8.48	19.20	20.20	26.41	25.71	100.00
Health center	7.42	15.33	22.47	37.25	17.53	100.00
Public hospital	5.16	13.28	21.20	22.49	37.87	100.00
<i>Rural areas</i>						
Dispensary	30.84	26.68	19.72	16.80	5.96	100.00
Health center	23.13	26.82	28.72	14.25	7.08	100.00
Public hospital	18.43	20.59	21.27	22.75	16.96	100.00
<i>National</i>						
Dispensary	17.41	22.19	20.01	22.57	17.81	100.00
Health center	14.13	20.24	25.14	27.43	13.06	100.00
Public hospital	8.65	15.21	21.22	22.56	32.36	100.00

Source: staff estimates.

3.31 Options for Reforms. The 1998/99 LSMS data indicate that the urban-rural disparity is still far from being reduced and both access and utilization levels are strongly biased toward the urban households. Limited resources combined with poorly targeted public health programs and inefficiently run hospitals have resulted in (i) poor health indicators, particularly for less-off, women and children in rural areas; (ii) inequitable distribution of health services; and (iii) deprivation of rural population and the urban poor from adequate provision of health services. The low level of utilization of services

indicate the need to increase both availability and the quality of services. In the medium-term to upgrade health service coverage, and improve access and quality of the health care the Government needs to (i) reallocate resources towards services benefiting the disadvantaged, particularly in rural areas; (ii) enhance effectiveness by making hospitals effectively autonomous with respect to financial and personnel management; (iii) increase public health budget; and (iv) introduce structural reforms necessary to ensure sector wide efficiency and long term financial sustainability. More specifically the priority areas are:

- ***Reducing infant and maternal mortality rates:*** This would require strengthening maternal and child health programs, especially in rural areas. These issue will also need to be linked to improvements in health education, female literacy and education particularly for women in rural areas.
- ***Improving equity and expanding health coverage:*** This could be achieved through redirecting health care services to primary health care and emphasizing on curative interventions. The strategic objective would be to improve availability and access to health services so that all the population in urban as well as rural have access to high quality services and to reduce rural-urban and inter-regional inequities in access to preventative and curative services. Extending services and coverage to the poor and the marginal groups may require the Government to seek partnerships with non-governmental organizations and local communities.
- ***Ensuring long-term sector financial sustainability.*** Currently the public cost recovery efforts are weak, low compared to the real costs (less than 10% of costs), inefficiently enforced, and resulting to large hospital subsidies to the better-off. Moreover the existing insurance system (CNOPS) lead to discrimination in favor of urban areas. Improving the financial sustainability of the health care will require enhancing cost-effectiveness of provision of services and pharmaceuticals, reforming and expanding the coverage of health insurance schemes, introducing compulsory health insurance and putting in place a national health assistance fund for low-income groups. To address cost recovery, a large scale evaluation of the impact of fee increases requires knowledge of price elasticities across different expenditure groups and willingness to pay measures. Such estimates are currently prevented by the quality of the available information.
- ***Increasing the financial resources of the public health care and improving the management of the system.*** The need to increase and improve health services calls for an increase in total public health spending and a reallocation of Government expenditure from curative, hospital care to preventive and base care. This reallocation of resources need to be accompanied by efforts to use available resources more efficiently, through improvement of management particularly in hospitals, and by a revision of the legal and regulatory framework that define the activities of the private sector.

D. Social Insurance System

3.33 The social insurance system protects those in the formal economy that is wage earners and their dependents. Benefits include family allowances; health insurance covering payment of maternity; old age, and disability and survivors insurance. Only 28% of the labor force has pension coverage and less than 15 percent of the overall population has access to formal health insurance.

3.34 For the private sector the payroll taxes which are paid to the CNSS represent 19% of the gross wage bill compared to 15% to CMR for the civil servants. Contributions from about 2 million workers are managed by four main funds, of which CNSS covers about 1 million workers in the private sector and CMR covers about 800,000 government employees.

3.35 The system does not cover the self-employed in the informal sector and in rural areas, temporary workers in the private sector, and the unemployed in urban areas. The present system, therefore, fails to cover those who need it most, such as those who do not have a permanent source of income, who do not have a secure job or who lose it, who are vulnerable to external shocks and sickness, death of household head, and divorce/repudiation. These vulnerable groups in Morocco generally seek help from intra household and informal support networks (see Chapter I on transfers). Moreover, since the financial sustainability of the formal pension system is in jeopardy, even the formal urban wage earner, who is among the vulnerable, may not have adequate protection for its old-age.

