

First Draft

## **A Preliminary Report on the Multiple Indicator Cluster Survey II in the Syrian Arab Republic**

by G. H. Peiris, UNICEF Consultant

### **1. INTRODUCTION**

#### **1.1 . Terms of Reference**

In accordance with specifications laid down in the contractual agreement between the Consultant and the UNICEF office in Damascus, the Consultant is required to submit to the UNICEF office on or before 17 May 2001 the first draft of a report on the dis-aggregated data generated by the second Multiple Indicator Cluster Survey (MICS 2) conducted in the year 2000 by the Central Bureau of Statistics (CBS) of the Syrian Arab Republic in collaboration with UNICEF. The draft report is expected to contain an analysis of the MICS 2 survey data with the objective of providing a basis for policy formulation. It is meant for internal discussion.

#### **1.2. Basic Documentation**

##### **1.2.1. MICS 2 DRAFT REPORT**

The present report is based primarily on a mimeographed document titled *MICS II: Final Draft*, prepared by the CBS and made available to the Consultant on 7 May 2001. This document makes it evident that the MICS 2 is part and parcel of the process of monitoring and evaluation of the enhanced efforts towards elevating the quality of life of the children of Syria, launched in the early 1990s in conformity with the declaration made at the conclusion of the United Nations' World Summit for Children in 1990. The CBS document could thus be considered as providing a comprehensive "end-of-the decade" retrospect of the progress made through such efforts.

##### **1.2.2. BASELINE STUDIES: MICS 1 and PAPCHILD 1993**

The data generated by MICS 2 need to be examined against the backdrop of information contained in earlier reports on the theme of child and maternal health and welfare in Syria. From the viewpoint of the present study, the publication titled *Multiple Indicator Cluster Survey in the Syrian Arab Republic*, Damascus, CBS/UNICEF, 1996 (referred to hereafter as MICS 1) is one of the most important among such documents. One of the principal objectives of MICS 1 was that of "augmenting **baseline data** made available by the 1993 PAPCHILD survey,<sup>1</sup> particularly in the areas of water and sanitation, health facilities, salt iodization, oral hydration therapy, diarrhoeal disease, breast feeding and basic education" (MICS 1: 2). These two surveys appear to have been followed by several others of more restricted scope, and by processes of regular monitoring undertaken by state agencies such as the Ministry of Health. <sup>2</sup>

---

1. CBS & League of Arab States (1994) *Maternal and Child Health Survey in the Syrian Arab Republic*, Pan-Arabic Project for Child Development, Damascus

2. The related unpublished documents made use of in the preparation of the present consultancy report include: Higher Committee for Childhood, Syrian Arab Republic (2000) *National End of the Decade Report on Follow-up of the World Declaration issues at the Conclusion of the World Summit for Children*, mimeographed, Damascus; and an unpublished paper titled *Women and Children in Syria: An Overview of their Situation and Priority Needs*, August 1999, Damascus presented at an internal workshop by Scott Lyon. Among the unpublished UNICEF documents used are UNICEF (2000) *First Call for Children: World Declaration and a Plan of Action from the World summit for Children*, New York; Executive Director UNICEF (2000) *Technical Guidelines for the Preparation of the Statistical Appendix*, New York; and *The Master Plan of Operations: Country Programme of Corporation, 2002 – 2006*, UNICEF Office, Damascus

### **1.2.3. OTHER DATA SOURCES**

The other sources used in the present report include several recent publications by United Nations' agencies such as UNFPA 1995 <sup>3</sup>, ESCWA 1999 <sup>4</sup>, and UN Resident Coordinator, 2000 <sup>5</sup>; statistical and other official documents of the Syrian government <sup>6</sup>; and a review report on Syria published by a non-government organization.<sup>7</sup>

### **1.2.4. SUPPLEMENTARY GUIDELINES**

Several considerations that emerged from the discussions which the Consultant has had with officials of UNICEF in Amman and Damascus, other UN agencies, and with those of the CBS, since the commencement of his assignment have also served as guidelines of the present study design. Foremost among such considerations are the constraints regarding the availability of the MICS data at the desired level of detailed dis-aggregation.

## **1.3. Objective, Methodology and Scope of the MICS 2**

### **1.3.1. OBJECTIVE**

The principal objective of MICS 2, as stated in the draft report is to provide up- to-date information, through a nationally representative survey of households, women and children, to be used for assessing the situation of children and women in Syria at the end of the decade (1990s), furnishing data needed both for monitoring the country's progress towards the goals established at the United Nations' World Summit for Children as well as for providing the information base for future action. The Survey was specially focused on estimating, accurately and at sub-national levels of detail, the prevailing state of infant and child mortality; education and literacy; water supply and sanitation; nutritional status of children; immunization of children against infections diseases; promotion of child health through dietary means; prevention, management and treatment of morbidity conditions among children; access to MCH and other health-related services; contraceptive prevalence and family planning; safeguards against the spread of HIV/AIDS; and several other aspects of children's welfare such as care for orphans, prevention of child abuse (the employment of minors), and the due registration of births.

- 
3. (1995) *Syrian Arab Republic: Programme Review and Strategy Development Report*, No. 50
  4. Economic and Social Commission for West Asia (1999) *Survey of Economic and Social Developments in the ESCWA Region, 1998-1999*, New York
  5. UN Resident Coordinator (2000) *Common Country Assessment:: Syrian Arab Republic*, Damascus
  6. Central Statistical Bureau (annual series) *Statistical Abstract*, Office of the Prime Minister, Damascus.
  7. The Economist Intelligence Unit (2000) *Syria: Country Report*, London

### 1.3.2. *METHODOLOGY (a brief comment)*

The MICS 2, based as it was on a sample of 10,000 households drawn in accordance with a multi-stage random sampling procedure, could be described as a large-scale investigation which extended over all parts of Syria, providing due representation to the entire population of the country. The first stage of sampling had involved the identification of one-thousand clusters (i.e. survey localities), each with a population of 100 households. The number of clusters identified in each Governorate was determined on the basis of its ratio in the total population of Syria. In the second stage, 10 households were randomly drawn from the one-hundred households in each of the selected clusters. There could, thus, be no dispute regarding the validity of this sampling procedure. The size of the sample is also statistically acceptable, and conforms to the related norms. For instance, assuming an overall average household size of 5.5 persons, it could be estimated on the basis of the information on the survey methodology furnished in the draft report that the sample was approximately 0.29% of the population., with a range of variation in the corresponding percentages of between *the Governorates* from 0.24% to 0.36%.

On the subject of what statisticians refer to euphemistically as “non-sampling errors”, it should be noted that various errors and distortions in the procedures of supply, recording and the processing of the data could, indeed, have occurred on a survey of this magnitude. Some of the discrepant tabulations found in the draft report could well be attributable to this type of error. It may also be recapitulated that another survey was conducted alongside M2, in the same sample of clusters, with overlapping (but larger) samples of household within the clusters, covering simultaneously an aggregate of 25,000 households, by the same field investigators.<sup>8</sup> Under such circumstances the propensity for error could obviously be greater than in a less tedious process of data gathering. There are, in addition, the computational and typographical errors (many of which could easily be identified as such) which are likely to be rectified prior to the publication of the report.

