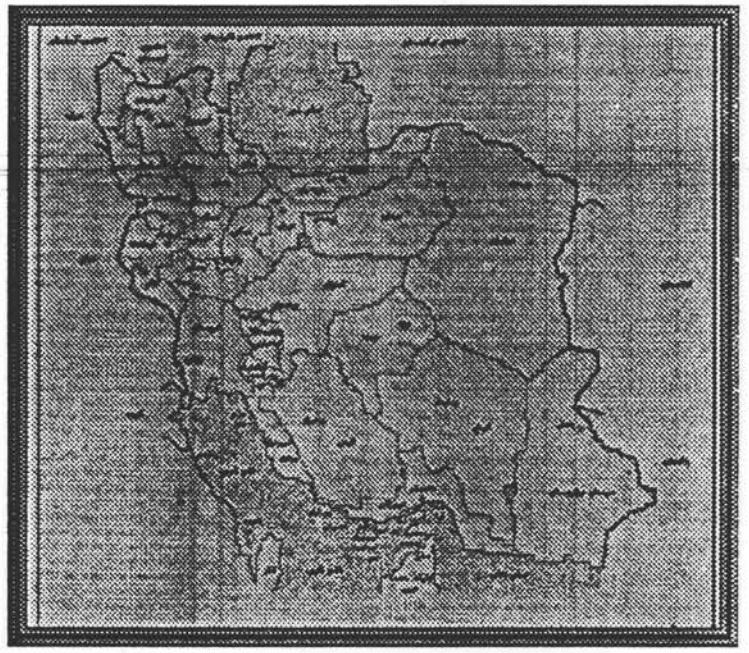
CRING 96.

In the Name of GOD
The Compassionate, The Merciful

Ministry of Health And Medical Education
Under Secretary for Public Health
Of the Islamic Republic of Iran

UNICEF Tehran

# The Multiple Health Indicator Cluster Survey of The Islamic Republic of Iran 23-27 September 1995



Undertaken as a Joint Project by Ministry of Health and Medical Education & UNICEF Tehran

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ISLAMIC REPUBLIC OF IRAN

## Fact Sheet: Basic, Mid-Decade & Decade Goal Indicators

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**BASIC INDICATORS:**

| | |
|---|---|
| GNP/ Capita (1994) | US$ 1,033 |
| GDP (1992) | US$ 110.3 billion |
| Total Population (1994) | 65.8 million *[SOWC '96]* |
| <1 Population (1994) | 1.4 million (2% of total) |
| <5 Population (1994) | 10.4 million (16% of total) |
| 5-9 Population | 8.747 million (13% of total) |
| <16 Population (1994) | 30.4 million (46% of total) |
| IMR, U5MR, MMR | (see Decade Goal Indicators overleaf) |
| Annual Popn. Growth Rate (1995) | 1.75% * |
| % of Popn. Urbanized | 58% |
| Av. Growth Rate of Urban Popn. | 4.9% |
| Total Fertility Rate | 3.3 * |

*(Sources: SOWC 1996 ; Human Devt. Rpt., 1995; (*)=Family Planning Cluster Survey,May '95/ MOH&ME)*

## 1995 MID-DECADE GOAL INDICATORS:

**Goal 1:** **Raising Immunization Coverage to at least 80%**

| | | |
|---|---|---|
| OPV3: | 97% | *(1995; MICS Rpt/ MOH&ME EPI Cluster Survey'95)* |
| Measles: | 95% | *(1995; MICS Rpt/ MOH&ME EPI Cluster Survey'95)* |
| TT2: | 82% | *(1995; MICS Rpt/ MOH&ME EPI Cluster Survey'95)* |

**Goal 2:** **Elimination of Neonatal Tetanus**

NNT cases 10 *(1995; WHO/UNICEF Reg.Directors' Meeting, Alex., Feb.,'96)*

**Goal 3:** **Eradication of Polio in Key Areas**

Polio Cases 90 *(1995; WHO/UNICEF Poliofax, Feb.'96)*

**Goal 4:** **Reduction in Measles Deaths & Cases**

| | | |
|---|---|---|
| Measles Cases | 287 | *(1995; WHO/UNICEF Reg.Directors' Meeting, Alex., Feb.,'96)* |
| Measles Deaths | 0 | *(1994; CRING '95: MOH&ME)* |

**Goal 5:** **Virtual Elimination of Vitamin A Deficiency**

VAD problem does not exist *(1994; UNICEF HQ & Tehran MOH&ME)*

Routine Vit. A distribution to U2's (Vit.A&D drops) through the PHC system.

**Goal 6:** **Universal Salt Iodization**

| | | |
|---|---|---|
| Iodized Salt Availability | 70% | *(1994; Nutrition Section, UNICEF HQ)* |
| Iodized Salt Consumption T/U/R | 82%/ 87%/ 76% | *(1995; MICS Rpt./ MOH&ME)* |

**Goal 7:** **Increasing ORT use to 80% to Control Diarrhoea**

| | | |
|---|---|---|
| ORT Use | 69.1% | *(1995; MICS Rpt./ MICS 1995)* |
| ORS Use | 80% | *(CRING '95/ WHO/CDD '94 unpublished report)* |

**Goal 8:** **Eradication of Guinea-Worm Disease (Dracunculiasis)**

Dracunculiasis has been eradicated in Iran

**Goal 9:** **BFHI implementation in key major hospitals/ maternity facilities & banning BMS**

BMS banned

| | | |
|---|---|---|
| # Hospitals targeted for 1995 | 300 | *(1995; CRING '95/ MOHME- confirmed)* |
| # Hospitals certified as BFH | 250 | *(1995; MICS Rpt./ MOH&ME)* |

**Goal 10:** **Ratification of CRC by all countries**

CRC was ratified/deposited by Iran in July of 1994

Monitoring of CRC Implementation planned

**Goal 11:** **Reduction of Malnutrition**

Underweight (moderate & severe) 16% *(1992; CRING '95: " The Hlth Sitn. of mothers & children in Iran" )*

| | |
|---|---|
| Net Enrolment Rate T/M/F | 96% /99%/ 93% * *(1994; MICS Rpt./ MOE)* |
| Gross Enrolment Rate T/M/F | 110/ 117/ 105 * *(1994; MICS Rpt./ MOE)* |
| Proportion reaching Grade 5 | 90% *(1992; Annex A, '93-UNESCO '94)* |
| Entry to Grade 1 (at official age) | 93% *(1991; Annex A, '93-UNESCO '94)* |

**Goal 13: Universal Access to Safe Water and Sanitary Means of Excreta Disposal**

| | |
|---|---|
| Access to Safe Water T/U/R | 90%/ 98%/ 82% *(1995; MICS Rpt./ MICS '95)* |
| Access to Sanitation T/U/R | 81%/ 86%/ 74% . *(1995; MICS Rpt./ MICS '95* |

## YEAR 2000/ DECADE GOAL INDICATORS:

**(1) Child & Maternal Mortality**

**Reduction of IMR by 1/3 or 50 per 1,000 live births; Reduction of U5MR by 1/3 or 70; Reduction of MMR by 1/2 per 1,000 live births**

| | |
|---|---|
| IMR | 31/ 1,000 live births *(1995; Cluster Survey on Family Planning,* |
| U5MR | 35/ 1,000 live births *MOH & ME, May 1995)* |
| MMR | 54/ 100,000 *(1991; UNICEF & 1991 MOHME Survey, Annex '93)* |

**(2) Malnutrition**

**Reduction of Severe and Moderate & Severe Malnutrition Among U5's by 1/2; Reduction of Low Birth- Weight (<2.5kg) to <10%; Elimination of Micronutrient Disorders: IDD & VAD**

| | |
|---|---|
| % Low Birth-Weight Babies | 8% *(1991; UNICEF/ MOHME 1991 Survey 1991)* |
| Goitre Prevalence | 33% *(Dec. '94 IDD Study/UNICEF, Tehran update)* |
| (see MDG Indicators) | |

**(3) Anaemia & ARI**

**Reduction of Anaemia in Women by 1/3 its 1990 value; Reduction of U5 ARI Deaths by 1/3**

| | |
|---|---|
| IDA prevalence in females | 40% |
| # ARI Deaths | 12,600 *(1991; MOHME 1991 Survey)* |
| ARI Deaths as % of U5 deaths | 19.4% *(1991; MOHME 1991 Survey)* |

**(4) ORT/ CDD**

**Achievement of 80% ORT Use & Reduction in Diarrhoea-Related Diseases by 1/2**

| | |
|---|---|
| # Diarrhoea Episodes in U5's | 2 |
| # Diarrhoeal-related Deaths | 9,084 *(1991; MOHME 1991 Survey)* |
| Diarrhoea Mortality Rate (U5's) | 16% *(1991; MOHME 1991 Survey)* |
| (see MDG indicators) | |

**(5) Maternal Health Care**

**Empowerment to Breastfeeding; Special Attention to Female Health/ Nutrition; Access to Family Planning For All; Access to Prenatal Care**

| | |
|---|---|
| Access to Prenatal Health Care | 70% *(UNICEF/MOH '91 Surv.,* |
| % Hospital Deliveries | 60% *(MENARO, CSD Unit est)* |
| % Births Attended by Trained Health Personnel | 70% *(1993-94; SOWC 1996)* |
| Exclusive Breastfeeding Rate (<6mths) | 45.8% *(1995; MICS'95 & MOE,* |
| Timely Complementary Feeding Rate (6-12mths) | 54% *(1991; Annex A, '94 based* |
| Contd. Breastfeeding Rate at 2 yrs (>12mths) | 40% *on 1991 MOHME Survey* |

**(6) Education & Literacy**

**Universal Access to Basic Education; At Least 80% Primary Education Completion Rate; Reduction of Adult Illiteracy rate to at least 1/2 its 1990 level- Emphasis on Female Literacy**

| | |
|---|---|
| Drop Out Rate T/M/F | 3% (1994; MICS Rpt/ MOE) |
| Repetition Rate T/M/F | 9%/ 10%/ 7% * |
| Adult Illiteracy Rate T/M/F | 46%/ 35%/ 57% * |

**(7) Water & Sanitation** (see MDG Indicators)

**(8) Improve Life Skills**

**(9) Acceptance and Observance of CRC**

**(10) Improved Protection for CEDC**

| | |
|---|---|
| *ARI: Acute Respiratory Infections* | *IMR: Infant Mortality Rate* |
| *BFHI: Baby Friendly Hospital Initiative* | *MDG: Mid-Decade Goal* |
| *BFH: Baby Friendly Hospitals* | *MMR: Maternal Mortality Rate* |
| *CDD: Control of Diarrhoeal Disease* | *NNT: Neonatal Tetanus* |
| *CEDC: Children in Especially Difficult Circumstances* | *ORS: Oral Rehydration Salts* |
| *CRC: Convention on the Rights of the Child* | *ORT: Oral Rehydration Therapy* |
| *IDA: Iron Deficiency Anaemia* | *U5MR: Under 5 Mortality Rate* |
| *IDD: Iodine Deficiency Disorders* | *VAD: Vitamin A Deficiency* |

* *1993 Data; MENARO/ Education Unit, 1995*

## I. Introduction:

In order to ascertain the achievement of the Mid Decade Goals (MDG) and the present situation with respect to End Decade Goals, a Multiple Indicator Cluster Survey (MICS) was undertaken from 23 September to 27 September 1995. The intersectoral committee made up of the Ministry of Health and Medical Education (MOH&ME), the Statistical Center of Iran (SCI), the Ministry of Education, and the Ministry of Agriculture was formed to finalize a Declaration of Achievement for the MDG. This committee decided that surveys in the past nine months had ascertained the indicator levels for the MDG, except for some health indicators. Therefore, the task of the field work and the analysis of the MICS was given to the MOH&ME. A member from the MOH&ME and one from the SCI had been sent to Amman to participate in the MICS workshop of March 1995. The strong background of the MOH&ME personnel in surveys coupled with their strong presence in the field had also been factors in delegating the task of the implementation of the MICS to the MOH&ME. The Under Secretary for Public Health of the MOH&ME, Dr. Malekafzali, is a professor of bio-statistics in Tehran, University of Medical Science and Health Services, and acted as an overall supervisor and resource person for this project. Dr. Naghavi, epidemiologist of MOH&ME, was assigned as the joint-project coordinator and performed the analysis presented in this report.

The Under Secretary for Public Health and other top officials of the government, made the MICS a high priority item on the agenda of the government and MOH&ME. The Under Secretary was personally involved in the formulation of the final questionnaire, the training of the provincial supervisors and the supervision of the implementation. The provincial staff of the MOH&ME involved in this project included 28 provincial supervisors; 924 personnel making up 107 urban and 201 rural teams; and 226 personnel making up 113 local supervisor teams. In addition to these staff 25 supervisors of MOH&ME Central Level were trained in the UNICEF office and sent to each one of the provinces for the monitoring of the MICS. The total personnel of the MOH&ME involved in the project exceeded 1250 persons. The field work took approximately five days, the data entry three days, and the analysis of the data two weeks, all performed by the staff of the MOH&ME. These results could not have been obtained without the utmost commitment of the government of the Islamic Republic of Iran and its Ministry of Health to the MDG and End Decade Goals.

The basis for the methodology of the survey was derived from the MICS package distributed in the above mentioned workshop. The package included **Monitoring progress toward the goals of the World Summit for Children, *A practical handbook for multiple-indicator surveys (Jan. 1995)*** of UNICEF, diskettes containing the Quattro Pro worksheet for margin of error and sample size calculations, EPI Info packages of WHO, and sample data entry software written for EPI Info. A new and improved data entry software was designed, made and distributed to the provinces for distributed data entry.

The relevant parts of this book was translated into Farsi and distributed to the members of the intersectoral committee. The committee reviewed and adapted the material to be used in the MICS. The detailed background information relevant to this survey can be found in the above mentioned book. The sampling framework was derived from SCI's framework, updated with this year's Polio National Immunization Day household registry. Whenever a more current update to the framework could be obtained, it was used.

The Islamic Republic of Iran, with an area of 1,648,000 square kilometers and a population of about 59.6 million, is located in the Middle East. It is bounded on the north by the Republics of Azarbaijan and Armenia and Turkmenistan as well as the Caspian sea; on the east by Afghanistan and Pakistan and on the west by Turkey and Iraq and on the south by the Persian Gulf and the Oman Sea. Iran has a variable climate. About one-half of the country is mountainous and a quarter, desert, leaving only 25 percent as arable land. The population is rather young; 41.5% being under 15 years of age and only 3% over 65. The population growth rate is currently 1.75% per year. The population of the country is comprised of 57% urban, 42% rural and 1% nomadic. The literacy rate, which was only 47.5% in 1976, presently stands at about 80%. In 1976, the infant mortality rate(IMR) was 104 per 1,000 live births and life expectancy was 52 years. At present, the IMR is 30 per 1,000 live births and life expectancy has increased up to 69 years. The present administrative structure divides the country into 25 provinces, 237 districts, 630 sub-districts, 612 cities and over 70,000 villages and hamlets.