3.36 **Family Allowances:** Similar to other countries in the region (Tunisia), family allowances are financed through social insurance system, therefore there coverage is limited to the urban formal sector, i.e., the public and formal private sectors. There design does not differentiate between risk and poverty objectives: the benefits are intended to provide financial support to low-income families but are administered by the social insurance system as though they were a form of insurance. As a result the low income households who work in the informal sector is not receiving this benefit. Therefore the system is inequitable because similar benefits are not provided to the unemployed, agriculture workers and the poor with children. They are financed from payroll taxation, paid entirely by the employer, and there coverage is limited to the affiliates of the social insurance funds. Currently since the contributions exceed outlays, they are used through cross-subsidization for financing the deficits of other social insurance benefits (i.e., pensions). A short-term option could be to extend family benefits to those vulnerable families not presently covered, i.e., the poor and needy families (e.g. widows, disable etc). A program of more radical reform could envisage separating family benefits from other social insurance schemes and social assistance programs. Different methods of financing, level of benefits, and cost would need to be considered for these reforms.

Table 20: Social Insurance Schemes in Morocco

	Private sector	Civil Service	Public enterprises
Old age, disability and survivors insurance	CNSS, CIMR	CMR, RCAR	ODEP, ONCF, ONE, OCP, Tabac, Bank Al-Maghrib
Health insurance	Mutuals	CNOPS	Mutuals
Family allowances	CNSS,	CMR, RCAR	?

3.37 **Health Insurance:** In principle all Moroccans are eligible to receive health care through the ministry of Health facilities free of charge (if poor), or highly subsidized. However the health insurance system is not compulsory. Morocco has a voluntary scheme administered by multiple organizations, like mutual insurers for civil servants, certain categories of professionals, and public enterprises; and mutual and private health insurance for private sector enterprises. Some limited health benefits are also provided through the CNSS --*Caisse Nationale de Securite Sociale*, which is in charge of old age insurance for private sector employees (see the Health Section).

3.38 Pension System: The pension system is fragmented as well.³³ It is dominated by four funds (CMR, CNSS, RCAR, and CIMR) which cover about 97% of contributors and 94% of beneficiaries. Together they receive 87 percent of total revenues and total expenses. The consolidated analysis reveals a system's dependency ratio of 0.27, which is relatively low considering that it includes disabled and survivors; an annual surplus of 1,168 million DH (about 0.5% of GDP), and a total reserve fund representing about 9% of GDP. However closer inspection reveals a number of problems: the high fragmentation into different schemes which may affect labor mobility and increase administrative costs, the presence of perverse incentives embedded in some of these schemes rules, annual deficits or a very small reserve fund in some of the schemes, and the excessive generosity in light of the available resources and yet inadequate provision of benefits for most of the population.

- **Demographics structure is favorable.** Morocco has a very favorable demographic structure: its population is very young, with a dependency rate of 14 percent³⁴. However the proportion of elderly in the population is expected to grow fast and demographic dependency rate will double in 30 years, and together with Lebanon and Tunisia it will be the highest in the MENA region. A high dependency rate imposes a potential burden to pay-as-you-go plans finances, as it means there are potentially very few contributors per beneficiary.
- **Eligibility and Benefits.** Most of the pension schemes in Morocco offer very generous benefits given the available resources. However, the conditions for eligibility may affect the financial sustainability of the system in the long run. In particular the following issues should be considered: (i) underreporting of income because the benefits at retirement is based on the last years of earnings (one year in the case of CMR, 3 or 5 in the case of CNSS); (ii) high replacement rate: civil servants can achieve a replacement rate of 100 percent after 40 years of covered work and private sector workers can receive pensions up to 70 percent of pre-retirement income, which is still very high for international standards; (iii) lack of imposing age condition for retirement lead to early retirement: civil servant are entitled to unreduced pensions after 30 years of covered work independent of age and private sector workers are entitled to full pensions after only 15 years of covered work; (iv) minimum pension are too high (Daniel Check): for CMR the minimum pension is about 25% of the average salary for civil servants, and for private sector workers, the minimum pension represents about 20% of the average salary in manufacturing; and (v) low retirement age by international standards can jeopardize the financial sustainability of the system: mandatory retirement age for CNSS is 60 while CMR imposes no age requirement for civil servants and therefore they can retire very young as long as they have achieved the required years of covered work and therefore they can claim benefits for a longer period of time.
- **Coverage.** The pension schemes in Morocco encompass about 2,300,000 contributors. This represents around 45 percent of the urban labor force, a number relatively high for regional standards. However, Morocco has about 15 million people who are between 15 and 59 years of age,