Regarding ‘methodology’, there is a much more important issue which warrants the careful attention of the authorities concerned. This relates to the fact that the mass of data so laboriously gathered from a large and well designed sample have not been processed in dis-aggregated form at the level of the Governorate and the District, allegedly due to a belief that, at these sub-national levels, the survey sample is not large enough to be adequately representative. The Consultant wishes to respectfully submit that this is a mistaken notion, and that, it is only in the case of a very few criteria which the MICS 2 has sought to quantify, that the **sample size**, *per se*, could be considered a legitimate constraint on sub-national dis-aggregation in the processing of the survey data down to the level of the District. Needless to stress, such dis-aggregation, if done, would be invaluable to processes of policy formulation and planning. It should be pointed out that the ‘Regions’ presently demarcated are large and, in several vitally important aspects, heterogeneous, geographical entities, and hence, *intra-regional diversities in criteria such as poverty, deprivation and want in their diverse manifestations are likely to be of greater salience to current policy concerns than the differences that prevail between Regions.* <sup>9</sup> The latter – the broad inter-Regional difference - in the Syrian context is, indeed, “general knowledge” which hardly demands re-discovery through intensive surveys.

---

8. The rationale of having a sample of 10,000 in one survey and of 25,000 in another to provide representation for the same population unless the latter survey was a probe into phenomena that have a lower incidence is not quite clear. The other survey has been referred to as a ‘Multiple Purpose Survey’ (MICS 2 Final Draft, Chapter 1, Section 2) .

9. Fragments of evidence in support of this contention will be presented in the section of this report devoted to policy perspectives.

### 1.3.2. SCOPE OF MICS 2

The tabulations presented in this section are intended to provide a brief overview of the scope of the report of the MICS 2. This overview indicates, *inter alia*, both the range of issues investigated as well as the nature of the information that could be obtained from the report as it stands at present.

The 'Final Draft Report' on the Multiple Indicator Cluster Survey conducted in 2000 (MICS 2) contains 100 statistical tables almost all of which could be placed (with alterations in the sequence they appear in the draft report) in one or another of the following categories.

#### 1. Basic Indicators

- 1.1. Current status of infant, child and maternal mortality
- 1.2. Current status of literacy and primary education

#### 2. Facilities for Health Care and Sanitation

- 2.1. Access to safe drinking water
- 2.2. Waste disposal
- 2.3. Ease of access to health care outlets
- 2.4. Utilization of maternal and child health (MCH) services

#### 3. Morbidity Conditions among Children and Mothers

- 3.1. Incidence of common diseases
- 3.2. Malnutrition and other specific nutritional deficiencies

#### 4. Management/Treatment of Morbidity Conditions and Preventive Practices

#### 5. Knowledge and Practices pertaining to Promotion of Health

#### 6. Fertility and Contraceptive Prevalence

#### 7. Family Life and Social Environment of Children

The nature of data made available in the MICS 2 draft report on each of the foregoing categories is summarized below. A few inconsequential tabulations have been ignored. The following abbreviations and symbols have been used in this summary.

**In all tabulations the asterik (\*) denotes "data available"**

### 1. BASIC INDICATORS

Criterion	National average	Urban/Rural Avrgs. For Syria	Region I D'scus	Region 2 Internal	Region 3 Coastal	Region 4 N'thern	Region 5 Eastern	Region 6 S'thern	Male/Female Avrgs. For Syria	Class' d by Age Avrgs. For Syria	Remarks
Infant Mortality	*	*							*	*	
Child Mortality	*	*							*	*	
Maternal Mort'	*	*	*		*			*	-		
Primary School Enrolment	*	*	*	*	*	*	*	*	*	*	
Primary School Dropout Rate	*								*	-	
Adult Literacy	*								*	*	

## 2. FACILITIES FOR HEALTH AND SANITATION

Criterion	National Average	Urban /Rural	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Male/F male	Class' d by Age	Remarks/ Additional Data
Access to safe drinking water	*	*	*	*	*	*	*	*			"safe drinking water" has not been defined, but data on type of source are given
Distance to water source		*	*	*	*	*	*	*			
Sanitary waste disposal	*	*	*	*	*	*	*	*			Data on different methods of disposal are given
Distance to health facility	*	*	*	*	*	*	*	*			3 km and 5 km have been used as ref. points. Data are classified by type of facility
Use of MCH services	*	*	*	*	*	*	*	*			The 17 tables on this aspect deal with use/non-use, regularity of use, immunization, and advisory services

## 3. INCIDENCE OF MALNUTRITION, MORBIDITY CONDITIONS AMONG CHILDREN, NATAL AND NEONATAL PROBLEMS

Criterion	National Average	Urban /Rural	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Male/F emale	Class' d by Age	Remarks/Additional Data
Anthropometric Measurements of the incidence of Malnutrition	*	*	*	*	*	*	*	*	*	*	Related national data have also been classified by mother's Educational status
Low Weight at Birth	*										+ Data from a survey in 1993 (smaller sample)
Diarrhoea	*	*	*	*	*	*	*	*	*	*	Restricted sample
Cough and Cold	*	*	*	*	*	*	*	*	*		Restricted sample
Live births, still births, and miscarriages	*	*								*	Restricted sample



## 6. FERTILITY AND CONTRACEPTIVE PREVALENCE

Criterion	National average	Urban/Rural	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Male/Female	Class'd by Age	Remarks/Additional Data
Total Fertility Rate (TFR)	*	*	*	*	*	*	*	*			Fertility data have been derived from another survey
Adolescent Fertility Rate	*	*	*	*	*	*	*	*			Data on 15 to 19 age group
Age-specific Fertility Rates (some age groups only)	*										
Current contraceptive use	*	*	*	*	*	*	*	*			Data on 15 to 49 females
Contraceptive method	*	*	*	*	*	*	*	*			Data on 15 to 49 females

## 7. FAMILY LIFE AND SOCIAL ENVIRONMENT OF CHILDREN

Criterion	National average	Urban/Rural	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Male/Female	Class'd by Age	Remarks/Additional Data
Parents residing together	*	*	*	*	*	*	*	*			
Reasons for parental separation	*	*	*	*	*	*	*	*			
Child birth registration	*										
Employment of minors	*										'minor' defined as 6-11 years. The estimate is derived from a 1998 survey

### General Comments on the Scope of the MICS 2 Draft Report

1. Within the restricted framework of dis-aggregation that has been adopted in the preparation of the report, it contains invaluable sets of data on several aspects of child health and welfare on some of which there has hitherto been an information lacuna. The most important among these are: (a) those pertaining to 'basic facilities for health and sanitation', (b) anthropometric measurements on nutritional levels, (c) the incidence of commonly occurring diseases among children, and (d) the management of such morbidity conditions. In certain others - notably, aspects of promotive health care, and social conditions of children, and, above all, on the 'basic indicators' - the information furnished could easily have been more comprehensive. Some of the existing data gaps appear inexplicable, except in terms of hasty or cursory preparation of the 'Final Draft'.
2. The sectoral dis-aggregations found in the PAPCHILD 1993 and MICS 1 survey reports have selectively recognized 'peri-urban' as constituting a distinct spatial category which has socio-economic salience, especially in the peripheries of cities such as Damascus and Aleppo that have recently witnessed surges of immigration. The abandonment of this categorization in the MICS 2 draft report has meant that its sectoral data are not compatible with those of the earlier surveys
3. What must once again be highlighted is the absence of more detailed spatial dis-aggregations, at least down to the level of governorates. Curiously, Table 47 (on "mothers who ever heard of ORS"), stands apart from the others in providing related information on the 14 governorates.