## II. Brief Background Information and Definitions:

The Islamic Republic of Iran is a signatory of the World Summit for Children (WSC) declaration. In 1990 the WSC was held with the participation of 71 heads of state and government and 88 senior officials from the countries around the world. The participants committed themselves to the attainment of certain goals to ensure the well being of children. National Plans of Action were drawn up in 158 countries to pave the path for the attainment of these goals. In order to maintain a sense of urgency, most of the developing world's governments have agreed to try to reach a limited number of goals by the middle of the decade. The list of these goals is presented in Annex One of this report.

The Islamic Republic of Iran had been monitoring the MDG in the past years. The level of achievement with respect to some of these goals is beyond the targets set for 1995 and close to the year 2000 targets. This has been indicated in many of government's, UNICEF Tehran's and the Middle East and North Africa Regional Office's (MENARO) reports. Examples of such reports are **Girls' Drop-Out from Primary Schooling in the Middle East and North Africa: Challenges and Alternatives** for the education indicators from MENARO, **The State of the World Children Report** for the immunization indicators from

UNICEF Headquarters in NY, and **The Declaration of the Achievement of the MDG Goals** from UNICEF Tehran and the government of Iran for many other indicators. A listing of the indicators and their values is presented in Annex Two.

Since 1985, several studies have been conducted in order to establish indicators related to death, birth, immunization coverage, degree of awareness and practice of mothers in management of diarrhoeal diseases of children under-five. There have also been studies on breastfeeding rates and nutritional status of Iranian children. In the 1988 survey, conducted prior to the launching of the Child Survival Campaign, baseline data pertaining to immunization coverage, management of diarrhoeal diseases, breastfeeding and supplementary food were obtained. Immediately after the completion of the third round of the campaign, a comprehensive survey showed the effectiveness of the campaign activities in increasing the immunization coverage and increasing the level of awareness of mothers in the above mentioned areas. In the October 1991 survey, which covered 108,000 households, it was shown that the target achievements have been sustained. This survey, in conjunction with other surveys conducted in the past twelve months, will ascertain the achievement of the MDG.

Some of the definitions used in this survey are as follows:

1- A household is a group people living under the same roof, eating from the same table and sharing a single pool of income.

2-Under-five children are children born from 22 September 1990 to 27 September 1995 or date of questioning.

3-Under 36 month old children are children born from 22 September 1992 to 27 September 1995 or date of questioning.

4-Under two year old children are children born from 22 September 1993 to 27 September 1995 or date of questioning.

5-Under-six month old children are children born from 22 March 1995 to 27 September 1995 or date of questioning.

6- Under-four month old children are children born from 22 May 1995 to 27 September 1995 or date of questioning.

7-Weight is measured without shoes and least amount of clothing with standardized and calibrated scales in kilograms, with an accuracy of 5 grams.

8-Height is measured without shoes and with under two year olds lying down, and above two year olds standing next to a wall, in metric units, with an accuracy of up to one centimeter.

9-The final definition for a sanitary latrine was that the latrine should possess all of the following characteristics: latrine area in a room protected from all sides and having a door, water available next to the latrine and in the latrine room, floor having a slope towards a sanitary water exit, and washable cement or tiles extending at least 45 cm from the ground should cover all walls, the ground should be made of nonpermeable material.

## III. The Objectives and Target Population:

The main objective of the survey was to monitor the present level of the indicators, that recent data was not available for, and that pertained to the Mid-Decade and End-Decade goals of the World Summit for Children. The indicator values that had been ascertained with cluster surveys in the past nine months were not included in the present undertaking.

The questions of the MICS had the following sub-objectives and target populations:

1A- To determine the proportion of population with access to an adequate amount of safe drinking water located within a convenient distance from the user's dwelling, disaggregated by rural and urban population.
1B- Target population was the household, questions were asked from the head of the household or the mother of the children of the household.

2A- To determine the proportion of population with access to a sanitary facility for human excreta disposal in the dwelling or located within a convenient distance from the user's dwelling, disaggregated by rural and urban population.
2B- Target population was the household, questions were asked from the head of the household or the mother of the children of the household.

3A- To determine the malnutrition rate in the country; stunting (height for age), underweight (weight for age) and wasting (weight for height), disaggregated by rural and urban population.
3B- Target population was under five children, children were measured on site.

4A- To determine the level of ORS use rate as part of diarrhoea case management, disaggregated by rural and urban population.
4B- Target population was under five children who had diarrhoea in the past two weeks, questions were asked from mothers who had children in the target group.

5A- To determine the prevalence of diarrhoea, disaggregated by rural and urban population.
5B- Target population was under five children who had diarrhoea in the past two weeks, questions were asked from mothers who had children in the target group.

6A- To determine the level of ORT use rate as part of diarrhoea case management , disaggregated by rural and urban population.
6B- Target population was under five children who had diarrhoea in the past two weeks, questions were asked from mothers who had children in the target group.

7A- To determine the exclusive breast-feeding rate in children less than four and six months old.
7B- Target population is under six month children, questions were asked from mothers who had children in the target group.

8A- To determine the proportion of children up to 36 months of age who are breast-feed.
8B- Target population was under 36 month children, questions were asked from mothers who had children in the target group.

9A- To determine the infant formula usage rate in under 36 month old children.
9B- Target population was under 36 month children, questions were asked from mothers who had children in the target group.

10A- To determine the percent of children starting complimentary feeding at the proper age.
10B- Target population was under 36 month children, questions were asked from mothers who had children in the target group.

## IV. The Sampling Methodology and the Questionnaire:

The population under study was optimized for children under 6 months of age, i.e. for the exclusive breast-feeding indicator. Based on the recommendation of the package **Monitoring progress toward the goals of the World Summit for Children, *A practical handbook for multiple-indicator surveys***, design effects for each one of the indicators was determined. The sample size was calculated as follows, optimizing for under-six month olds:

n=sample size = (Z**2(P)(Q)(DE))/d**2 where Z**2 is Z squared, and d**2 is d squared.
Z with 95% confidence level is 1.96; Z**2=3.8416
P=Prevalence of exclusive breast-feeding in 6 month Olds=0.20

Q=1-P=0.80 DE=Design Effect=2 d=Margin of error=0.05

The calculations on page five resulted in a sample size (n) of 491.7 six month olds. Therefore, we have to find at least 492 six month olds in the country. Since six month olds make up one percent of the population, we have to survey 49,170 persons to find 492 six month olds. Given that each family contains five persons, 9,834 families are to be surveyed in rural areas, and the same number in urban areas. Table One shows the distribution of clusters, interviewers, and supervisors per province.

Table One: The number of Cluster, Teams, and Supervisors per Province

| | | POPULATION '91 | | # OF CLUSTERS | | # OF TEAMS | | # OF SUPER VISOR |
|---|---|---|---|---|---|---|---|---|
| PROVINCE | CODE | URBAN | RURAL | URBAN | RURAL | URBAN | RURAL | TEAMS |
| AZARB. East | 1 | 1807000 | 1471000 | 57 | 61 | 6 | 12 | 6 |
| AZARB. West | 2 | 1083000 | 1201000 | 34 | 50 | 4 | 10 | 5 |
| ESFAHAN | 3 | 2450000 | 1233000 | 77 | 51 | 8 | 10 | 6 |
| ILAM | 4 | 211000 | 230000 | 7 | 10 | 1 | 2 | 1 |
| ARDEBIL | 5 | 488000 | 653000 | 15 | 27 | 2 | 5 | 3 |
| DOP IRAN | 6 | 2655000 | 647000 | 83 | 27 | 9 | 5 | 5 |
| BUSHEHR | 7 | 356000 | 338000 | 11 | 14 | 1 | 3 | 2 |
| DOP TEHRAN | 8 | 2530000 | 362000 | 79 | 15 | 8 | 3 | 4 |
| CH. MA.&BA. | 9 | 277000 | 470000 | 9 | 20 | 1 | 4 | 2 |
| KHORASAN | 10 | 3067000 | 2946000 | 96 | 123 | 10 | 25 | 12 |
| KHUZESTAN | 11 | 1930000 | 1245000 | 61 | 52 | 6 | 10 | 6 |
| ZANJAN | 12 | 426000 | 595000 | 13 | 25 | 2 | 5 | 3 |
| SEMNAN | 13 | 282000 | 176000 | 9 | 7 | 1 | 2 | 1 |
| SIST.&BALUCH. | 14 | 630000 | 825000 | 20 | 34 | 2 | 7 | 3 |
| DOP SH. BEHSHT | 15 | 3488000 | 300000 | 110 | 12 | 11 | 3 | 5 |
| FARS | 16 | 1886000 | 1658000 | 59 | 69 | 6 | 14 | 7 |
| GHAZVIN | 17 | 395000 | 360000 | 12 | 15 | 1 | 3 | 2 |
| KORDESTAN | 18 | 585000 | 648000 | 18 | 27 | 2 | 5 | 3 |
| KERMAN | 19 | 851000 | 1012000 | 27 | 42 | 3 | 9 | 4 |
| KOHK.&BOYER | 21 | 151000 | 346000 | 5 | 14 | 1 | 3 | 2 |
| GILAN | 22 | 883000 | 1321000 | 28 | 55 | 3 | 11 | 5 |
| LORESTAN | 23 | 761000 | 741000 | 24 | 31 | 3 | 6 | 3 |
| MAZANDARAN | 24 | 1539000 | 2254000 | 48 | 94 | 5 | 19 | 8 |
| MARKAZI | 25 | 591000 | 591000 | 19 | 25 | 2 | 5 | 3 |
| HORMOZG. | 26 | 382000 | 543000 | 12 | 23 | 2 | 5 | 3 |
| HAMEDAN | 27 | 697000 | 955000 | 22 | 40 | 2 | 8 | 4 |
| YAZD | 28 | 470000 | 221000 | 15 | 9 | 2 | 2 | 2 |
| TOTAL | | 31834000 | 24001000 | 1000 | 1000 | 107 | 201 | 113 |

As it can be observed from Table One, the number of families was rounded to 10,000 families in each area. The sample was divided into 1,000 clusters in urban and 1,000 clusters in rural areas. In each cluster ten families or households are to be surveyed. It was assumed that each team can cover one cluster in the rural areas and two clusters in the urban areas per day. The teams were made up of a male and a female interviewer and a driver. For each three teams, one supervisor was selected. The supervisor team consisted of the supervisor and a driver. Local provincial focal points were assigned to each province. The provincial focal were invited to Tehran and trained. So were the data entry personnel. The provincial focal points in turn trained the interviewers and the supervisors locally. It was of utmost importance that the personnel being trained in Tehran had extensive cluster survey experience in the past. This was checked before the invitations were sent and during the training. This is to ensure uniformity of teaching in the provinces.

The listing of households was available at the provinces. During the last round of the polio campaign, all urban households were registered and listings of them created. The rural household listings were obtained from the yearly census of the health houses and cross-checked with the Malaria Form2 listings. The total number of households in each area, being rural or urban, was divided by the number of clusters required, to obtain the sampling interval. Next, a random number less than the sampling interval was chosen. This was the first household to be visited in the first cluster. The sampling interval was added to this random number to obtain the first household of the second cluster. This method was followed until all of the clusters were exhausted. Once the first household of each cluster was determined, the next nine households were also interviewed, to obtain ten household per cluster.

The rough translation of the questionnaire is presented in Annex Three. The photocopy of the Farsi questionnaire is also presented in the same Annex. The questionnaire was based on the MICS package, adopted to the local language. Indicators that we had ascertained a value for in the past nine months were not included in the questionnaire, which was made up of 37 questions, six modules, and two pages, printed on both sides. The modules were the water and sanitation module, the diarrhoea module, the breast-feeding for under-one module, exclusive breast-feeding for under-six months module, and the anthropometric module.

A source of bias can be originating in the questioning teams. This is because the implementors of the health programmes were asked to asses themselves. If we take an outside view of this process, the fact stands that the implementing Ministry is assessing itself. But, if we take an inside view, one that the supervisors are monitoring and evaluating the implementors, namely the behvarzes, the source of bias might be minimized. The questioning teams were usually made up of the supervisors of the

behvarzes. The behvarzes are the health workers of the rural areas. The behvarzes were sometimes present to introduce the teams and facilitate the interactions between the interviewers and interviewees.

## V. The Results:

The national results of the survey is presented in the table two below. The results are for a 95% confidence interval. The margin of error is stated next to each figure. The margins of error were calculated with the EPI6 package.

### V.1 General Results:

Table two presents the general results of the MICS. The sample size is presented in each cell in the format of SS is equal to the figure corresponding to the sample size. The average family size in our sample for urban, rural, and country areas was 4.8, 5.6, and 5.2 respectively.