³³ There are four main schemes: the already mentioned CNSS --*Caisse Nationale de Securite Sociale*-- for private sector employees, the CMR --*Caisse Marocaine de Retraite*-- for civil servants, the CIMR --*Caisse Interprofessionnelle Marocaine de Retraites*-- which is voluntary and a supplement to the benefits provided by CNSS, and the RCAR --*Regime Collectif d'Allocation de Retraite*-- for temporary workers in the public sector. Additionally, six public enterprises offer their own pension plans: *Bank Al-Magrib*, *Office Cherifien des Phosphates* (OCP), *Office d'Exploitation des Ports* (ODEP), *Office Nationale des Chemins de Fer* (ONCF), *Office Nationale d'Electricité* (ONE), and *Régie des Tabacs*

³⁴ The dependency rate used here is defined as the ratio of individuals aged 60 or more to those between 20 and 59 years of age.

and with a labor participation rate estimated at 30 percent, total labor force (including rural workers) would be about 8 millions. Therefore total covered population by the insurance system is about 28 percent, placing Morocco on the low side of coverage by regional standards. However the pension system has many weaknesses: (i) although the system is too generous, it does not seem to be providing adequate benefits to the beneficiaries: according to 1998/99 LSMS, although in urban areas only 8.6% of household heads (compared to 1.6% in rural areas) are receiving pension, over half of them are poor (4.7% compared to 0.6% in rural areas) and among poor inactive household heads in urban areas, about 19% are those receiving pensions; (ii) the system covers the formal sector, and even though workers in the agricultural sector are officially covered by CNSS, the number of active contributors from the rural sector is negligible: in 1998 there were about 1 million workers from urban areas contributing to CNSS, while there were only 30,000 rural workers contributing; and (iii) number of contributor in urban areas has increased by 36% during 1990-98, while the number of rural workers contributing to CNSS has remained constant³⁵.

- **Financial Status.** The financial situation of the pension system differs by schemes. Some schemes like RCAR have accumulated significant reserves and still experience annual surpluses. Other schemes like CNSS have been suffering from deficits during the last few years, but still have significant reserves. The civil service on the other hand has benefited from an increase in contribution rates as the base of contributors was aggressively expanded in the 1980s through the inclusion of groups that were not covered before and through a significant increase in the civil service work force. But that situation has reverted and the financial pressure will be felt in the near future, as the scheme's population ages and retires. The main issues regarding the long run financial equilibrium of the retirement schemes are: (i) long term financial viability is in danger: based on recent actuarial evaluations, reserve funds of CNSS and CIMR will be depleted very soon if no changes are implemented, and other smaller funds are already in financial distress as annual expenses are higher than revenues; (ii) real financial situation of the funds is hidden due to cross subsidization among benefits: some funds like CNSS are already experiencing annual deficits, however the family allowances, which has accumulated significant reserves, are used to cover the pension deficit. This means that the labor is additionally taxed for benefits that are inadequately distributed; (iii) given the existing benefit formula, pension contributions are low by international standards: about 10% contribution is allocated to CNSS for pension benefit. However increasing the contribution rates will increase the labor cost, may create additional labor market distortion and should not be considered in isolation from other social insurance benefits.
- **Administrative Issues.** There are two main issues: (i) fragmentation of the system (too many funds) lead to higher administrative costs and hinder labor mobility across sectors; therefore decision should be adopted concerning the harmonization of rules and the recognition of acquired rights in one scheme by others; (ii) high evasion and unclear mechanisms of control: the low level of coverage in Morocco has to do in part with the difficulty of including workers in the informal sector and in agriculture, but also with lax mechanisms to enforce contributions. It is unclear how the collection system works in the different schemes and how it can be improved : issues like computerization of records, unifying collection by a central agency, using a unique identification code for social insurance and tax purposes merit being considered.

³⁵ From CNSS's annual reports.