## CHAPTER 2

### Achievements as Reflected in the MICS 2 Data

Despite the constraints on access to information referred to in the previous chapter of this report, the MICS 2 data as released through the CBS draft report, when considered together with data extracted from earlier survey reports such as PAPCHILD 1993, MICS 1 1996 and other official documents, could be used for assessing certain aspects of the progress that has been made since the early and/or mid- 1990s through the efforts at improving the quality of life of the children in Syria. However, as the tabulations and the appended notes presented in this chapter show, even on several basic criteria, an urban/rural differentiation is the only form of dis-aggregation of national-level data obtainable **in mutually compatible form** from the different sources. In respect of a few criteria, the sources also contain compatible sets of regionally dis-aggregated data (i.e. numerical values on the six regions into which the national data are divided). In the overall situation of data availability, however, these constitute the exceptions, in the sense that the reports of various surveys conducted in the 1990s cannot be matched with the majority of dis-aggregated data sets presented in the MICS 2 draft report. What this fact implies is, first, that data presently at our disposal do not permit the tracing of the progress made during the 1990s in the different parts of the country; and, second, that (subject to qualifications concerning quality and detail of the MICS 2 data to which reference has already been made), much of the MICS 2 data could serve as useful baseline measurements for future assessments and evaluations provided the data are processed and preserved.

#### 2.1 COMPARISONS OF THE BASIC INDICATORS

##### 2.1.1. Mortality Rates

The only available time-series spatial dis-aggregations on Mortality Rates are the following:

	<b>1990</b>	<b>1993</b>	<b>1995</b>	<b>1996</b>	<b>1998</b>	<b>2000</b>
	estimates based on hospital records	PAPCHILD Survey	Basic Safe Delivery Survey	MICS 1	Ministry of Health	MICS 2, Draft Report
<b>Infant Mortality Rate (IMR)</b>						
(per 1000 live births)						
National Average	-	32.7	-	-	28.0	24.0
Urban Sector	-	31.9	-	-	-	23.0*
Rural Sector	-	37.2	-	-	-	28.0*
<b>Child Mortality Rate (CMR)</b>						
(under 5 yr deaths per 1000 live births)						
National Average	-	41.7	-	-	32.0	29.0
Urban Sector	-	39.4	-	-	-	28.0*
Rural Sector	-	43.9	-	-	-	34.0*
<b>Maternal Mortality Rate (MMR)</b>						
(per 100,000 live births)						
National Average	143	107	90	-	95.0	71.0 (?)
Urban Sector	-					71.0
Rural	-					69.0

\* estimates given in an 'Interim Report' on MICS 2, but not in the 'Final Draft'



## COMMENTS

- (1) The fragments of data presented above show emphatically enough that there has been a continuing trend of declining mortality rates during the 1990s – **one which, in respect of the IMR and the CMR, approximates the UN target.**
- (2) There are no indications regarding any change in the marked urban-rural difference in the **Infant Mortality** Rate reported in 1993. Other sets of MICS 2 data pertaining to the incidence of morbidity conditions suggest that the sectoral difference is likely to have persisted over the 1990s decade.
- (3) The available data suggest that it is in the reduction of **Maternal Mortality** that the most tangible advances have been made. It has been reported (UNFPA, 1995:8) that the MMR in 1980 was 280. If this estimate could be considered authentic, the 1990s MMR trend represents a continuation of an earlier one – not, however, at an *accelerated* pace. **It also seems that the lowering of the MMR during the 1990s has fallen short of the UN target of a 50% decline over the decade.** The MMR in the urban sector being higher than in the rural sector as reported in the draft report is contrary to the expected norms, and could well be a “non-sampling error”. The short-period oscillations of the MMR reflected in the estimates for late 1990s is also a source of minor discomfort regarding the authenticity of the 1998 estimates.

### 2.1.2. Adult Literacy

On Adult Literacy the only time-series dis-aggregations available are those pertaining to Male-Female differences.

	1981 (UNESCO estimates)	1994	2000 (MICS 2)
<b>Adult Literacy Rate</b> (15 years +)			
National Average	61.5	77.0	90.3
Male	78.0	87.0	93.0
Female	45.0	67.0	73.7

#### COMMENTS:

- (1) Assuming the authenticity of these estimates, it appears that Syria has made major strides during the past two decades in increasing literacy. The advances made in Female Literacy are, indeed, almost spectacular.
- (2) As in the case of the Maternal Mortality Rate, there is no discernible *acceleration* in the rate of increase of the Female Literacy Rate during the 1990s. **However, the rate which prevailed at the end of the decade had surpassed the UN prescribed target.**

### 2.1.3. Primary School Enrolment

	1990 (Higher Committee for Childhood, Prime Minister's Office, Damascus)	2000 (MICS 2)
<b>Enrolment Rate</b> (number enrolled as % of the 6 – 11 year age group)		
National Average	80.0	98.7
Urban Sector		99.1
Rural Sector		98.3
Male		98.9
Female		98.5
Damascus Region		99.7
Internal Region		99.0
Coastal Region		99.2
Northern Region		97.9
Eastern Region		98.1
Southern Region		99.8

## COMMENTS

- (1) Primary school enrolment rate is high and, as reported in MICS 2, its sectoral, male-female, and regional variations are slight. That there is much diversity *within* some of the regions is shown in a UNICEF document which cites recent data from the Ministry of Education that show enrolment rates of 88.1% and 97.6%, respectively, for males and females, in the Governorate of Deir-Ezzar of the Eastern Region where the MICS 2 has reported an overall enrolment rate of 98.1%. If these values have any authenticity, they must surely mean that other parts of the region has very high enrolment rates.
- (b) Two further comments are necessary here. The first is that, even at the primary level, school attendance and retention rates (according to MICS 2 data, the enrolment rate declines to 87% by Grade 5) leave much space for improvement; and second, in certain rural localities, a wide gap has been reported to exist (see the sources cited by Scot Lyon in the paper referred to above in Chapter 1, fn 2) between enrolment and actual school attendance, especially in the case of girls.