Table Two: General Results of the MICS ; Sample Size = SS

| Indicator values are in Percent | Urban % | Rural % | Country % |
|---|---|---|---|
| **Proportion of households using safe drinking water** | 98.4±0.4<br>SS=10065 | 82.0±1.0<br>SS=10034 | 90.2±0.6<br>SS=20099 |
| **Proportion of household with access to an adequate amount of safe drinking water within 15 minutes of dwelling or in dwelling** | 98.3±0.4<br>SS=10065 | 79.8±1.1<br>SS=10034 | 89.0±0.6<br>SS=20099 |
| **Proportion of households with access to a sanitary facility for human excreta disposal** | 86.0±2.2<br>SS=10065 | 73.7±2.8<br>SS=10034 | 80.5±1.8<br>SS=20099 |
| **Proportion of children under 5 years with diarrhoea during the past 2 weeks from the date of interview** | 12.8±1.4<br>SS=4762 | 16.9±1.3<br>SS=6953 | 15.2±1.0<br>SS=11715 |
| **Proportion of children under 5 years with diarrhoea receiving ORS for treatment** | 34.9±5.5<br>SS=611 | 38.0±4.1<br>SS=1173 | 36.9±3.3<br>SS=1784 |
| **Proportion of children under 5 years with diarrhoea receiving ORS or increased fluids** | 68.1±5.3<br>SS=611 | 65.4±3.9<br>SS=1173 | 66.3±3.2<br>SS=1784 |
| **Proportion of children under 5 years with diarrhoea receiving breast milk more or the same amount as before the illness** | 71.0±5.2<br>SS=611 | 65.8±3.9<br>SS=1173 | 69.1±3.1<br>SS=1784 |

| Table Two: Gen. Results of the MICS (continued) | Urban % | Rural % | Country % |
|---|---|---|---|
| **Proportion of children under 5 years with diarrhoea receiving water and liquids more or in the same amount as before** | 54.5±5.7 SS=611 | 50.2±4.1 SS=1173 | 51.7±3.4 SS=1784 |
| **Proportion of children under 5 years with diarrhoea receiving more food or the same amount of food** | 49.0±5.7 SS=611 | 51.8±4.1 SS=1173 | 50.8±3.4 SS=1784 |
| **Proportion of children under 36 months who were never breast-fed** | 5.5±1.3 SS=2637 | 4.4±0.9 SS=3957 | 4.8±0.8 SS=6594 |
| **Proportion of children under 36 months who were breast-feed for at least one year** | 79.1±2.2 SS=2637 | 85.4±1.6 SS=3957 | 83.0±1.3 SS=6594 |
| **Proportion of infants less than 6 months of age exclusively breast-fed within past 24 hours** | 33.7±6.5 SS=427 | 47.3±5.9 SS=579 | 41.5±4.4 SS=1006 |
| **Proportion of infants less than 4 months of age exclusively breast-fed within past 24 hours** | 45.8±9.0 SS=262 | 59.0±7.5 SS=356 | 53.4±5.7 SS=618 |
| **Proportion of infants less than 6 months of age exclusively or predominantly breast-fed within past 24 hours** | 66.0±6.5 SS=427 | 75.5±5.1 SS=579 | 71.2±4.0 SS=1006 |
| **Proportion of infants less than 4 months of age exclusively or predominantly breast-fed in the past 24 hours** | 81.3±7.6 SS=262 | 86.8±5.7 SS=356 | 84.5±4.6 SS=618 |
| **Proportion of infants who had started weaning food between the age of 4-6 months** | 76.0±7.9 SS=238 | 70.7±7.0 SS=338 | 72.0±5.3 SS=576 |

Table Three: Anthropometric Results of the MICS: Percent Under Two Standard Deviations From NCHS Standards, Urban - Rural

| Indicators | Urban | | | Rural | | |
|---|---|---|---|---|---|---|
| Sample Size | % Male 2417 | % Female 2345 | % Total 4762 | % Male 3530 | % Female 3423 | % Total 6953 |
| **Height for Age** | 10.9±1.8 | 13.3±2.0 | 12.2±1.4 | 25.3±2.1 | 24.2±2.1 | 24.8±1.5 |
| **Weight for Age** | 12.1±1.9 | 14.4±2.0 | 13.3±1.4 | 19.0±1.9 | 18.3±1.9 | 18.7±1.3 |
| **Weight for Height** | 6.9±1.5 | 8.6±1.6 | 7.8±1.1 | 5.7±1.1 | 6.3±1.2 | 6.0±0.8 |

Table Four: Anthropometric Results of the MICS: Percent Under Two Standard Deviations From NCHS Standards, Total Male and Female

| Indicator<br>Sample Size | % Male<br>5947 | % Female<br>5768 | % Total<br>11715 |
|---|---|---|---|
| **Height for Age** | 19.5±1.5 | 18.4±1.5 | 18.9±1.0 |
| **Weight for Age** | 15.0±1.3 | 16.3±1.4 | 15.7±1.0 |
| **Weight for Height** | 6.1±0.9 | 7.1±1.0 | 6.6±0.7 |

Table Five: Percentage of Severe and Moderate Stunting, Underweight, and Wasting

| All figures in Percent | TB | TG | **Tot.** | UB | UG | **UT** | RB | RG | **RT** |
|---|---|---|---|---|---|---|---|---|---|
| **Stunting Sever** | 5.2 | 5.3 | **5.3** | 2.6 | 3.2 | **2.9** | 8.4 | 7.8 | **8.1** |
| **Stunting Moderate** | 14.3 | 13.1 | **13.6** | 8.3 | 10.1 | **9.3** | 16.9 | 16.4 | **16.7** |
| **Stunting Severe & Moderate** | 19.5 | 18.4 | **18.9** | 10.9 | 13.3 | **12.2** | 25.3 | 24.2 | **24.8** |
| **Underweight Sever** | 2.7 | 3.1 | **2.9** | 1.8 | 1.8 | **1.8** | 3.8 | 3.8 | **3.8** |
| **Underweight Moderate** | 12.3 | 13.2 | **12.8** | 10.3 | 12.6 | **11.5** | 15.2 | 14.5 | **14.9** |
| **Underweight Sever & Moderate** | 15.0 | 16.3 | **15.7** | 12.1 | 14.4 | **13.3** | 19.0 | 18.3 | **18.7** |
| **Wasting Sever** | 0.4 | 0.8 | **0.6** | 0.8 | 0.9 | **0.8** | 0.1 | 0.7 | **0.4** |
| **Wasting Moderate** | 5.7 | 6.3 | **6.0** | 6.8 | 5.3 | **6.1** | 4.9 | 7.1 | **6.0** |
| **Wasting Sever & Moderate** | 6.1 | 7.1 | **6.6** | 7.6 | 6.2 | **6.9** | 5.0 | 7.8 | **6.4** |

Please Note:
TB= Total Boys; TG = Total Girls; Tot.=Total; UB=Urban Boys; UG = Urban Girls; UT= Urban Total; RB = Rural Boys; RG = Rural Girls; RT = Rural Total.(Continued)
Stunting = Height for Age; Underweight = Weight for Age; Wasting = Weight for Height.
Severe = Below -3SD; Moderate = Between -2SD and -3SD; Mod. & Sev. = Below -2SD

To obtain the national averages in the anthropometric modules, a sample from the totality was obtained, since EPI Info's anthropometric section could not handle more than 2500 children at a time. There is a section in the EPI Info software that automatically draws a random sample from the larger sample in its memory. Therefore, the analysis for each anthropometric section has been done on a drawn sample of 2500 from the sample sizes mentioned in the tables.

The margins of error for table five were not calculated. But, it is understood that as the sample size becomes smaller, the margins of error generally increases. Provincial data from the survey can be obtained, but with a larger margin of error. They will be used for comparative analysis. The provincial data, although not presented in this final version of the MICS report, is available at the MOH&ME. The provincial results of the Access to Safe Drinking Water indicator is presented in a map on page twelve. The specific results from the MICS will be presented in the next sections of this report.

V.2. Specific Results:

V.2.1. Water and Sanitation:

Map One: The safe drinking water module results are presented below.

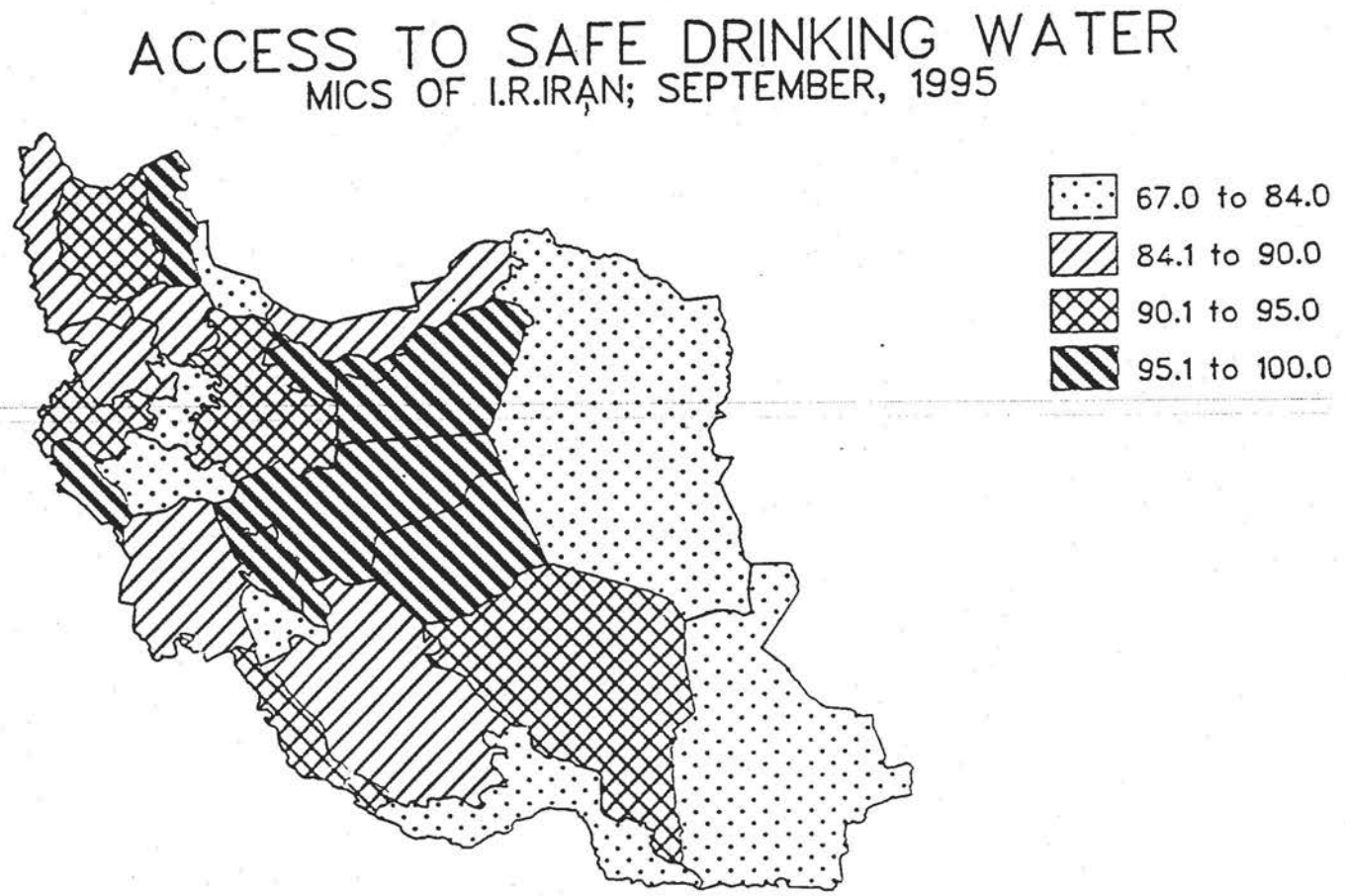


Table Six : Access to Safe Drinking Water in Rural, Urban and Total areas.

| Indicator | Urban | Rural | Total |
|---|---|---|---|
| Access to Piped Water | 96.1% | 65.7% | 80.9% |
| Access to Sanitized Well or Spring | 2.0% | 14.5% | 8.2% |
| Chlorinated or Boiled Water | 0.3% | 1.7% | 1.0% |
| Non-sanitary Water | 1.6% | 18.1% | 9.8% |
| Total | 100% | 100% | 100% |

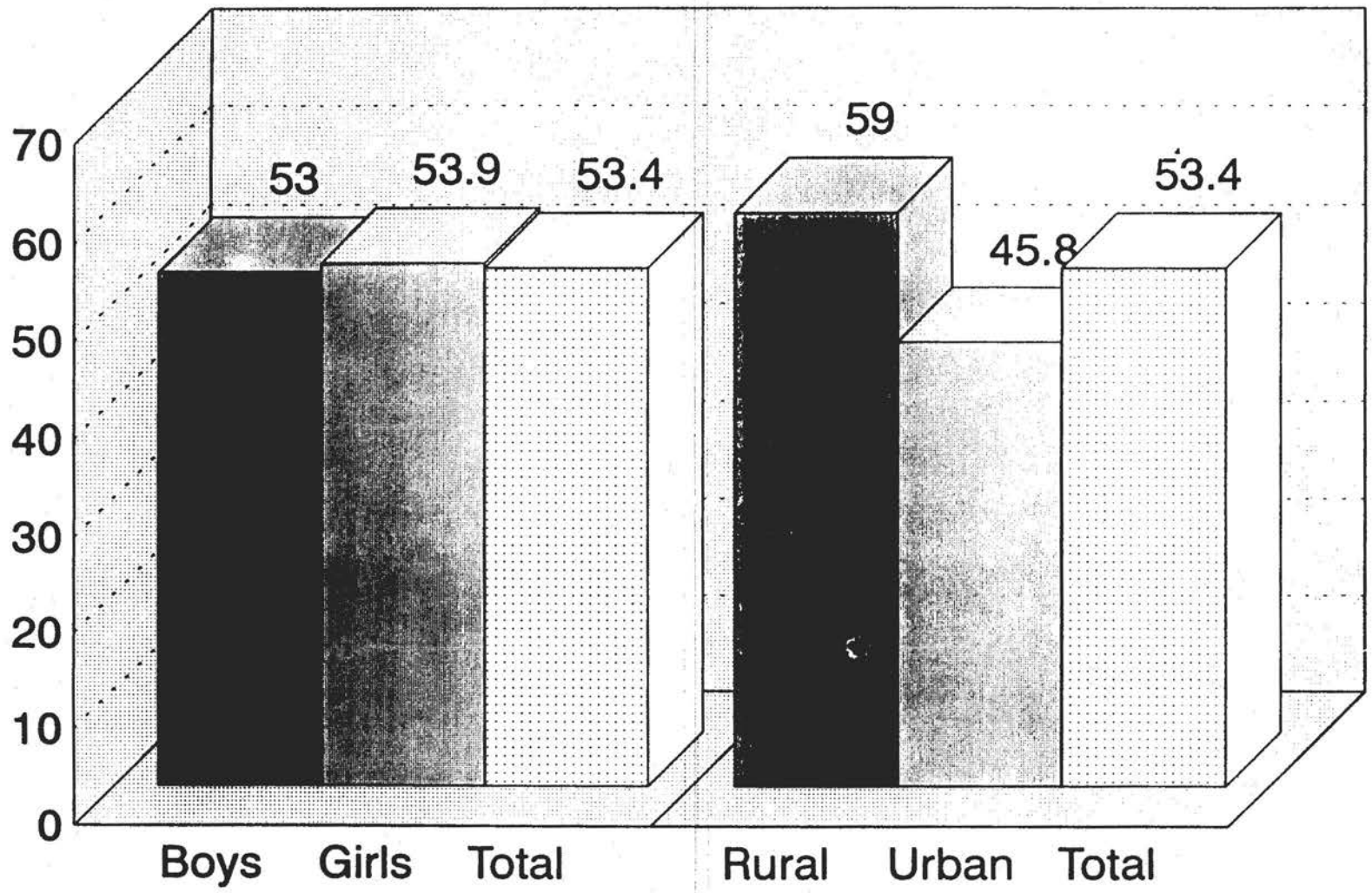
Table Seven : Time it takes to get Safe Drinking Water in Rural and Urban areas.