3.39 **Reform Options for Pensions.** There are three main areas of concern with respect to the pension system:

- ***Low coverage:*** This is a pressing problem in Morocco as no alternative safety nets are present for the old age. The international experience is not very helpful in this area. Recent reform episodes in countries where coverage was low have not resulted in significant increases in the number of contributors and in many cases coverage has decreased. This suggests that the issue of coverage may be related more to the structure of the economy than to the particular features of the pension system. The decision of remaining in the informal sector is clearly related to the characteristics of the pension system, but there are many other factors affecting this decision. One way to increase coverage is through a demogrant type program. This type of system offers a basic pension as a safety net to every individual who reaches a certain age. It is financed out of general revenues and can be means tested. The main problem with this type of system is its cost, as they can be very expensive. However in places with a tight family structure, such as Morocco, demogrant pensions have the advantage of providing a safety net not only to the elderly but to their families.
- ***Financial sustainability:*** The pension system is in no immediate danger of collapsing, but some of the schemes like CNSS are already experiencing annual deficits. Since there is no unique solution for this problem, the government should explore the feasibility of implementing parametric or structural reforms. Among the first, it is recommended to review eligibility rules, in particular the years of covered work requirement. Among the second type, the government could consider the creation of a second pillar to channel part of the retirement savings. The CIMR scheme already has a capitalization component, which could be used as a base for a more widespread individual account system. The individual account would act as a supplement to the main pay-as-you-go program. Actuarial projections for each of the schemes are being performed with assistance from the World Bank, and as a result an estimate of the cost of implementing different types of reforms will be obtained.
- ***Administrative efficiency:*** It is unknown at this moment how many workers do not contribute simply because the collection agencies are not efficient in enforcing the law. A more thorough study of the different areas in administration of pension schemes is required. This includes looking at how many agencies perform collection and if it would be more efficient to have one central collection agency, how is compliance verified, if tax authorities use the same identification number as pension authorities, if individuals participating in more than one scheme have a unique identification number, the role of banks and other financial institutions, etc.

E. Social Assistance Mechanisms

3.40 Social assistance programs in Morocco, costing over 2% of GDP, consist of three programs: (i) universal consumer food subsidies; (ii) public works employment programs administered by the *Promotion Nationale (PN)*; and (iii) in-kind welfare program for the needy administered by the *Entraide Nationale (EN)*. Despite the increase in poverty, budgetary cost of these programs has stayed almost constant in the last decade. Fourth-fifths of government expenditures on social assistance programs are devoted to consumer food subsidies, and only about one tenth go to public works. Overall they are marginally targeted to the poor and the vulnerable, they face efficiency problems and

are limited in scope and effectiveness: They mostly benefit the non-poor, leakages are high, and their coverage is modest compared to the existing number of poor and needy population.

Consumer Food Subsidies in Morocco³⁶

3.41 Consumer food subsidies were introduced in Morocco to stabilize prices of strategic goods with no explicit focus on the poor. In fact food subsidies in Morocco tend to compensate consumers for the incidence of high border tariffs, as well as to protect crop producers and industrial processors. Except for low-grade flour (FNBT)³⁷ which is available at an annual aggregate limit of 10 million quintals, cooking oil and sugar are universally available at subsidized prices in unlimited quantities to anyone who chose to buy them. Cost of food subsidies, which is the largest social assistance program, has reached DH 5.3 billion in 1999 (about 1.6% of GDP compared to 1.3% in 1990). Since July 1996, import quotas and licensing controls have been eliminated and the system is financed by (i) part of the custom revenues (equivalent tariffs) collected on soft wheat, sugar, oilseeds and their main derivatives; and (ii) direct budget contributions.

3.42 ***Distributional Incidence.*** Overall food subsidies in Morocco are not well-targeted to poor consumers and cannot be justified as a mean to redistribute income to the poor: only about 25% of the benefits reach the poor. However their welfare effect is stronger for the poor because subsidized products account for a higher proportion of the poor's expenditure and 40% of their caloric intake.

3.45 In absolute terms, a large portion of subsidy expenditures never reaches the consumer, and of the portion that does, only a small fraction reaches the poor. Incidence of subsidies falls disproportionately on the top quintile of the population, which receives 25 percent of total subsidy spending compared to only 15 percent for the bottom quintile.³⁸ (see Annex C).

3.46 Despite high degree of leakages, the subsidies in Morocco constitute an important transfer to the poor. Overall, the poor benefit 4 times more than the rich in relative terms from food subsidies. Similar to all food related transfers, all the three food subsidies in Morocco are progressive and as share of total per capita expenditures of the household they fall with increase in income. Moreover subsidized goods are more important to the diets of the poor than the non-poor, and the calories from subsidized goods represent a larger portion of total caloric intake by the poor compared to the rich.

3.47 ***Link between Consumer Food subsidies and Agriculture sector Policy.*** In practice, since consumer food subsidies serve to counteract import tariffs, a substantial share of subsidies constitute a transfer to producers rather than consumers, while distorting agricultural production pattern. With respect to flour, for example, on average about 50 percent of the subsidy goes to producers. For sugar and cooking oil, producer transfers amounted to at least 25 percent and 21 percent of total subsidy outlay on each, respectively.