## 2.2. FACILITIES FOR HEALTH CARE AND SANITATION

### 2.2.1. Access to Sources of Water

(percent of sample households obtaining water from specified source)

Region	Pipe-Borne		Well/Spring		Tanker		Other	
	1996	2000	1996	2000	1996	2000	1996	2000
Damascus	76.7	99.7	6.6	0.3	16.3	0	0.4	0
Internal	73.8	90.5	13.6	7.3	4.4	2.1	8.2	0.1
Coastal	73.0	81.3	13.5	16.1	2.2	2.6	11.3	0
Northern	74.0	80.8	21.3	13.2	1.0	5.3	3.7	0.7
Eastern	58.0	69.5	14.0	13.0	16.0	16.7	12.0	0.8
Southern	94.0	86.7	0	5.8	0.7	7.4	5.3	0.1

Sources: MICS 1 and 2

Notes: Classification frames in the sources have been modified to achieve mutual compatibility

## COMMENTS

- (1) Of the different sets of data on domestic water supply generated by the two surveys, this is the only set which is mutually comparable.
- (2) Both survey reports imply that water from pipe-borne systems, wells (protected or unprotected) and springs provide "safe water". The reports do not furnish an explicit definition of "safe water".
- (3) This tabulation leaves little room to doubt that there have been significant advances in the country as a whole in regard to the supply of water for domestic use since the commencement of special efforts as prescribed in the UN World Summit for Children.
- (4) There are, however, significant variations between the Regions in respect of the scale of such improvements, with the Damascus region outranking the others. The fact that the Eastern Region has lagged behind could be explained in part with reference to its environmental conditions and settlement pattern.
- (5) The survey data on sectoral differences in the improvements achieved, though not strictly comparable (due to a difference in the related definitions), suggest that significant improvements in water supply conditions have occurred in both urban as well rural areas.

### 2.2.2. Domestic Waste Disposal

(percentage of households with latrines connected to a piped sewage)

	1996	2000
Damascus	88.8	99.1
Internal	63.5	76.6
Coastal	65.2	63.2
Northern	68.3	72.2
Eastern	43.3	43.0
Southern	52.0	76.6

## COMMENTS:

- (1) There is substantial variation among the Regions in regard to improvements of this aspect of waste disposal.
- (2) It is of interest that the Internal and Southern Regions have recorded the largest percentage improvements.
- (3) The other sets of survey data on 'waste disposal' are not comparable. However, it is possible to infer from the sectoral estimates on the availability of piped sewage (as tabulated below) that significant improvements have been witnessed in the rural sectors of the Internal and Southern Regions.

### 2.2.3. Availability of a Health Service Facility within 5 km of Dwelling

(percentage of households located less than 5 km from the specified service outlet)

	HEALTH CENTRE		PUBLIC HOSPITAL		PRIVATE HOSPITAL		PRIVATE PHYSICIAN		PHARMACY	
	1996	2000	1996	2000	1996	2000	1996	2000	1996	2000
<b>Damascus</b>	90.0	95.4	66.0	78.6	97.0	75.4	70.0	98.9	98.0	97.6
<b>Internal</b>	75.0	81.8	28.0	41.5	77.0	50.7	33.0	82.0	70.0	79.7
<b>Coastal</b>	82.0	86.4	43.0	35.9	90.0	40.0	44.0	79.0	74.0	80.4
<b>Northern</b>	80.0	71.7	45.0	32.7	86.0	44.5	55.0	72.8	81.0	74.5
<b>Eastern</b>	43.0	62.2	22.0	31.6	44.0	25.7	16.0	67.7	34.0	68.4
<b>Southern</b>	93.0	92.7	12.0	29.3	92.0	35.8	12.0	93.0	87.0	90.3

**Sources:** MICS 1 and 2

**Notes:** The estimates for 1996 have been extracted from a graphical representation and must hence be regarded as approximations.

Urban-Rural dis-aggregations from earlier surveys are not comparable to those of MICS 2

## COMMENTS:

- (1) The most prominent feature seen in this set of data is the sharp decline between 1996 and 2000 in the values recorded under 'Private Hospital', and the corresponding increase in the values recorded under 'Private Physician'. This could probably be explained in terms of a lack of precision in the use of the related terminology in the recording and/or the processing of the data.
- (2) A feature which warrants special attention is the pronounced decline between 1996 and 2000 portrayed in the values recorded on the NORTHERN REGION under both categories of state sector health care outlets – 'Health Centres' and 'Public Hospitals'. This should be considered against the backdrop of the decline recorded under both 'Private Hospitals' as well as 'Pharmacies' in this same region. Why the trends in the Northern Region have been different from those recorded in the other regions has not been explained.
- (3) The overall increase in the number of state sector health service outlets reflected in this tabulation is in conformity with the trend borne out by health sector data in other official publications (i.e. *The Statistical Abstract, 2000*) which show, *inter alia*, that between 1994 and 1999 the number of hospitals (government and private) in the country increased from 273 to 375 (37%), and the number of Health Centres from 210 to 238 (13%).
- (4) It should be emphasized that these data, even more than those examined above, probably camouflage the wide diversities that actually exists within some of the Regions, glimpses of which could be obtained from several writings to which reference is made later in this report.

## 2.2.4. Utilization of Primary Health Service Facilities

The two main aspects relating to this topic - the utilization of Maternal and Child Health (MCH) facilities, and the immunization of children against infectious diseases – have been dealt with in considerable detail by the MICS 2, resulting in the production of several sets of data some of which, as noted in the previous chapter, have been dis-aggregated in sectoral and regional classification frames. Unfortunately, for the reason that the earlier surveys have been far more restricted in scope in inquiring into these topics, there are only a few sets of data which could be used for the purpose of measuring progress during the 1990s. Even in the case of these three topics, dis-aggregated analysis has to remain confined to the rural-urban dichotomy. However, in order to trace the progress made in the utilization of Primary Health Services during the 1990s, we have supplemented the MICS 2 data with estimates obtained from the monitoring records of the Ministry of Health.

### Utilization of Pre-Natal Services (pregnancy monitoring)

(the number of women pregnant during a reference period prior to the survey\* who had obtained the services of a health care outlet at least once during their pregnancy as a percentage of the total of such pregnant women during the period)

URBAN SECTOR		RURAL SECTOR		NATIONAL	
average		average		average	
1993	2000	1993	2000	1993	2000
64.3	82.2	37.3	62.2	50.8	71.2

The reference period was 5 years in the 1993 survey and 2 years in the 2000 survey

### Pre-Natal Immunization against Tetanus

(the number of tetanus immunized pregnant women in the sample at the time of the survey as a percentage of the total number of pregnant women in the sample at the time of the survey)

URBAN SECTOR		RURAL SECTOR		NATIONAL	
average		average		average	
1993	2000	1993	2000	1993	2000
17.1	77.8	20.1	79.2	18.9	78.5

### Neo-Natal Protection of Infants against Tetanus

According to reports prepared by the Ministry of Health based on returns furnished health service outlets (which could be considered fairly comprehensive in coverage respect of institutional deliveries), the overall national coverage of infants against NT had increased from about 44.0% in 1993 to 87.9% in 1999. The related Governorate data are as follows:

(percent of infants protected against NT)			
Tartous	96%	Edleb	87%
Hama	93%	Homs	85%
Swida	91%	Aleppo	84%
Lattakia	90%	Raqqua	82%
Dara'a	90%	Dier Ezore	81%
Damascus Rural	89%	Qunitetera	76%
Damascus	88%	Al Hassaka	75%

### Place of Child Delivery

(the percentage of live births during a reference period prior to the survey falling into each type of place of delivery)

	URBAN SECTOR		RURAL SECTOR		NATIONAL	
	1993	2000	1993	2000	1993	2000
Public Hospital	18.0	25.0	15.1	24.1	16.5	24.5
Private Hospital	21.7	30.9	5.0	8.0	13.3	18.3
Health Centre	0.3	0	0	0	0.2	0
Private Clinic	5.1	5.7	5.0	7.7	5.0	6.8
Home	53.8	38.1	73.8	59.6	63.9	49.9
Other	1.1	0.3	1.1	0.6	1.1	0.5

## Immunization of Infants

Child immunization against Tuberculosis, Diphtheria, Pertussis, Tetanus, Poliomyelitis, and Measles is an aspect of 'utilization of MCH facilities' which, despite its crucial importance, cannot be analyzed from the perspective of change over time with the PAPCHILD and MICS data. This aspect of health care, however, is regularly monitored by the **Ministry of Health**, and the tabulation presented below is based on data extracted from the ministry's annual surveillance reports.