| | In House | <5 Min. | 5-15 Min. | 15-30 Min | 0.5-1Hour | >1 Hour |
|---|---|---|---|---|---|---|
| Urban | 98.3% | 0.8% | 0.6% | 0.1% | 0.1% | 0.1% |
| Rural | 77.3% | 9.1% | 8.9% | 2.4% | 1.3% | 1.1% |

V.2.2 Breastfeeding Results:

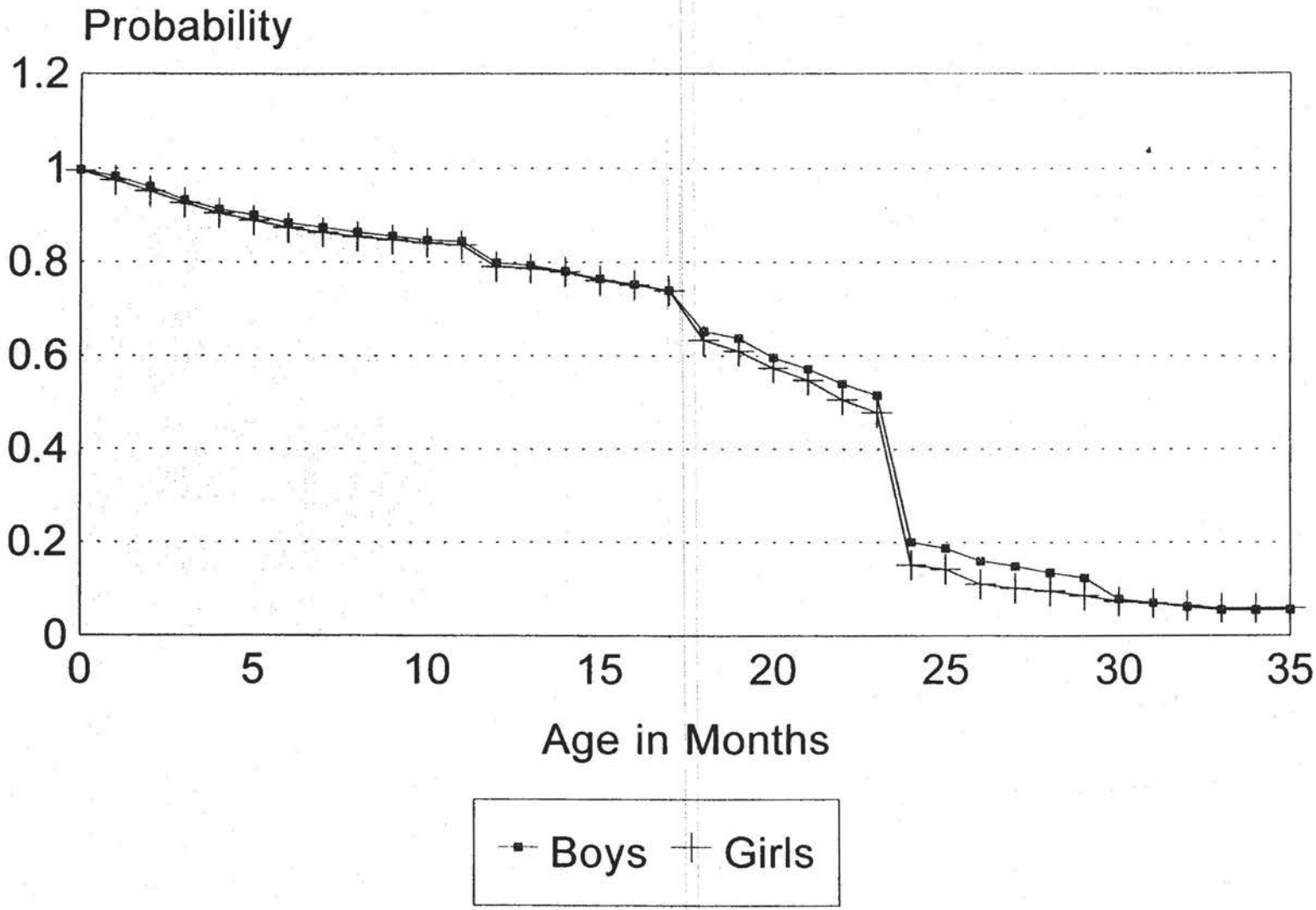
The following three charts show the breastfeeding results of the MICS. The graphs show the survival pattern of breastfeeding in infants, disaggregated by location and sex. The graphs were derived using the SPSS version 5 package, Survival Analysis section. The difference between the trends in boys and girls, and urban and rural areas, is not statistically significant. Until one years of age, more than 80% of children are still breastfed. Until 24 months of age, this figure declines to 50%.

# Porpotion of Infants Less than 4 Months: Exclusively Breastfed
## Islamic Republic of Iran



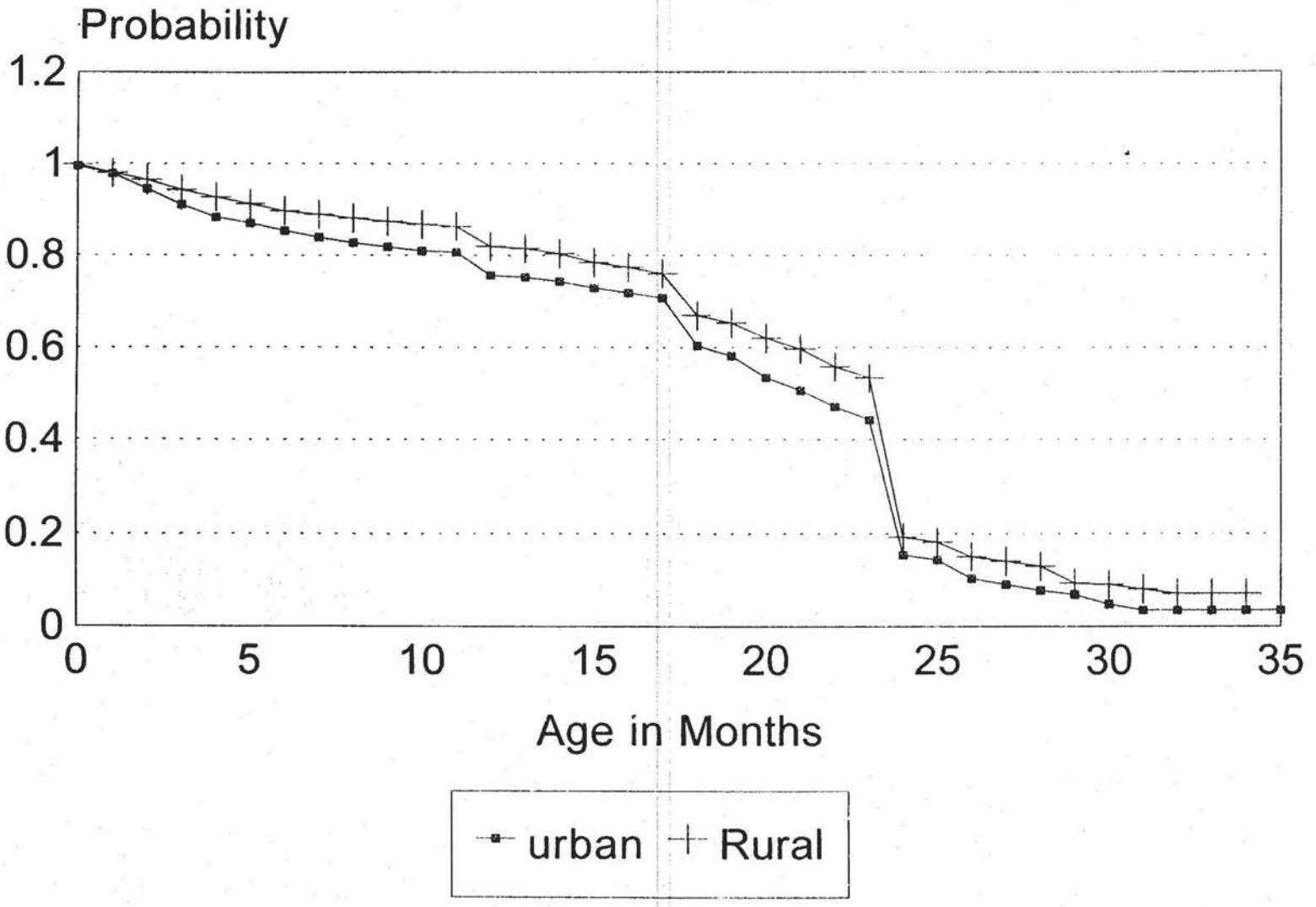

Source: Ministry of Health and Medical Education; MICS of 1995

# Probability of Continued Breastfeeding for Ever-Breastfed Children
## Islamic Republic of Iran




MICS of Sept. 1995, I.R. Iran

# Probability of Continued Breastfeeding In Ever-Breastfed Children
## Islamic Republic of Iran

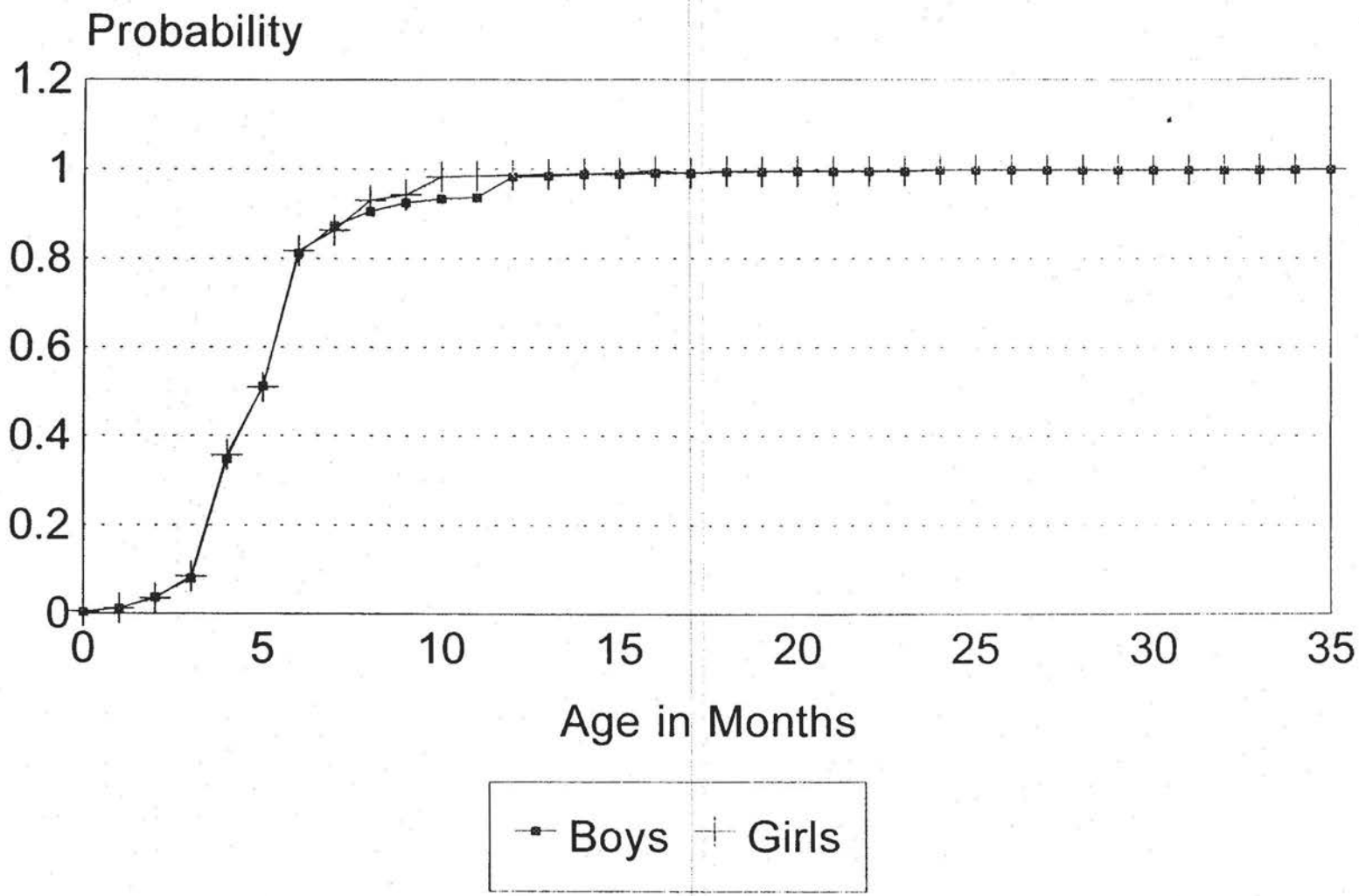



MICS of Sept. 1995, I.R. Iran.