³⁶ See "Consumer Food Subsidies in MENA", World Bank, December 1999 and "*Morocco: Reforms of Consumer Food Subsidies*", August 1999, Karim El Aynaoui.

³⁷ This high-extraction rate flour is known as farine nationale de blé tendre (FNBT).

³⁸ This incidence analysis is based on 1990/91 LSMS data. Once the data on detailed food expenditures products will be available for 1998/99 LSMS this incidence analysis will need to be updated. Given the increase in the number of poor during 1990s, it can be expected that a larger share of expenditures is reaching the poor.

3.48 At current international prices, nominal protection rates for wheat, sugar and oilseeds, and their major derivatives range from 84 % to 157 %. This substantial public transfers to the processing units create a distorted price and incentive structure. Consequently, competition is weak, inefficient processors and weak performers are maintained, and significant incentives for fraudulent behavior is promoted particularly for wheat subsidies (*FNBT*).

3.49 On the agricultural side, persistently high farm-gate prices for soft wheat, sugar crops and oilseeds generate significant economic distortions. Particularly in the case of soft wheat, it encourages substitution effects leading to (i) an undesirable extension of land sowed in soft wheat, contributing to soil erosion; (ii) miss-allocation of productive resources and increasing the variability of yields with no real positive effect on productivity; (iii) discouraging farmers from planting crops which are better suited to the climate. For oilseeds and sugar, the protection policy has been mainly driven by industrial transformation interests rather than by producer interests. The sugar processing sector consists of a number of uncompetitive refineries that survive behind protective barriers. The oilseed refining industry is even more concentrated, and primary refiner is well placed politically to maintain its favored position regardless of whether it procures its inputs from domestic producers or from imports.

3.50 ***Reforming Food subsidies for better targeting the poor.*** Moroccan Government is well aware that the food subsidy program coupled with the highly protectionist agricultural policy is costly and inefficient. Therefore various reform options are being assessed. Elimination of consumer food subsidies without addressing the agriculture policy and simultaneously reducing tariff protection would lead to an increase of all three consumer food prices and would result in an increase of poverty, particularly in rural areas. Therefore the best reform option in terms of lower cost and efficiency is (i) parallel reduction of tariff protection and subsidies on food products; and (ii) introduction of targeted assistance to low-income groups negatively affected by reduction of domestic protection and consumer food subsidies. This would allow to reallocate budgetary fund freed up by reduced subsidy expenditures to programs benefiting the poor (e.g., alphabetization, basic services in rural areas, public works programs and assistance programs targeted to the poor). In addition in the medium term it would allow strengthening the agricultural policy through focusing on crops where Morocco has a competitive advantage in order to ensure adequate income for rural population, including the poor.

- ***Savings obtain by the reform.*** Overall eliminating the subsidy program and cutting the custom tariffs would generate about DH 2.7 billions savings that could finance the economic and social costs of the transition period (nearly 3 times the investment budget of the Ministry of Health for fiscal year 2000) through financing targeted assistance.
- ***Producers, farmers and processors.*** Adjustment process will affect everyone to some extent, but mostly 35-40 000 sunflower producers, 60,000 farmers in regions with no comparative advantage for sugar crops, and nearly all cereal producers (about 1.5 millions farmers). In total about 2 millions farmers and agriculture workers would be affected by the tariff reduction. Compensatory measures could include (i) programs to help small land holders to convert to other and better suited alternatives; (ii) expansion of the existing labor intensive public works projects (PN) to assist low income household; (iii) basic infrastructure development in affected rural areas to increase access of vulnerable to basic social services (i.e., potable water, electricity, rural roads); and (iv) community development programs in remote rural areas. For oilseed, sunflower producers could receive a direct temporary payment to protect their revenue which will cost about DH 120 millions. In the milling activity and the sugar, increasing the competitive pressure would lead to a desirable

restructuring process. Within this context, the four sugar public producers should be immediately privatized when possible, and liquidated for some of them. Here, the State could finance the social costs following a liquidation.