**Immunization Coverage of Infants: National Estimates**  
(percent of live births)

Selected Years	BCG	OPV – DPT			MEASLES	
		1	2	3	1	2
1982	37	44	28	15	22	
1985	53	60	43	29	27	
1988	87	83	70	59	52	
1990	92	95	90	89	84	
1993	91	98	92	90	86	16
1996	100	100	100	96	95	83
1999	100	100	99	97	97	94

### COMMENTS:

- (1) The tabulations presented above on PHC services point to a continuing trend of increase in the utilization of the PHC services throughout at least from about the early 1980
- (2) The data on pre-natal services recorded at MICS2, when compared with PAPCHILD 1993 estimates, point to massive increase in the popularity of such services - a rate of increase between 1993 and 2000 which is difficult to reconcile with some of the other data sets.
- (3) The immunization data, extracted as they have been from Health Ministry reports that are compiled with returns furnished by health service outlets, may not be totally comprehensive in coverage. Assuming that whatever shortfall the Ministry data contains has not caused a significant distortion, the fact that there could be a slight discordance in the two sets of data – i.e. the MICS 2 data on pre-natal immunization and the Ministry data on neo-natal immunization - should be taken note of. The former set of data shows a higher rate of coverage in the rural sector than in the urban sector. The Governorate data from the latter source (which, of course, relate to immunization of infants against tetanus) reflects a substantially lower coverage rate in the predominantly rural areas of the country, especially those of the north and the east.
- (4) The comparative "backwardness" of the northern and eastern governorates in respect of neo-tetanus immunization coverage of infants is a feature of thematic importance to the present review.
- (5) A trend of increasing popularity of hospitals for child births probably indicates an increasing popular awareness of the need for deliveries to take place under professional care. The corresponding decline in the proportion of "home deliveries" substantiates this change in perceptions. It could be taken as an indication of an increasing trend of demand for this service.

### 3. MORBIDITY CONDITIONS AMONG CHILDREN

Once again, only a few sets of data placed in this category could be used for an assessment of spatial changes at sub-national levels. Those from the different sources that are mutually compatible in respect of definitions and classifications frames are presented below.

#### 3.1. Incidence of Diarrhoea

( percent of children of less than 5 years of age afflicted with diarrhoea within the two-week period preceding the survey )

REGION	1996 (MICS 1)	2000 (MICS 2)
<b>Damascus</b>	6.4	8.4
<b>Internal</b>	7.9	9.9
<b>Coastal</b>	6.4	7.6
<b>Northern</b>	3.7	10.0
<b>Eastern</b>	21.1	6.0
<b>Southern</b>	?	4.7
<b>SYRIA</b>	<b>8.6 *</b>	<b>7.8</b>
SECTOR		
<b>Urban</b>	16.7	8.8
<b>Rural</b>	14.9	7.1

Source: MICS 1 and 2 Survey Reports

#### COMMENTS

- (1) Both survey reports state that the surveys were conducted in winter, a season during which the incidence of diarrhoea is lower than in summer, and hence, the survey data probably deflate the norms in respect of the incidence of diarrhoea.
- (2) Considered in the light of the fact that the normal incidence of diarrhoea is likely to higher than that indicated by these data, two features could be deemed highly significant - namely, (a) even in winter (the season of low diarrhoeal morbidity, its incidence in most parts of the country is relatively high (Note here that 8% of the children in any population being afflicted by diarrhoea over any two-week period means that, statistically (on the average), a child suffers this condition about 3 times in a given year. Such a rate, according to expert opinion, is high even by 'Third World' standards); and (b) in certain regions (for example, Damascus, Internal, and Coastal) that had experienced over the period covered by the data significant improvements in aspects of sanitation and hygiene (safe water, waste disposal etc.), the recorded incidence of diarrhoea, contrary to what one would expect, had increased. Such increases could, of course, be attributed (conjecturally) to lack of precision in the related estimates.

#### 3.2. Respiratory Infections

(the number of children in the sample who were suffering from respiratory ailments during the two week prior to the date of the survey as a peof all children in the sample)

Urban Sector		Rural Sector		National Average	
1993	2000	1993	2000	1993	2000
13.1	23.3	9.0	18.2	11.0	20.4

- NOTE: (a) There could be an incongruity in the two sets of data for the reason that, whereas the 1993 survey report refers to "acute respiratory infections", the MICS 2 draft report refers to "cough and cold".
- (b) The 'Regionally dis-aggregated data furnished in the MICS 2 report indicate only minor variation between regions – a range of between 19.3% in the Northern Region to 28.8% in Damascus.

## COMMENTS

- (1) Since the incidence of respiratory ailments in children could fluctuate widely in the short term, depending factors such as variations in weather, there are no firm conclusions that could be drawn from this set of data.
- (2) The higher incidence of respiratory ailments in 2000 than in 1993, and in urban areas than in rural areas, could however be taken note of on account of the possibility that it could be symptomatic of a trend caused by increasing air pollution.

### 3.3. Malnutrition among Children

It is on malnutrition (determined on the basis of conventional anthropometric criteria) that we find some of the most comprehensive and mutually compatible data. These are presented below.

(all values are based on measurements of children under 5 years of age)

#### (a) Weight-for-Age (Acute Malnutrition)

Percentage of Children in Standard Deviations of:

REGION	- 2 to - 3% (moderate)		above - 3% (severe)		Total above - 2%	
	1996	2000	1996	2000	1996	2000
Damascus	12.3	3.3	2.7	0.4	15.0	3.7
Internal	7.4	6.3	1.6	0.8	9.0	7.1
Coastal	2.9	3.4	0	0.2	2.9	3.6
Northern	10.9	5.3	3.4	1.8	14.3	7.1
Eastern	7.4	9.1	11.9	2.0	19.3	11.1
Southern	11.5	4.2	1.0	0.9	12.5	5.1
<b>National Avr.</b>	<b>9.2</b>	<b>5.6</b>	<b>3.7</b>	<b>1.3</b>	<b>1.9</b>	<b>6.1</b>
<b>Urban</b>	*	4.6	*	1.0	*	5.6
<b>Rural</b>	*	6.4	*	1.5	*	7.9
<b>Male</b>	10.0	6.0	3.9	1.4	13.9	7.4
<b>Female</b>	8.3	5.2	3.4	1.2	11.7	6.4