V.2.3 Complementary Feeding Results:

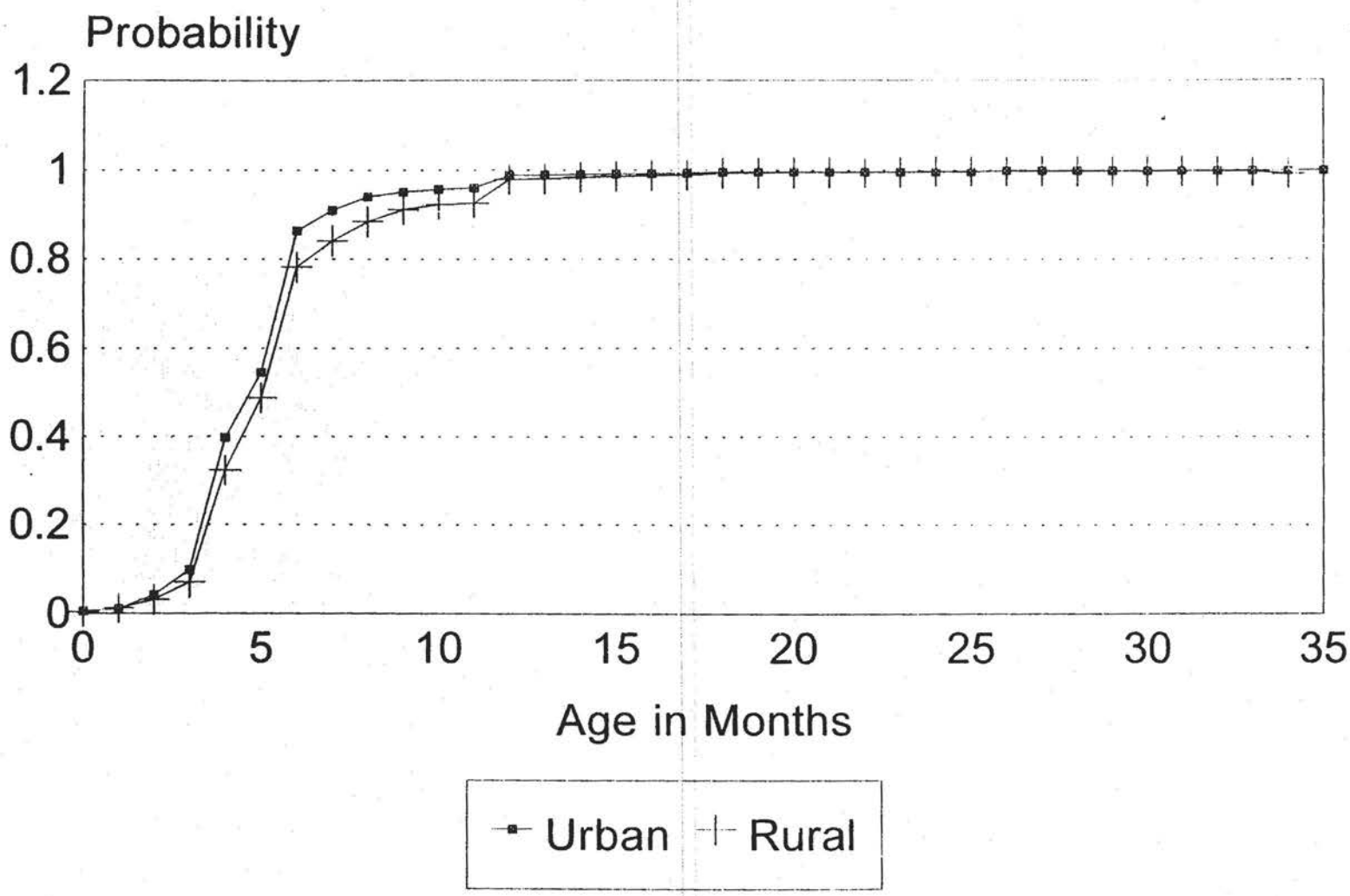
The two graphs show the cumulative probability of initiating complementary feeding. They show that until six months of age more than 80 percent of children have initiated complementary feeding. The difference between the trends in boys and girls, rural and urban areas, is not statistically significant.

# Probability of Initiating Complementary Feeding
# Islamic Republic of Iran




MICS of Sept. 1995, I.R. Iran

# Probability of Initiating Complementary Feeding
# Islamic Republic of Iran

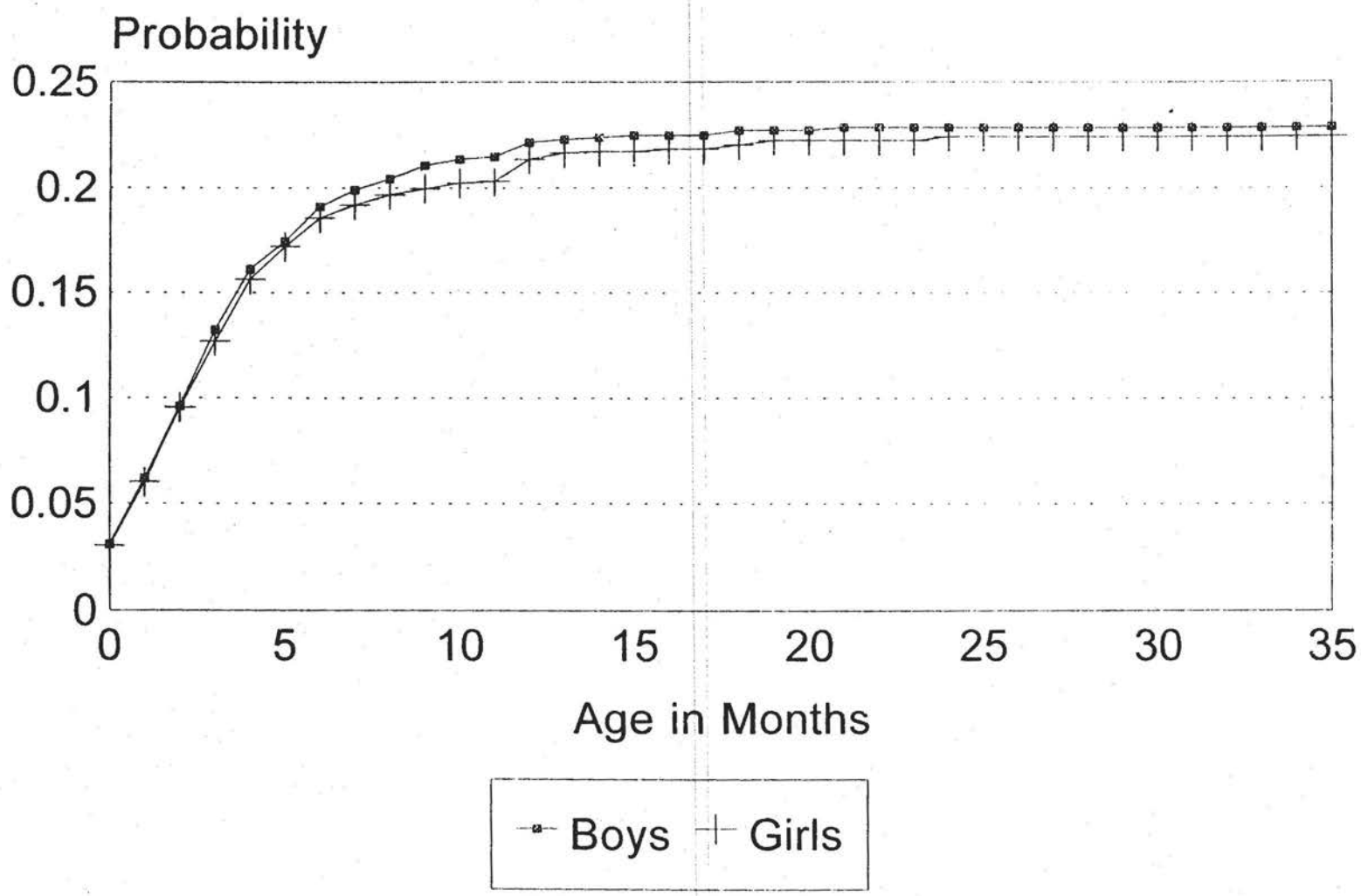



MICS of Sept. 1995, I.R. Iran

V.2.4 Infant Formula Feeding Results:

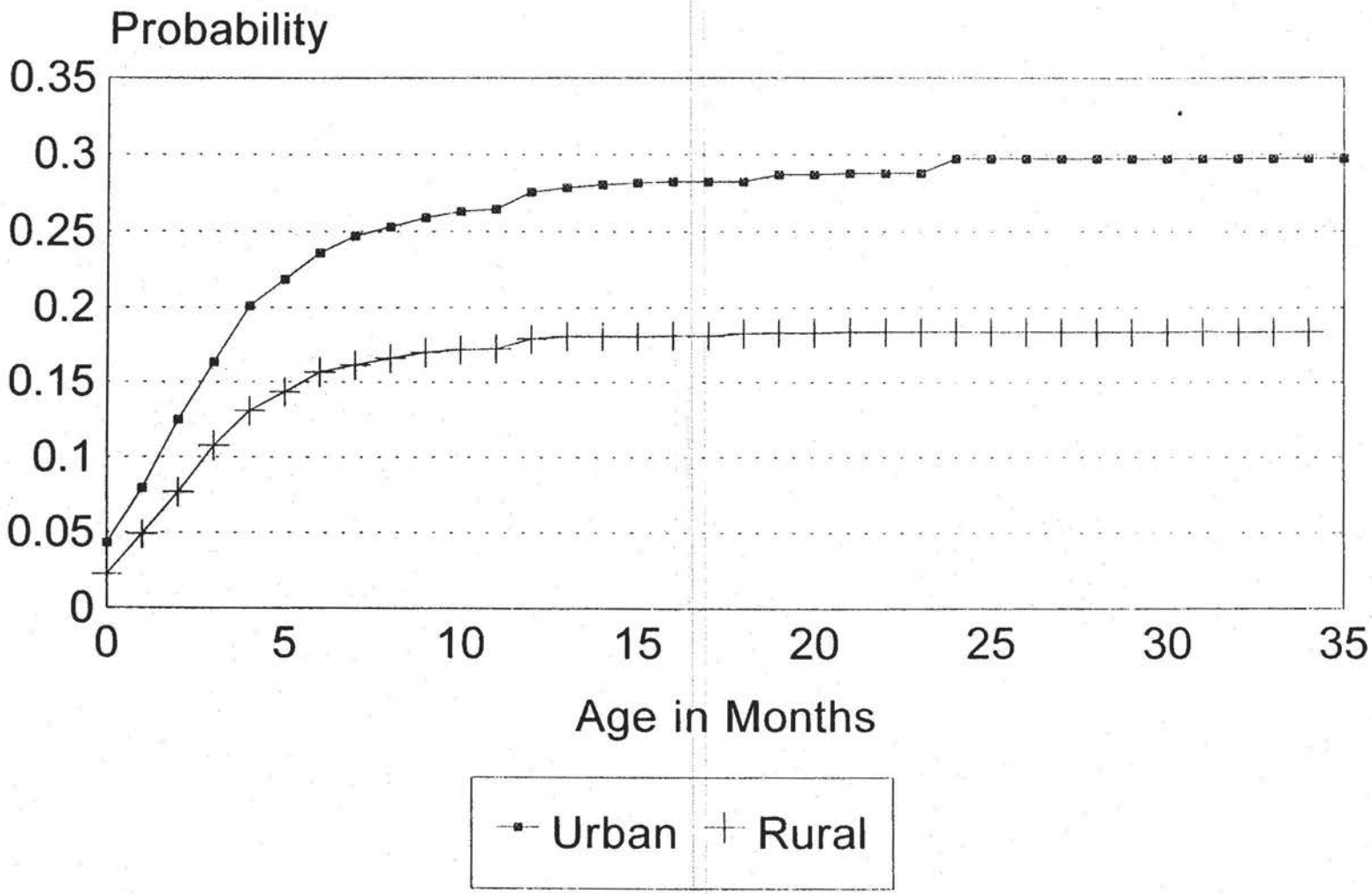
These two graphs show the cumulative probability of initiating infant formula feeding for each age group. The probability of initiating infant formula feeding at birth is less than five percent, and increases to a maximum of 23 percent at age of 12 months. The difference between the trends in boys and girls is not statistically significant. However, there is a statistically significant difference between the trend of initiating infant formula feeding in rural versus urban areas. In urban areas this cumulative probability reaches a maximum of 27 percent in urban areas, while it reaches only 18 percent in rural areas. This maximum value is reached at 12 months of age.

# Probability of Initiating Infant Formula Feeding
# Islamic Republic of Iran




MICS of Sept. 1995, I.R. Iran

# Probability of Initiating Infant Formula Feeding
# Islamic Republic of Iran




MICS of Sept. 1995, I.R. Iran

V.2.5 Anthropometric Results:

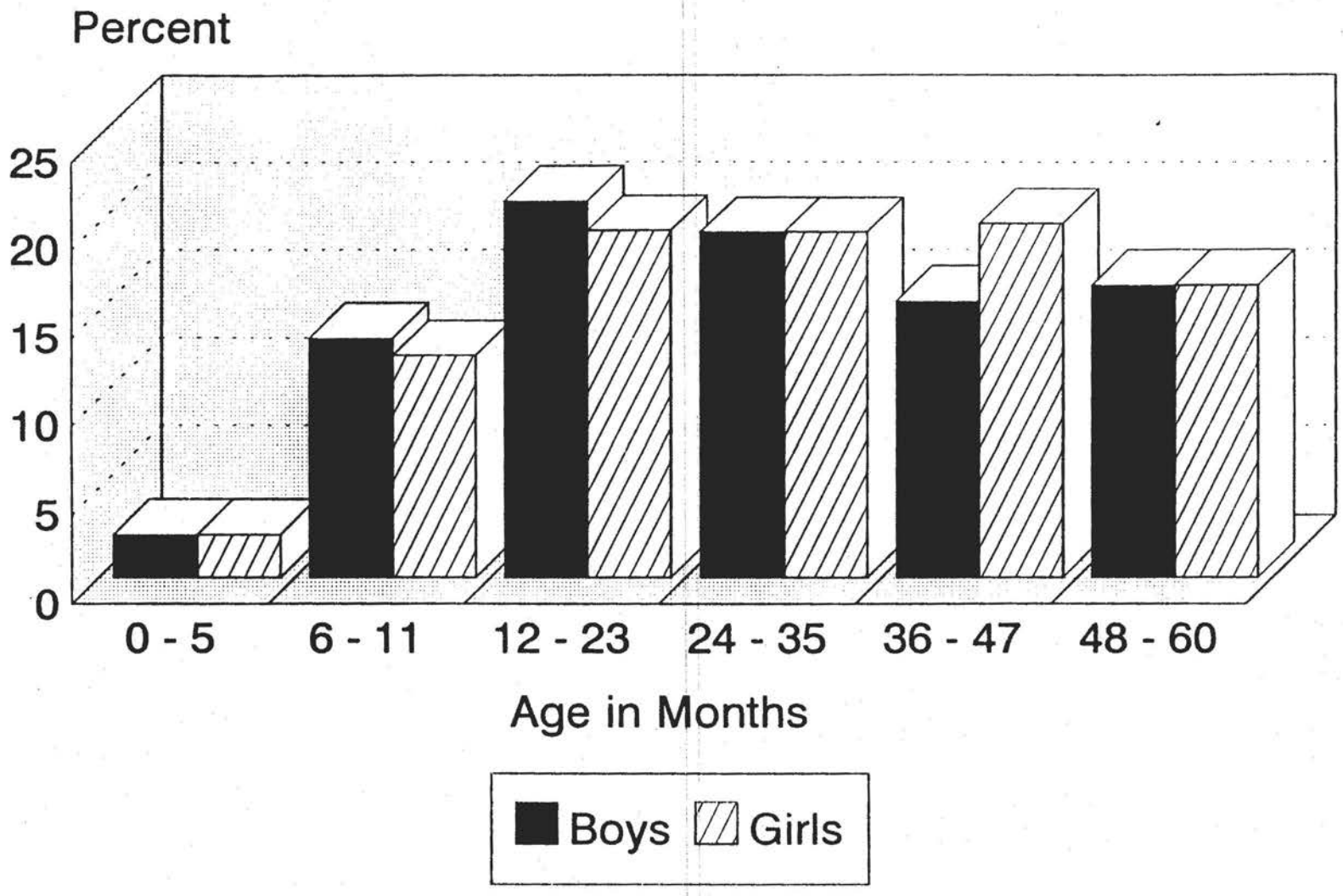
The anthropometric results are presented in four categories:

- Underweight disaggregated by gender and area
- Growth trend is presented disaggregated by gender and area
- Wasting disaggregated by gender and area
- Stunting disaggregated by gender and area.