- **Consumers.** Reduction of tariff protection would lead to domestic price decline which in turn would benefit consumers (domestic prices of vegetables oils, flour, would be reduced respectively by about 10 %, 14 %, and it would remain stable for sugar). Nevertheless the timing for the phasing out subsidies and choice of products to be eliminated at a more rapid pace should be guided by the impact of the removal of the subsidies on the poor and the share of existing subsidies accruing to the poor. Subsidies on *cooking oil* appear to be suitable for more aggressive elimination because of its lower contribution to total per capita expenditures nutritional intake of the poor, but for sugar and FNBT subsidies should be removed more gradually in light of their relatively larger contribution to the total expenditures and caloric acquisitions of the poor. Based on 1998/99 LSMS the incidence of eliminating subsidies on the poor need to be calculated once the disaggregated food information are available and introduction of targeted food programs, particularly for the poor children, should be considered and there costs estimated.

Public Works Program (PN)

3.51 The *Promotion Nationale* (PN), an autonomous agency under the Ministry of Interior, is responsible for creating labor-intensive public works to fight rural underemployment and to improve rural infrastructure. Overall PN, which uses force account procedures, has been an important source of temporary employment in rural areas, although more recently it has shifted resources towards jobs in urban areas. Although the 1998/99 LSMS does not allow to assess the relevance of PN on poverty, there is no doubt that this program help providing income support to the rural population, including the poor.

Strengths of PN.

- Provide employment in rural areas through productive investments utilizing to some extend labor intensive methods in the provision of works and services.
- Create high quality basic infrastructure work in low-income communities.
- Establish participatory development process to involve communities in the planning and execution of development projects of national and/or local interest.
- Provide appropriate and efficient mechanism to create temporary employment for underemployed, and particularly provide income-earning opportunities to the rural poor, although the urban programs are targeted to first job seekers who are not necessarily poor.
- During 1990-1999 the PN has created about 104 million person-days of employment (on average about 10.4 million person-days of employment per year or 40,000 person-year) for a total cost of DH 4.5 billion.³⁹ Average cost of job created per day is low, about 43DH (or \$4/day), though there are significant annual and regional variations in number of jobs created and funds allocated by various programs.

³⁹ During 1997-99, BAJ I project has created about 1.8 million person-days. The cost of person-day is estimated at DH85 (\$8.5). This cost is based on the assumption that 90% of the projects are rural roads with a coefficient of labor share of about 55% in average and the remaining 10% of the activities are infrastructure or hydraulic projects with an average labor share of 35%.

- Vast majority of the beneficiaries are unskilled workers, paid the agricultural minimum wage, or SMAG.
- Ability to respond rapidly to regional and national crisis when funds are available through creating temporary employment: PN has the administrative capacity of scaling up, particularly during droughts and inactive agricultural period, the labor intensive rural activities to generate temporary income for the underemployed and the poor.
- Low project cost compared to other similar activities: Unit cost of PN's projects (particularly for social infrastructure) is comparable with similar activities undertaken by other agencies while for rural roads PN's project unit cost is about half the cost of other agencies.
- Share of administering the program is very low by all standards: less than 6% of the investment cost compared to other countries social funds administrative cost which is about 10% of the total investment. Moreover it has an appropriate administration structure and almost present in each region.⁴⁰

Weaknesses in targeting and cost effectiveness.

- Jobs created are not always based on labor intensive mechanisms and the PN's original mandate has been diluted significantly during the last decade: almost half of the resources (particularly in *Chantiers Collectivités*) are spent on supporting local government wage payments to its administrators, rather than directly helping low-income communities through labor intensive activities.
- During 1990-99, about 40% of the total employment was created in traditional chantiers of PN (excluding the CCs with 50% share of labor in total costs). The labor intensity of jobs for traditional chantiers vary by type of *Chantier* and by regions.⁴¹ For rural roads the share of labor in total project cost is between 50% and 60%; for water and sewerage is between 40% and 50%; and for social infrastructure the share of labor is around 30% and 40%.
- Projects are not financially sustainable because once they are completed, beneficiaries are not responsible for their maintenance.
- Except in BAJ provinces, there is no explicit monitoring of the outcomes.

3.52 Options for Reforms. Despite its weaknesses, PN is currently the most efficient program targeted to the poor in Morocco. Given the potential that public-works employment programs have as an effective poverty reduction mechanism and particularly with the increase in poverty, in the future, the PN could:

- ***Provide large scale employment programs:*** PN should continue to play its role as an emergency agency providing large scale employment in areas hit by draughts and other natural disasters. This would require phasing out the *Chantiers Collectivités* to free funds as well as ensuring that labor intensive methods are enforced for generating labor intensive projects in most disadvantaged regions of the country. With the existing annual investment budget allocated to PN, amounting to DH 500 million, assuming daily wage at DH 37, labor share in project at 50% and assuming each person will work for 20 person days, the program could reach 340,000 workers. In case that the investment budget of the PN is doubled (DH 1 billion), the program could reach nearly 90% of the 5.3 million poor).