#### (b) Height-for-Age (Chronic Malnutrition)

Percentage of Children in Standard Deviations of:

REGION	- 2 to - 3% (moderate)		above - 3% (severe)		Total above - 2%	
	1996	2000	1996	2000	1996	2000
Damascus	10.1	0.7	12.5	5.5	22.6	6.2
Internal	8.7	11.8	6.9	11.2	15.6	23.0
Coastal	10.7	6.3	4.9	1.6	15.6	7.9
Northern	12.5	12.7	8.3	8.7	20.8	21.4
Eastern	9.8	10.0	16.4	10.7	26.2	20.7
Southern	14.5	10.5	12.0	4.9	26.5	15.4
<b>National Avr.</b>	<b>10.7</b>	<b>10.6</b>	<b>10.1</b>	<b>8.7</b>	<b>20.8</b>	<b>19.3</b>
<b>Urban Sector</b>	*	8.8	*	6.3	*	15.1
<b>Rural Sector</b>	*	13.0	*	9.0	*	21.0
<b>Male</b>	11.5	10.5	11.6	8.3	23.1	18.8
<b>Female</b>	9.8	10.5	8.5	7.3	18.3	17.8

NOTE: \* Sectoral Data on 1996 in this set of tables is based on a classification frame which identifies a 'peri-urban' sector which makes the data incompatible with those on the year 2000.

(c) **Weight-for-Height**

percentage of children in standard deviations of:

REGION	- 2 to - 3		above - 3		Total above - 2	
	1996	2000	1996	2000	1996	2000
Damascus	7.4	3.7	1.2	1.0	8.6	4.7
Internal	4.5	2.1	2.1	0.3	6.6	2.4
Coastal	1.5	0.9	0.5	0.7	2.0	1.6
Northern	7.4	2.6	3.3	0.6	10.7	3.2
Eastern	8.7	5.3	5.3	1.7	14.0	7.0
Southern	5.0	2.6	2.0	0.9	7.0	3.5
<b>National Avr.</b>	<b>6.2</b>	<b>3.0</b>	<b>2.5</b>	<b>0.8</b>	<b>8.7</b>	<b>3.8</b>
<b>Urban Sector</b>	*	3.2	*	0.9	*	4.1
<b>Rural Sector</b>	*	2.8	*	0.8	*	3.6
<b>Male</b>	6.5	3.2	2.9	0.9	9.4	4.1
<b>Female</b>	5.9	2.8	2.1	0.8	8.0	3.6

**COMMENTS**

- (1) It has been observed, on the basis of empirical evidence, that measurements of malnutrition could contain a fairly wide margin of error. This observation is of salience to any attempt at interpretation of these tables.
- (2) The overall reduction of **Acute Malnutrition** (by 50% over a 5-year period) is undoubtedly quite impressive and surpasses the goals prescribed in the UN declaration. The related 'Regional' trends, however, are erratic, and are featured by wide disparities. For instance, Damascus which may be placed at one extreme of the range of diversity, has recorded a decline from 15% to less than 4%. At the other extreme is the Eastern Region where the reported decline of acute malnutrition, in both its 'moderate' and 'severe' manifestations, has been slight.
- (3) **Chronic Malnutrition** is usually a product of prolonged nutritional deficiencies. In this context, what the national averages show (a decline from 20.8% to 19.3% over the 5-year span) is in conformity with what one would expect. What appears unusual are the major changes reported from some of the regions – for example, the decline of Chronic Malnutrition in its 'moderate' form from 10.1% to 0.7% in Damascus, or the upsurge seen in the values on 'severe' Chronic Malnutrition from 6.9% to 11.2% in the Internal Region.
- (4) The absence of a significant **male-female difference** in the levels of malnutrition, and the marginally *lower* incidence of malnutrition among females, are features of special interest which stand in contrast to what has been observed in many 'Third World' situations.
- (5) **Overall advances** notwithstanding, the malnutrition rates – those of Chronic Malnutrition, in particular - in the arid and semi-arid Northern, Interior and Eastern Regions – are high for a nation that has, for long, prioritized equity and social welfare in its development goals, and has recently joined the ranks of 'Middle Income' countries.
- (6) The mutual incompatibility of the two sets of **sectoral data** has prevented us from making an urban-rural comparison of malnutrition trends. The general impression conveyed by the related data is that, over the this period, the sectoral differences in the incidence of malnutrition have remained inconsequential.

insert data on trends in other morbidity conditions (source Ministry of Health)



## 4. MANAGEMENT/TREATMENT OF MORBIDITY CONDITIONS

### 4.1. Management of Diarrhoea

Throughout the recent decades there has been a concerted global effort to popularize the use of Oral Rehydration Salt (ORS) in the management of diarrhoeal conditions among children. The priority which Syria has placed on this health care technique is reflective, on the one hand, of the importance of diarrhoea in childhood morbidity and mortality in the country, and, on the other, of the effectiveness of ORS as a remedy in the treatment of the large majority of diarrhoeal patients. In accordance with this priority, the MICS surveys have devoted detailed attention to generating data on a variety of aspects concerning the availability and use of ORS. Only a few of the available data sets, however, could be used in identifying regionally dis-aggregated changes over time.

#### (a) Current Use of ORS as a Remedy for Diarrhoea in Children

(The totals on the basis of which these percentages have been calculated are the number of respondents who children below 5 years had suffered diarrhoeal diseases during the two weeks preceding the surveys)

Treatment Provided	Damascus		Internal		Coastal		Northern		Eastern		Southern	
	1996	2000	1996	2000	1996	2000	1996	2000	1996	2000	1996	2000
ORS only	0	10.0	12.5	2.5	18.7	14.0	4.2	15.6	1.7	17.6	40.0	10.7
ORS + home remedies	2.4	6.0	8.9	7.7	0	4.6	0	4.5	14.7	0	10.0	1.3
ORS + medicine	36.6	54.0	28.6	60.0	18.7	55.8	8.3	66.3	44.0	36.2	30.0	40.0
<b>All ORS users as % of total respondents</b>	<b>39.0</b>	<b>70.0</b>	<b>50.0</b>	<b>70.0</b>	<b>37.4</b>	<b>74.4</b>	<b>12.5</b>	<b>86.4</b>	<b>60.4</b>	<b>53.8</b>	<b>70.0</b>	<b>52.0</b>

Notes: Other respondents (i.e. those who did not use ORS) were placed in categories of 'medicine only', 'home remedies only', 'medicine and home remedies' or 'did not provide treatment'. They have been omitted from this table because of the classificatory incompatibility of the related data.