The growth trend is shown by plotting the median of the weight of all children of the each age group on a standard growth monitoring chart. The 97, 50, and third percentile lines are shown as a solid line. These are reference lines. The survey result is shown as a dotted line. In the draft versions of this report, the mean of each age group was plotted. In this final version, the median of the age group is plotted, and a best fitted line is passed through the points. The fitted line method resulted in a smooth line. While if we were to connect the age group dots one by one, we would have a jagged line. It is interesting to note that the median and the mean of the age groups are very close together.

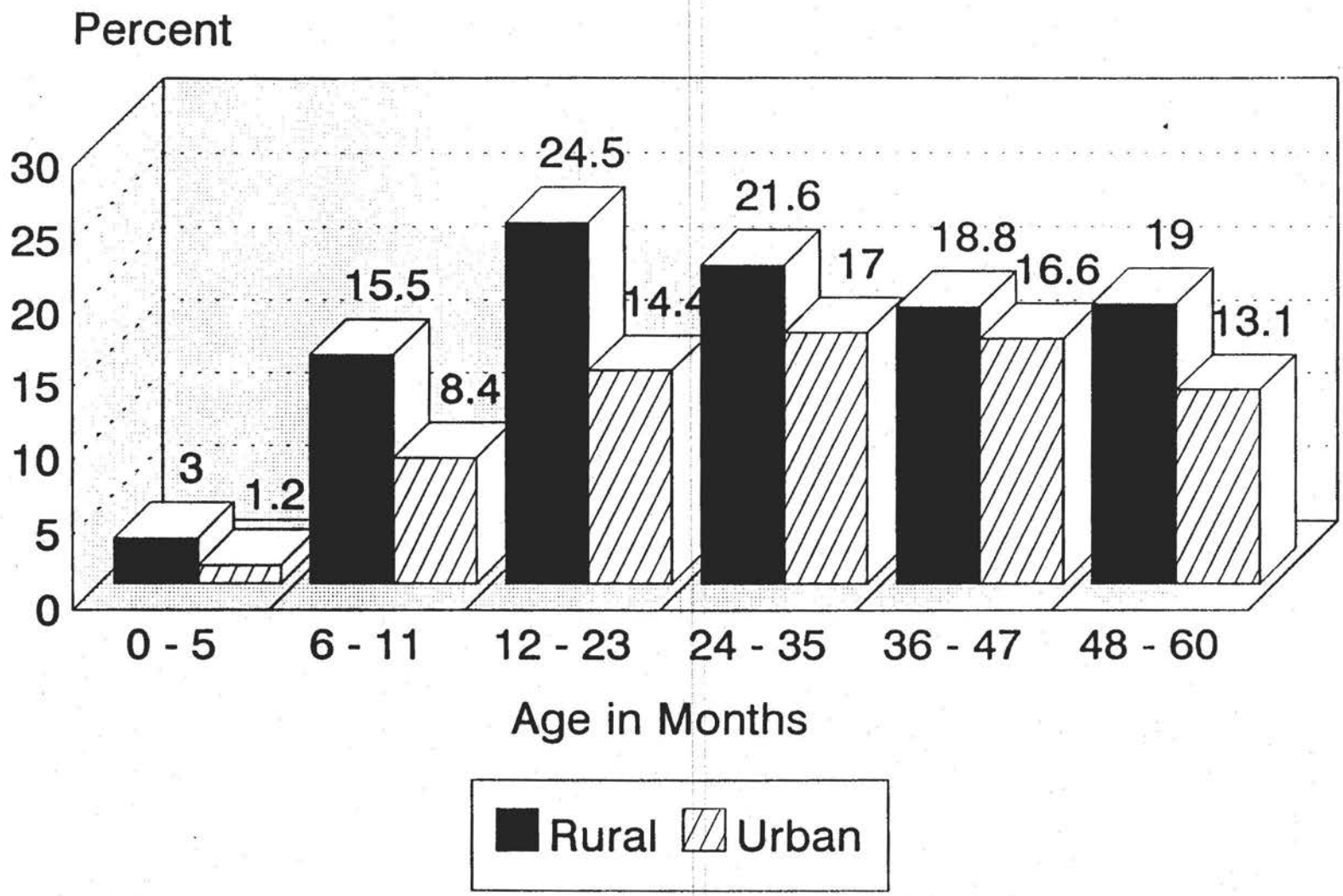
V.2.5.1 Underweight disaggregated by gender and area

# Underweight Below Two Standard Deviations
# Islamic Republic of Iran



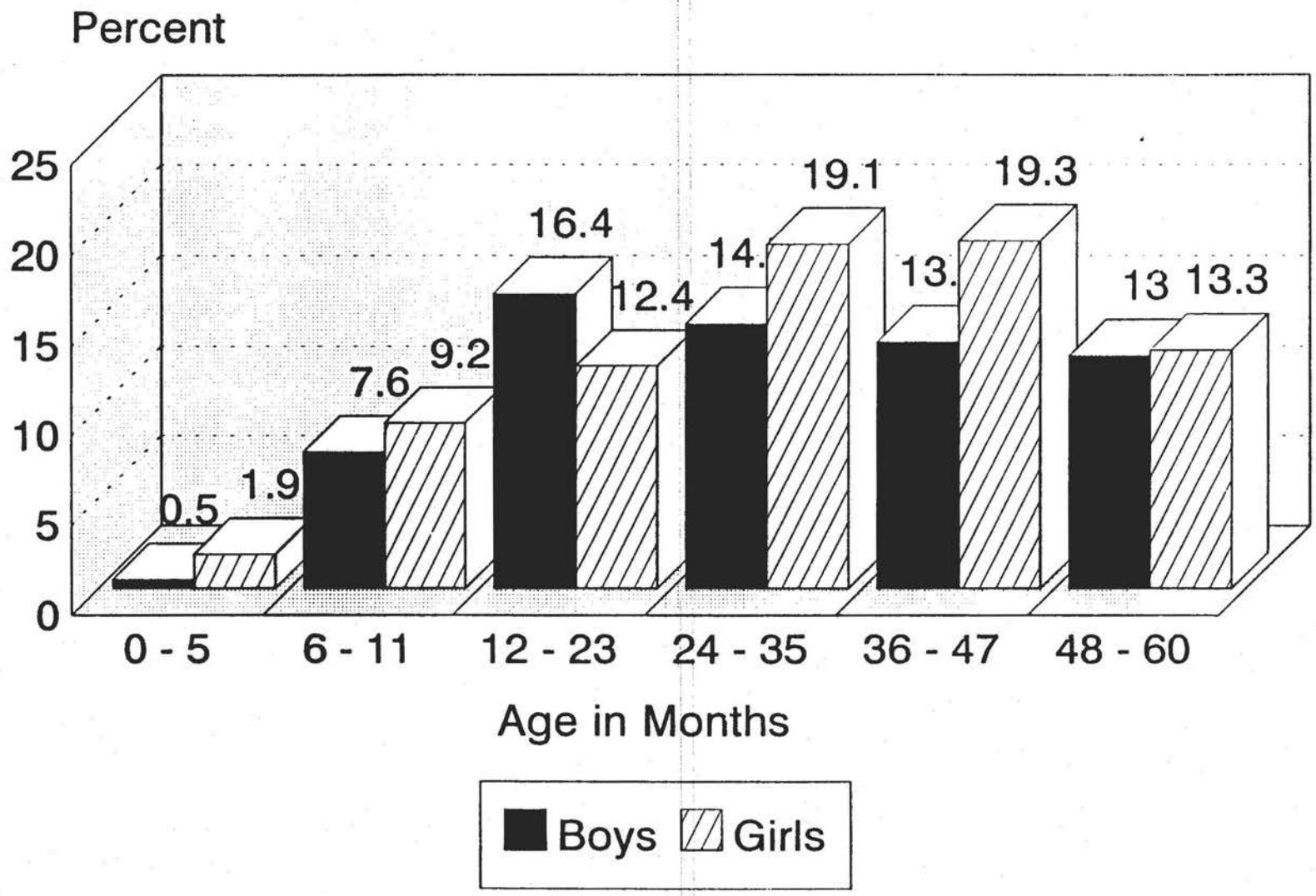

MICS of Sept. 1995, I.R. Iran

# Underweight Below Two Standard Deviations
# Islamic Republic of Iran



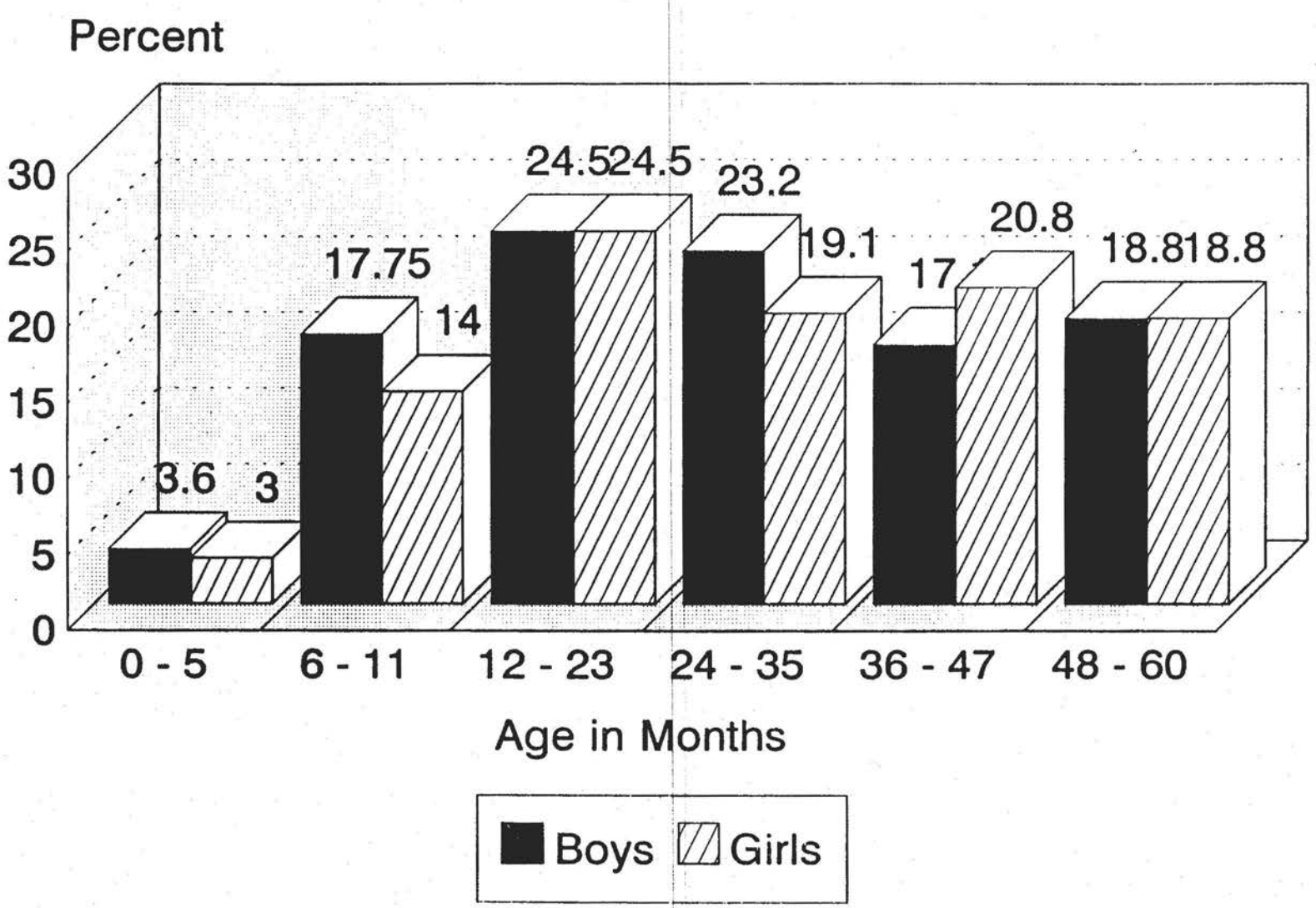

MICS of S ot. 1995, I.R. Iran

# Underweight Below Two Standard Deviations - Urban Islamic Republic of Iran




MICS of Sept. 1995, I.R. Iran

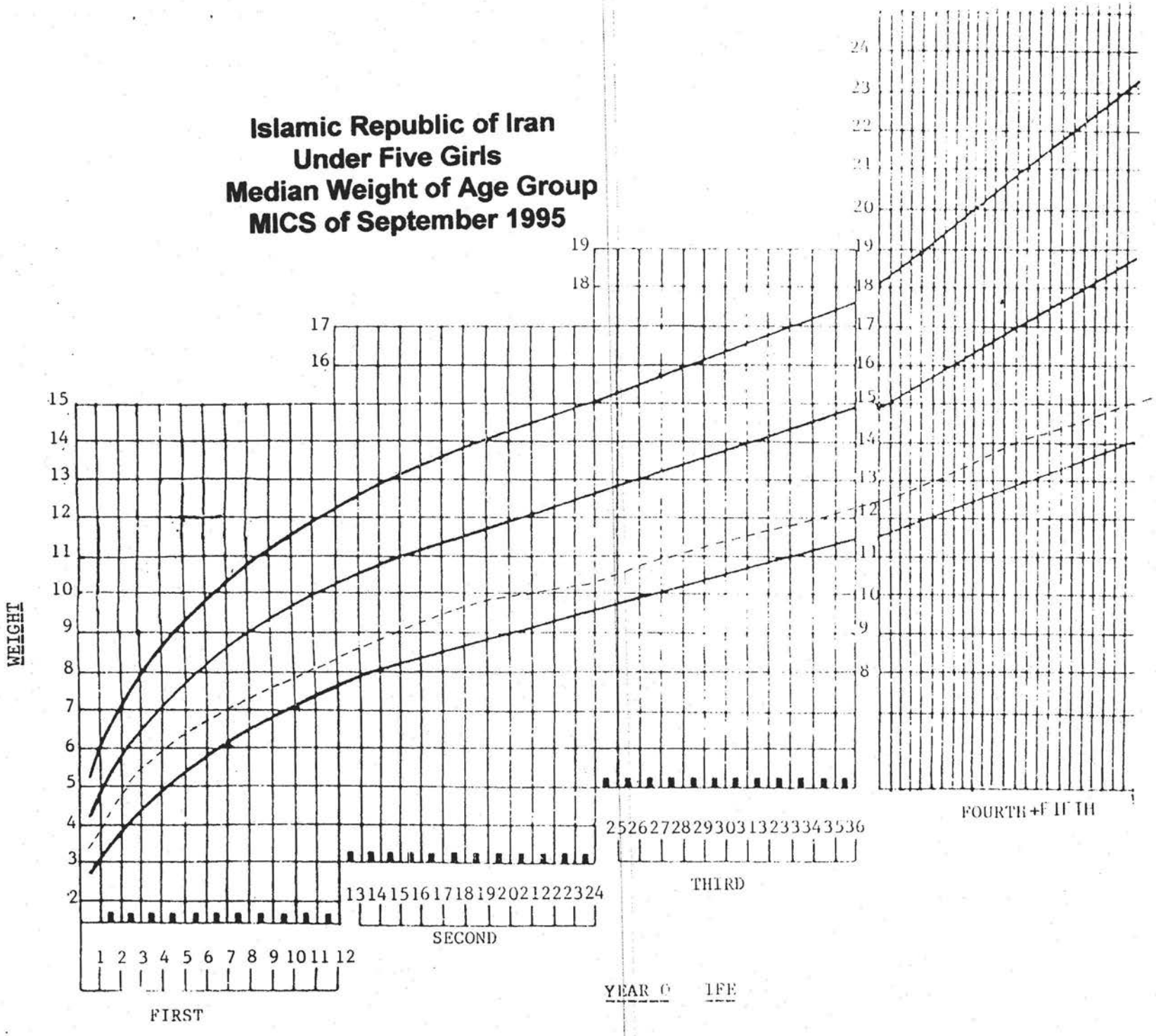
# Underweight Below Two Standard Deviations - Rural Islamic Republic of Iran