⁴⁰ The total staff of PN is around 1200 of which the higher level are around 476 people and about 70 people are military staff.

⁴¹ See audit report prepared for the BAJ I, March 2000.

- ***PN could act as an advisory to other Government agencies in selecting projects:*** projects should use labor intensive methods as well as being productive. But this would require effective coordination within Government.
- ***Involve private sector in PN programs:*** PN could also initiate to contract out projects to the private sector. Private contractors will be required to use labor intensive methods and local workers, similar to the method used by PN. This would allow the PN to focus its resources on rural works, specifically the labor intensive activities and on the most disadvantaged regions rather than scattering its resources throughout the country as it does today.

Welfare Program - Entraide Nationale (EN)

3.53 Entraide Nationale offers many different but small-scale services—literacy, basic training, shelters, pre-schooling etc.-- to disadvantaged women, children and youths (See box 5). However its performance is uneven, and programs cover only a tiny proportion (out of an estimated 5 million poor, of which some will need EN assistance, only about 80,000 people are reached by EN programs--1.6% of the poor). Administration is highly centralized and organizational capacities are weak; and both cost/performance monitoring and follow-up of outcomes are absent.

Box 5: Program of Entraide Nationale

- Basic literacy training to mothers and basic nutritional advice for their children (Centres Socio-Educatifs - CSE);
- Training centers for girls who are illiterate and/or drop-out from schools (Centres d'Education et du Travail - CET);
- Shelter for school age children and orphans (mainly boys) by subsidizing and providing staffing to local charities (Associations Musulmanes de Bienfaisance - AMB);
- Pre-school centers for children between ages 3 to 6 (garderies);
- Technical training (2 years) to needy children/basic education drop-outs (above ages 10-12 years) and orphans of the AMB (Centres de Formation Professionnelle - CFP);
- Subsidy/food transfers to handicapped associations and training for handicapped children.

3.54 EN programs are for the most part pro-poor, but the existing programs are loosely focused and try to achieve too many objectives. Its interventions are scattered over a large network of small offices with some 1003 centers throughout the country, covering about 80,000 beneficiaries.⁴² Although the budget for EN activities is modest (about 200 million DH or 0.1 percent of GDP in 1998), most of it is allocated to recurrent costs, mainly the salaries of about 6,300 persons of which about 1900 are permanent staff and 4400 are temporary (all the temporary staff are women and earn about 1,400 DH/month). The cost of programs by beneficiaries differs from one program to another, but in average it reach DH 2,500 per beneficiary per year.(see table 12 needs to be updated). This figure compared to DH 2000 per child per year in basic education and DH 8,000-12,000 per student per year in professional vocational training.

⁴² See " Morocco: Social Protection Reform - Entraide Nationale Component"; WB 1998.

**Table 21. staffing levels and nb. of beneficiaries in EN centers for 1999
(excluding administration)**

	¹ AMB	CFP	CET	CSE	Garderie	Handic. centers	TOTAL
Staff	634	437	3147	514	334	58	5124
Beneficiaries	49900	3678	18626	4800	6962	330 ⁴³	83966
Ben/staff 1/		8.4	5.9	9.3	20.8	5.7	
No of Establishments	457	53	482	235	199	3	1429
Cost of program/benef.(DH/year) 1/	1530	5550	5720	3170	1965		2500

Note: 1/ The number of beneficiaries per EN staff is an unrealistic measure for AMBs since there are many other staff financed by the other sources of AMB funding.

Strengths of EN

- EN has an important mandate to assist the poorest of the poor. In fact, it is the only public agency in the country which tries to reach the poor, albeit only a small portion (1.6%) of the estimated 5 million poor. At present, there is no social security system that provides cash transfers to the lowest stratum of society.
- Although EN is reaching a small portion of the poor, it has centers located all over the country (and particularly in the South), potentially enabling it to reach many remote areas;
- To some extent the self-targeting schemes are already in place due to the location of the centers and the type of services provided which are not attractive to the non-poor: although there is no information on the socio-economic characteristics of the beneficiaries, and the LSMS has no information on the beneficiaries of EN, on the basis of the location of the centers and the kind and quality of services provided, it can be assumed that most services are self-targeted. It is estimated that about 70 to 80% of EN's budget reaches poor or low-income groups. In addition to the direct beneficiaries, a large part of the EN's non-permanent staff belong to low income groups.
- EN is a public agency and because of its legal status it has more flexibility in managing and implementing services than other line ministries;
- EN has a tradition of private support and has a sound experience of partnership arrangements with other organizations (particularly in the case of the AMBs centers).