Sources: MICS 1 and 2

#### COMMENTS

- (1) These data indicate emphatically enough that the efforts to popularize the use of Oral Rehydration Salts (ORS) in the treatment of diarrhoea in children have had a highly commendable measure of success in 4 of the 6 constituent regions of the country.
- (2) The decline in the use of ORS reported from the Eastern Region could be seen as decidedly unfavourable in its impact when considered in the light of the fact that there has been in the region only a marginal increase (from 26.7% to 29.7%) in the use of 'medicine only', and 'home remedies only' (from 8.6% to 9.9%) in treating diarrhoeal children in that part of the country (Table 6a in the report on MICS 1, and Table 32 in MICS 2).
- (3) In the Southern Region, there has been an increase in the 'use of medicine only' (from 10.0% to 24.0%) which has occurred alongside the reported decline of ORS use.
- (4) In 1996 a fairly large proportion of parents were reported to have not given any treatment when the children were afflicted with diarrhoea. Quite strangely, in the Northern Region, this category accounted for as much as 33.3 % of the respondents. Redeemingly, the corresponding percentage had dropped steeply by 2000 to a of 2.6%

**(b) Feeding of Diarrhoeal Children: Parental Responses**

(These percentages have been computed on the basis of the responses furnished by whose children had been afflicted with diarrhoeas during the two weeks preceding the survey)

	<b>Increased / Maintained the usual amount:</b>				<b>Reduced the usual amount:</b>			
	of liquid food		of solid food		of liquid food		of solid food	
	<b>1996</b>	<b>2000</b>	<b>1996</b>	<b>2000</b>	<b>1996</b>	<b>2000</b>	<b>1996</b>	<b>2000</b>
Damascus	90.2	34.7	80.5	75.5	9.8	65.3	19.5	24.5
Internal	96.4	50.0	76.8	73.3	3.6	50.0	23.2	26.7
Coastal	93.8	32.5	62.5	69.8	6.2	67.5	37.5	30.2
Northern	91.7	43.7	75.0	68.1	8.3	56.3	25.0	31.9
Eastern	83.7	31.8	50.0	78.8	16.3	68.2	50.0	21.2
Southern	90.0	34.3	80.0	86.3	10.0	65.7	20.0	13.7

**COMMENTS**

(1) There is some doubt here about whether the survey questions on this subject was properly formulated if the objective of the questions was to ascertain whether the parental response is correct. It should hence be noted that, according to expert medical opinion, when a child is afflicted by diarrhoea (involving watery bowel movement), the dehydration which could ensue should be compensated for by giving the child an increased amount of liquids (along with ORS and prescribed medicines if any), along with easily digestible foods so as to prevent rapid nutritional deterioration (Note: Paediatrics texts do not recommend increased amounts of *any* solid food.). In advisory services on the home management of diarrhoea, the attempt has universally been to the idea among parents that dehydration should be prevented by administering more liquid.

(2) These data, if considered authentic, could be regarded as reflecting a deterioration in diarrhoeal patient management. It is seen that, in all Regions, there had been a substantial increase (2000 estimates as compared with 1996 estimates) in the percentage of parents who **reduce** the amount of liquids given. If this is not a computational error, it should certainly warrant careful scrutiny.

**(c) Source of Treatment for Diarrhoea**

Percentage distribution of external treatment sought for children afflicted with diarrhoea, classified by Type of Service Outlet

TYPE OF OUTLET	DAMASCUS		INTERNAL		COASTAL		NORTHERN		EASTERN		SOUTHERN	
	<b>1996</b>	<b>2000</b>	<b>1996</b>	<b>2000</b>	<b>1996</b>	<b>2000</b>	<b>1996</b>	<b>2000</b>	<b>1996</b>	<b>2000</b>	<b>1996</b>	<b>2000</b>
Government Hospital	4.9	10.4	0	4.4	6.3	2.4	0	8.0	14.6	3.4	0	4.0
Health Centre (government)	9.8	16.7	14.3	4.4	12.5	21.4	0	11.8	5.2	10.2	10.0	13.3
Private Hospital	0	4.7	0	1.8	0	0	0	2.5	2.6	3.4	0	4.0
Private Doctor	58.5	52.1	44.6	77.0	31.2	59.5	29.2	67.6	45.7	37.5	40.0	61.4
Pharmacy	4.9	0	10.7	7.1	0	7.2	20.8	11.8	6.9	25.0	17.3	10.9
No Treatment Sought	21.9	14.6	30.4	5.3	50.0	7.1	50.0	24.9	25.0	17.1	40.0	17.3

## COMMENTS:

- (1) Among the diverse factors that determine decision-making in this aspect of diarrhoeal patient management, parental perception of the seriousness of the attack, relative ease of access to the different type of facility available, parental means, and the client perception of the quality of services provided at the different (optional) service outlets could be considered the most important. On account of this wide variety of determinants, there is a high degree of stochasticity in the pattern portrayed by the tabulation.
- (2) It is of interest that the 'private doctor' has continued to rank foremost among the different type of service outlet, increasing in comparative importance between 1996 and 2000 in all but two regions. The significance of this is reinforced when the related data are placed against the backdrop of an earlier tabulation (2.2.3., above) which showed that in terms of 'distance from dwelling', government-run Health Centres offer more or less the same ease of access as the 'Private doctor'.
- (3) There has been a marginal increase in the popularity of government health service outlets during the period covered by the survey.
- (4) The sharp drop in the 'no treatment sought' category in all Regions could also be regarded as an achievement unless diarrhoea was a more than typical serious condition of morbidity among children (an outbreak of, say, dysentery or typhoid) at the time of the MICS 2 investigations.

## 5. KNOWLEDGE AND PRACTICES IN HEALTH PROMOTION

### 5.1. Breast Feeding

Data compatible with the sets presented in the draft report on MICS 2 are not available in the earlier survey reports

Current Breast-feeding status' data in the Draft Report on MICS 2 (2000), which are based on responses from women who had given birth to children during the two-years preceding the survey do not indicate the presence of a wide range of variation either between Regions or between Rural and Urban areas in respect of this criterion. The same absence of wide inter-regional or inter-sectoral diversity is reflected in the MICS 1 (1996) data on the percentage of 'women who had given birth to a child during the two years preceding the survey, currently breast-feeding the youngest child'.

### 5.2. Consumption of Iodized Salt

None of the data sets from the different surveys are mutually compatible. The data from the two MICS suggest, however, that it is in the Northern and Eastern Regions that the lowest rates of awareness of the value of iodized salt and the lowest rates of actual consumption of iodized salt have been reported. The Sectoral difference in this respect also appear significant. The MICS 1 (1996) estimated that, in the Urban Sector ('Peri-Urban' areas were considered in that survey as constituting a distinct sector) 92.9% of the sample of "families" were "aware of iodized salt", and 63.6% of the "aware families" were actually using iodized salt. In the Rural Sector the corresponding values recorded in 1996 were 63.0% and 52.6%. work out to a consumption rate of iodized salt 59.8% in the Urban Sector, and 33.1% in the Rural Sector. The MICS 2 (2000) estimates are based on the testing of salt which was being used in 98.4% of the sample. In the Urban Sector, 70.7%, and in the rural Sector, 47.6% of the households had iodized salt. It thus seems clear that, while the sectoral disparity has persisted, there have been a marked increases in both sectors in the use of iodized salt between 1996 and 2000.

### 5.3. Other Aspects Relating to Health Promotion

The MICS Draft Report contains several sets of information on Women's Knowledge on matters that pertain to the preservation and promotion of their own health as well as that of the family. These include knowledge on HIV/AIDS, water- and food-borne diseases, needs of personal cleanliness, safeguards against accidents, the nutritional qualities of different types of food, and the advantages of breast-feeding. Why some of these data sets were considered as having any utility value is not quite clear. In any event, the data as presently available on most of these aspects cannot be used for meaningful dis-aggregated analysis. Since the earlier surveys have not extended over these aspects, a probe into their temporal trends is also not feasible.