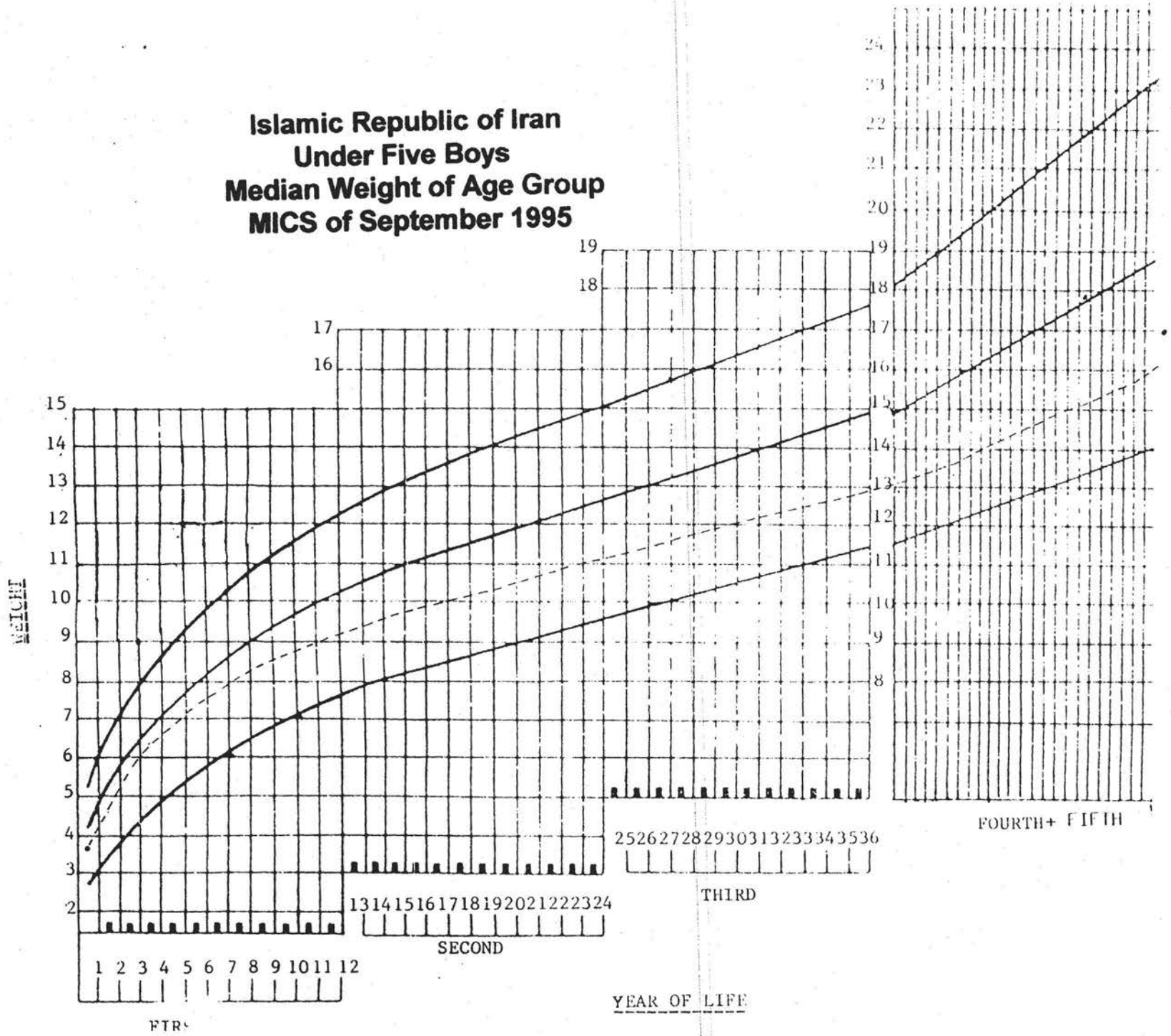

MICS of Sept. 1995, I.R. Iran

V.2.5.2 Growth trend disaggregated by gender and area

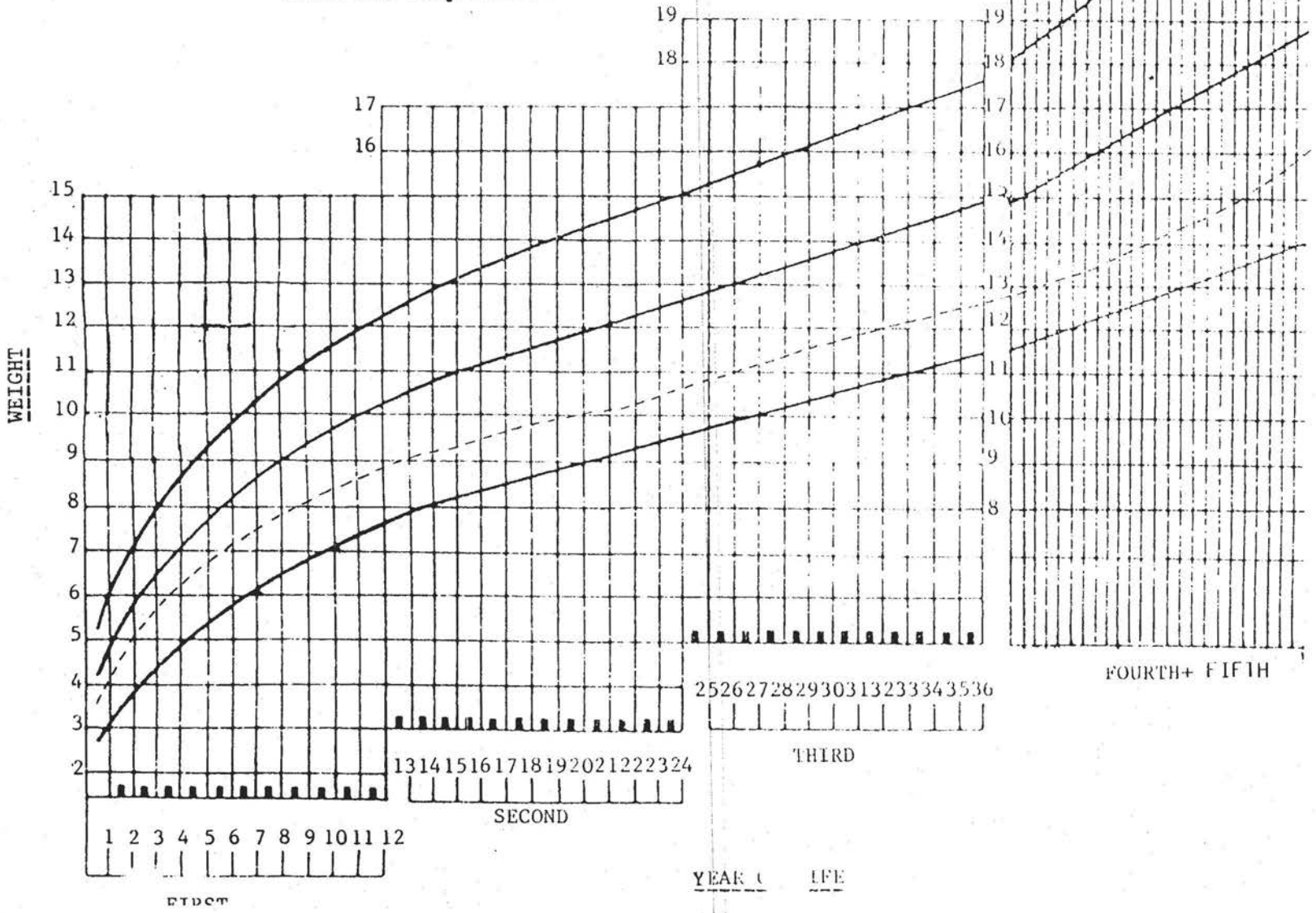
# Islamic Republic of Iran
# Under Five Girls
# Median Weight of Age Group
# MICS of September 1995