Weaknesses of EN.

- The administration is highly centralized, allowing little chance of local decision-making initiatives and targeting of services. The Délégué (regional coordinator at the provincial level for EN programs) has no power to make decisions about personnel nor activities.
- Given the lack of a comprehensive social strategy at the other line ministries (i.e., health, education, vocational training, etc.), EN has been called upon to deal with issues that nobody else in the Government wishes to deal with. As a result, EN's activities have become scattered, with little focus, and some activities are less well targeted to the poor (e.g., "garderies" and CFP);
- There is no system for monitoring the cost of each program, the performance of the centers (e.g., AMB, CET) and there is no follow-up on the outcomes (i.e., insertion rates of the CFP, number of girls taught to read and write);

- Some staff and infrastructure are not really used or are under-used (particularly in the case of CSE)⁴⁴ and because of its small investment budget, EN's infrastructure is dilapidated (i.e., AMB, CSE, CET);
- Staffing levels are considerably higher than needed for the number of beneficiaries and staff are not dynamic, have little creativity, are not flexible, and are difficult to be re-trained (24% of EN staff are illiterate women): The EN's recurrent expenditures are high compared to its number of beneficiaries (about 80% of its budget is spent on staff salaries), and some centers are generously overstaffed. Staffing levels in EN have changed very little over the last 8 years, and yet the number of beneficiaries has dropped by about 90%--mainly due to the cessation of food aid (i.e., before 1992, when food-aid distribution in the CSE existed, the clientele of EN reached about 750,000 beneficiaries, but today it reaches only 80,000).

3.55 *Reform Options.* There is a strong and demonstrated need for an efficient assistance system and given that there is no other public institutions in Morocco that have direct responsibility for helping the poor a major restructuring of EN is necessary. To improve the efficiency of EN, since 1999, Government has launched a two-year restructuring effort piloted in four provinces to introduce fundamental changes in service delivery. Objective of this initiation is to test the impact of the changes and examine restructuring alternatives. Several concrete measures have already been taken, including: (i) a detailed assessment of the existing legal framework within which EN operates to ensure consistency with the goals and principles of the restructuring program; (ii) selection of the pilot provinces on the basis of a well-defined criteria; (iii) an assessment of the effectiveness of EN's Vocational Training Centers (CFPs) has been completed and eligible students have been transferred to the vocational training offices (OFPPT's); and (iv) partnerships with other agencies have been strengthened (particularly with *Foundation Mohamed V*) and use of outsourcing, notably to local NGOs, in activity implementation has been increasing.

3.56 However the results of this restructuring in pilot provinces are not yet available. Moreover, an extensive restructuring to reach a larger share of the poor and deliver fewer, more focused programs more efficiently has not yet been implemented. Although the budget allocation to EN is clearly too small for the State to carry out minimum social protection objectives, it is not advisable to increase EN resources before evaluating the results of the ongoing restructuring in pilot provinces.

3.57 As explained in detailed evaluation of EN program prepared in 1998, underlying goals of the restructuring program should enable EN to: (i) better identify target groups and their needs; (ii) better focus its activities, make them more cost-effective, and increase their beneficiary coverage; and (iii) strengthen its institutional capacity to monitor the impact of its activities. To achieve these objectives, EN needs to:

- Become more accountable to the beneficiaries and strengthen its institutional capacity to monitor the impact of its programs;
- Work in partnership with other agencies in order to improve the efficiency of its services;
- Continue to carry out a few narrowly defined activities and contract out some activities to other public/private agencies and local NGOs (CFP and garderies);
- Introduce major reforms in management and operation: EN's administration would need to decentralize considerably--coupled with putting in place clear monitoring and auditing mechanisms

⁴⁴ Capacity utilization rates are especially low at CSE (1.5%) and CET (31%) compared to AMB (71%) and CFP (80%).

to ensure that objectives are being met. Among institutional reforms to be considered are (i) relocation of some centers; (ii) redesigning management responsibilities and changes in roles of reporting lines at different levels; (iii) reducing some of the over-staffing through redeployments, transfers to contracted agencies that will begin to carry out the service, some lay-offs, and early retirement; (iv) decentralization (responsibility, accountability, and resources to the délégué level); (v) establishing performance targets and a monitoring system; (vi) introducing management information systems; (vii) reviewing partnership arrangements; (viii) re-training at all levels; and (ix) computerization.