## CHAPTER 3

### POLICY PERSPECTIVES

My main objective in this section of the report is to highlight, albeit tentatively, a series of issues pertaining child and maternal health and welfare in Syria which have emerge from the analyses of the MICS 2 data in the previous chapter. Devising specific policy-related proposals is a task which could be attempted only after further study extending over the wider context of policy formulation and not confined to.

#### 3.1. Matching Achievements with Goals

The data from MICS 2 have already been used in several official documents for the purpose of assessing the extent to which Syria's achievements in child and maternal health match the goals prescribed in the UN declaration of 1990.<sup>1</sup> Accordingly, such an exercise need not be repeated here except by way of recapitulating the essentials and, in the process, clarifying certain minor discrepancies found in the existing analyses (See Table 3.1. below). It appears from these studies that, in respect of the sentinel criteria such as those concerning mortality rates, primary education and literacy, the UN targets have been approximated, achieved or even surpassed.

Even in some of the other indicators of the improvement of facilities for good health and sanitation, the set targets appear to have been reached or approximated. For instance, in providing access to safe drinking water the increase in the proportion of the recipient population from 83% to 93% has meant that the achievement has been only 7% short of the target. Again, in urban areas, the improved sewage facilities had reached about 98% of the expected coverage by 2000. Likewise, the targeted minimum levels of MCH services had been reached well before the end of the century. In population planning and the lowering of fertility rates, the progress during the recent past is in conformity with the declared commitments.

#### 3.1. Global Child Development Targets and Syrian Achievements

INDICATOR	UN Target	Base Year Estimate	MICS 2 Estimate for 2000	MICS 2 Estimate as % of UN Target
Infant Mortality Rate	reduce by one-third or to 50/1000	33 (1990)	24	<b>92</b>
Child Mortality Rate	reduce by one-third or to 70/1000	44 (1990)	29	<b>103</b>
Maternal Mortality Rate	reduce by 50%	143 (1990)	71	<b>100</b>
Primary School Enrolment	100% of 6-11 yr. population	83 (1990)	89	<b>99</b>
Acute Child Malnutrition	reduce by 50%	12.9 (1996) (above -2 SD)	6.9% (above -2SD)	<b>1996-2000 rate of decline exceeds target rate</b>
Chronic Child Malnutrition	reduce by 50%	20.8 (1996) (above -2 SD)	19.3% (above -2SD)	<b>estimates dubious</b> (see 3..3. b, above)
Main Immunizations (TB, DPT, Polio)	90% coverage	90% (1990)	98.0%	<b>109</b>

While not minimizing the significance of this impressive record of achievement, it is pertinent to recall that the global targets were set taking into consideration a wide variety of situations including those encountered in the large majority of low-income developing countries in which possibilities and prospects were far less promising than those of Syria. It must be remembered that, by the early 1990s Syria, apart from being in the upper end of the “low income economies”, had already experienced the benefits of almost two decades of development policies that had persistently placed high priority on social welfare, and by the time of the World Summit for Children, the country was conspicuously ahead of the large majority of the others at similar levels of per capita national income in matters concerning the health and welfare of its population.

Nevertheless, from the perspectives of an evaluation undertaken mainly for the purpose of consolidating and improving upon the advances made in the past, there are certain questions that must necessarily be asked. One of these is whether there has been a genuine acceleration of the rates of progress which could be regarded commensurate with the intensified government efforts. Another is whether the improvements reflected in the national-level data have reached most if not all segments of the population and brought tangible benefits to the less privileged segments thereof.

#### ***Was there an acceleration in the rate of progress?***

It is obvious that a conclusive answer to this question cannot be found in the Draft Report of the MICS 2. But what data from the draft report, taken in conjunction with data from other official sources, point to is that, ***while in respect of certain criteria there has, indeed, been an acceleration of the gains, in others, despite the intensified efforts, what could be discerned is no more than a continuation of an earlier momentum – the extension of the trends which commenced well before the 1990s – sometimes at a slower pace than before.***

This, it should be made clear, does not constitute a criticism. It is being highlighted for the reason that it is a replication of a phenomenon of which there have been innumerable experiences in development efforts – one which has been modeled in the well known ‘S-Curve’ initially promulgated by Haegerstraand in his theoretical postulate on ‘Diffusion’.<sup>10</sup> The essence of this conceptualization is that, when once a process of diffusion – of, say, an idea, an innovation, or the use of a technique or a commodity – is set in motion in a community, following a slow rate of spread in its early stages, it accelerates and, then, beyond a particular stage, has a tendency to slow down. This slowing down at the late stages of the diffusion process, regardless of whether it is caused by supply-related causes or demand-related causes, represents special constraints encountered at the upper end of the ‘S-Curve’ which invariably necessitates different strategies and impulses for the process to engulf the “late adopters” of the community. ***The salience of this model to the present discussion on policy issues is that, at the time of the World Summit for Children, on several fundamental aspects of child and maternal health and welfare, Syria was already at the upper end of the related processes of diffusion.*** What is even more relevant is that, as the data generated by MICS 2 indicate, in most matters concerning this aspect of the country’s development and social welfare efforts, policy should be designed in the context of the challenges at the later stages of the diffusion.

### ***Have the benefits reached all segments of the population?***

Note: (17 May 2001, 11.55 a.m.)

The comments I make on this issue are based on the sets of data furnished in the MICS 2 Draft Report.

The data situation has changed somewhat today as a result of the discussion with the CBS officials in course of which they indicated to us that additional (and more detailed data) from MICS 2 will be made available to us in instalments, starting next Sunday (20 May 2001)

A probe into this aspect of the progress made in the 1990s would necessitate more detailed data than presently at our disposal. However, the data on the 6 Regions presented in the MICS 2 draft report provide glimpses of the related trends of the recent past. As noted in the previous chapter in the course of our comments on several spheres of development, the data provide confirmation to what could be regarded as a well known fact – namely, that many parts of the Eastern Region and some of the densely populated urban peripheries of the Northern Region have tended to lag behind in vital concerns such as access to primary health services and facilities for primary education, and nutrition levels, in some of which there are indications of widening disparities. The urban-rural differences have also tended to persist in most parts of the country, once again, more prominently at the lower levels of the spatial hierarchy than they would appear in statistical data on national or macro-regional levels. What appears far more important as a planning concern is the existence of relatively small localities with people in a state of deprivation and want (a phenomenon even encountered in most of the upper income countries, one should hasten to add). The related evidence is probably not difficult to find even in published writings. For instance, in the limited time span which was available for the preparation of the present report, the Consultant came across several references to the governorates of Deir Ezzar and Raqqa being referred to as being backward in respect of several criteria that bear upon health and welfare. To link this with our earlier submissions on the relevance of the diffusion model to an understanding of this phenomenon - for reasons of supply or of demand, these areas could be perceived as consisting of large numbers of “late adopters” for the promotion of whose welfare strategies different from those hitherto pursued are likely to be necessary.

### **3.2. Broadcasting versus Targeting of Development Effort**