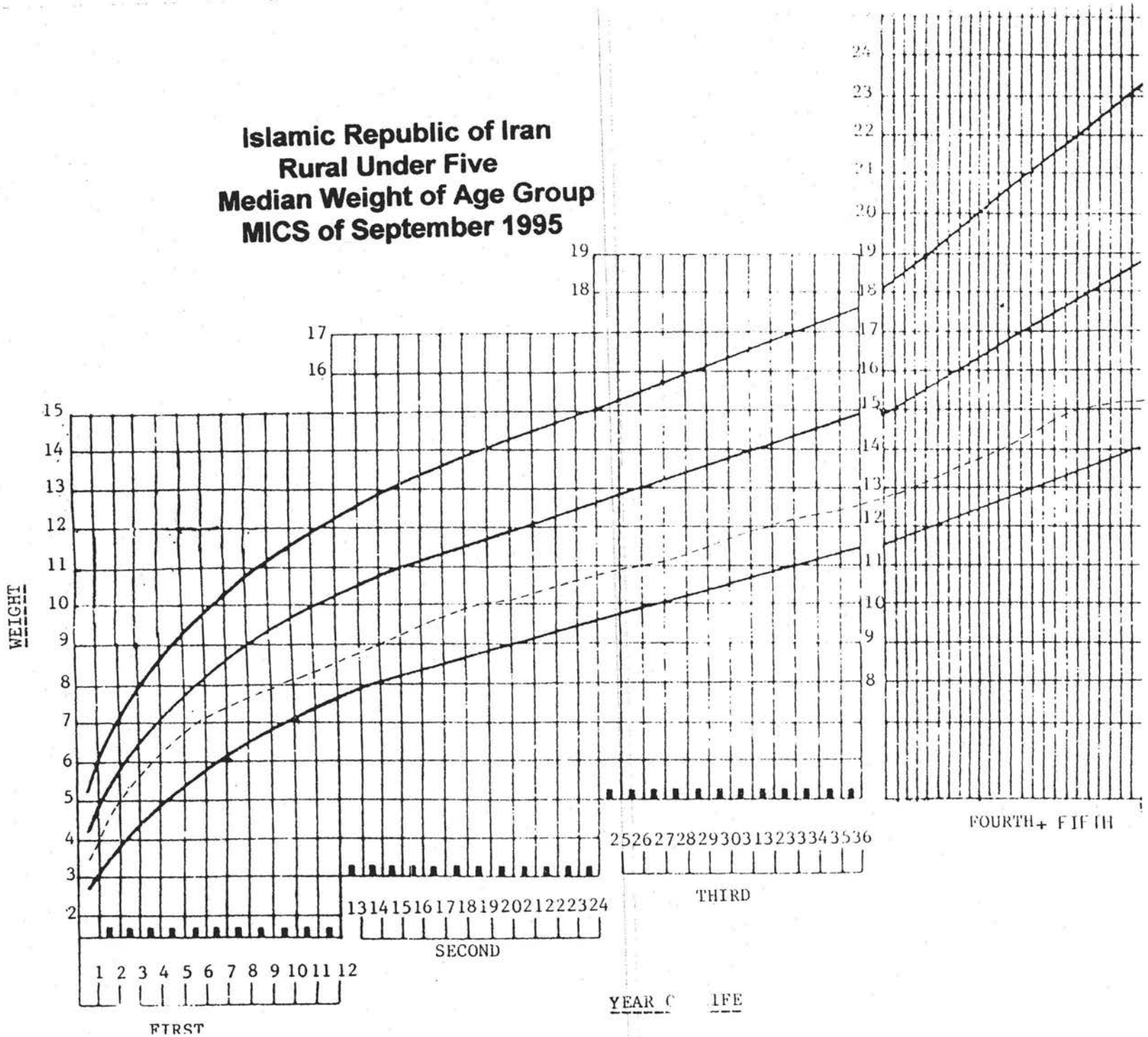


**Islamic Republic of Iran**
**Under Five Boys**
**Median Weight of Age Group**
**MICS of September 1995**

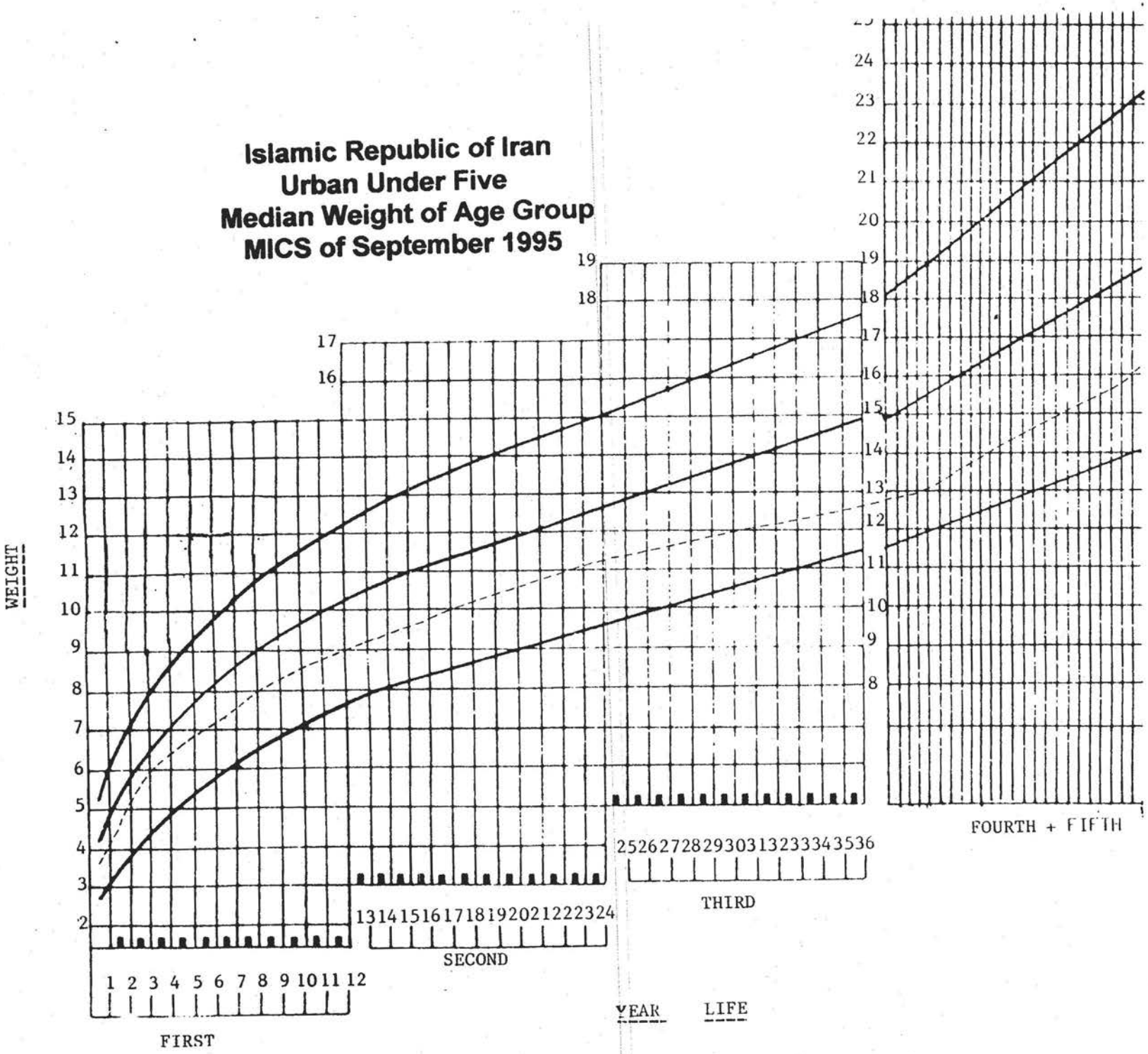


# Islamic Republic of Iran
# Under Five Total
# Median Weight of Age Group
# MICS of September 1995

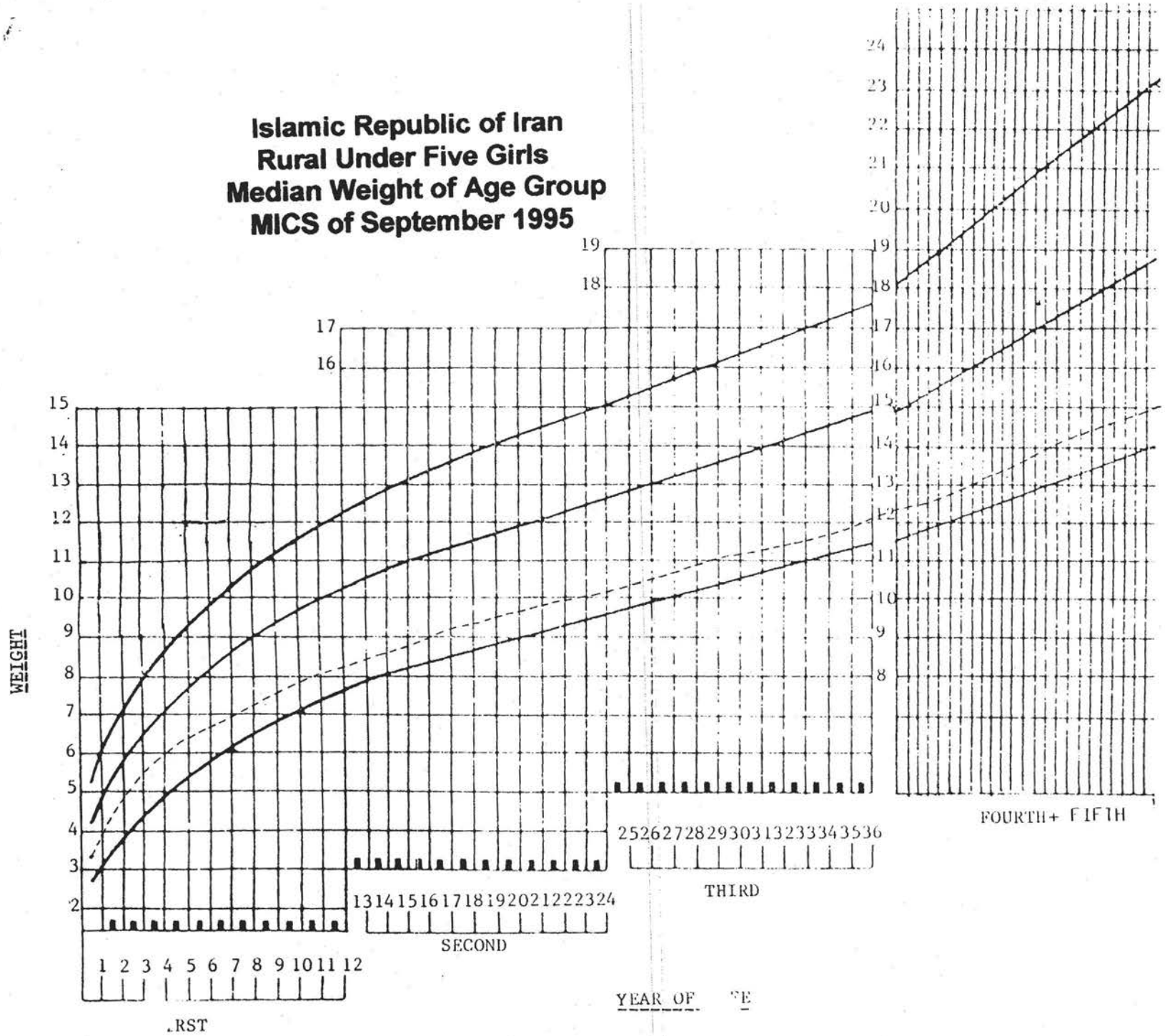



Islamic Republic of Iran
Rural Under Five
Median Weight of Age Group
MICS of September 1995
WEIGHT
YEAR OF LIFE
FIRST
SECOND
THIRD
FOURTH + FIFTH

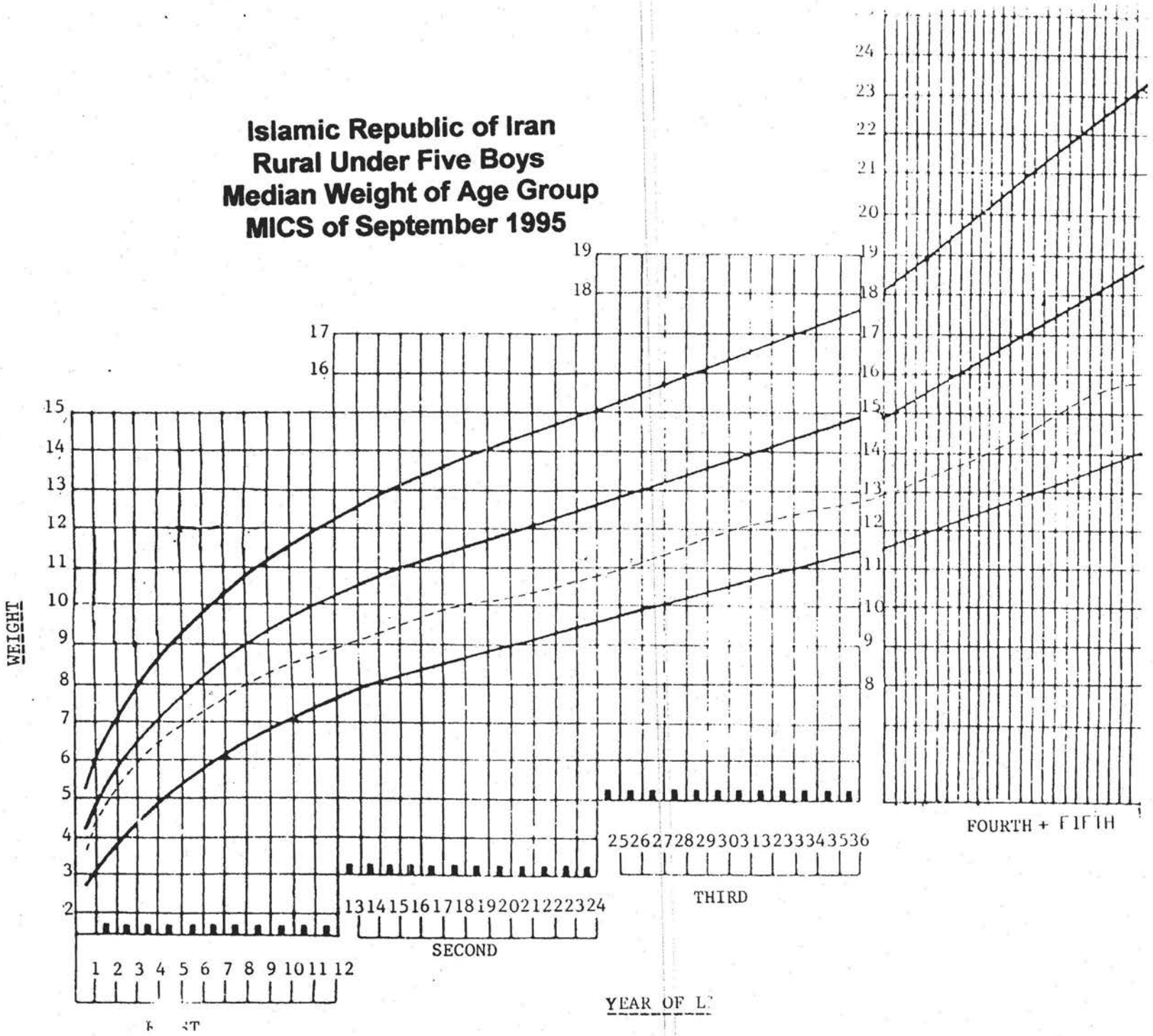
# Islamic Republic of Iran
## Urban Under Five
## Median Weight of Age Group
## MICS of September 1995



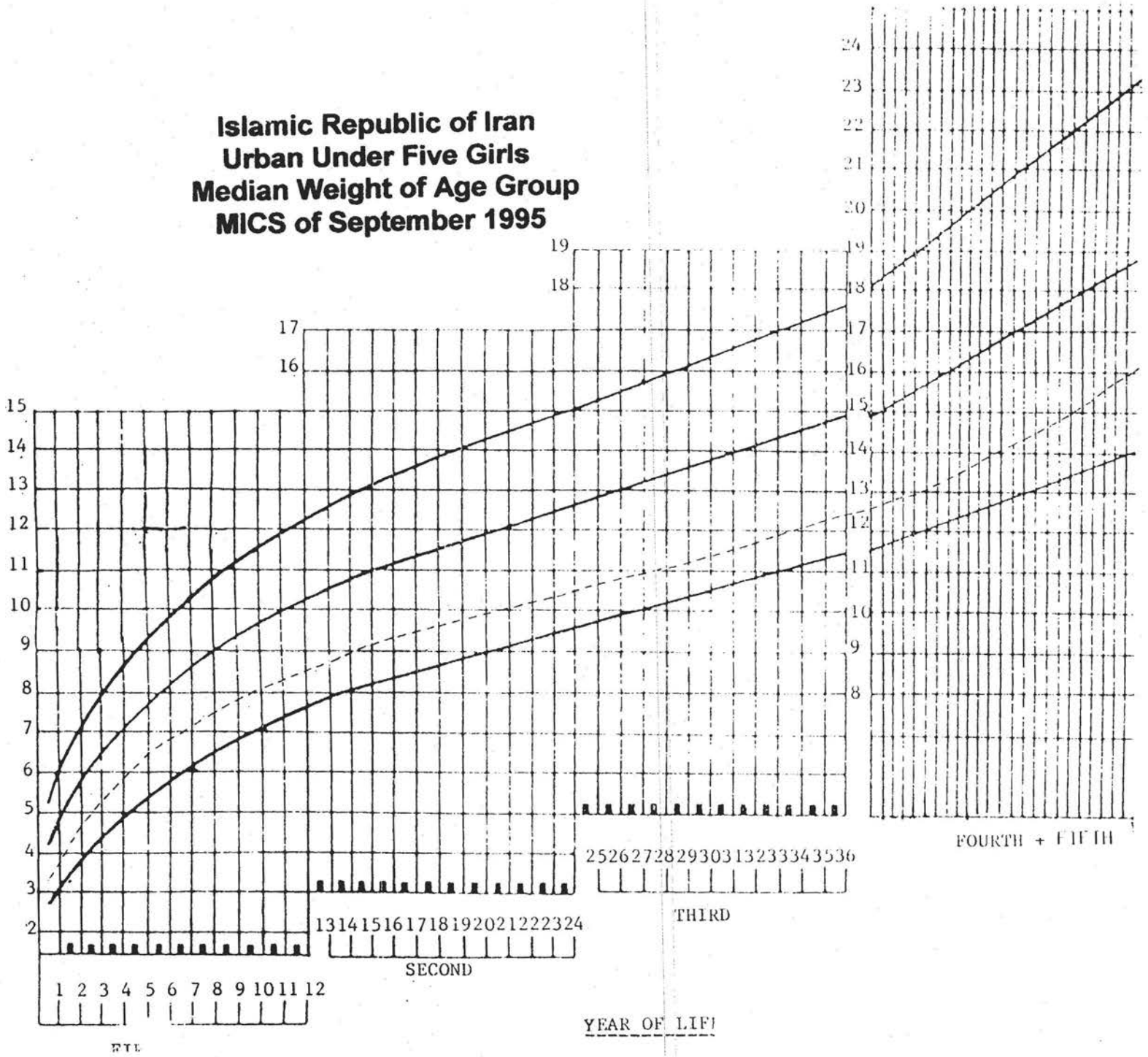
# Islamic Republic of Iran
# Rural Under Five Girls
# Median Weight of Age Group
# MICS of September 1995



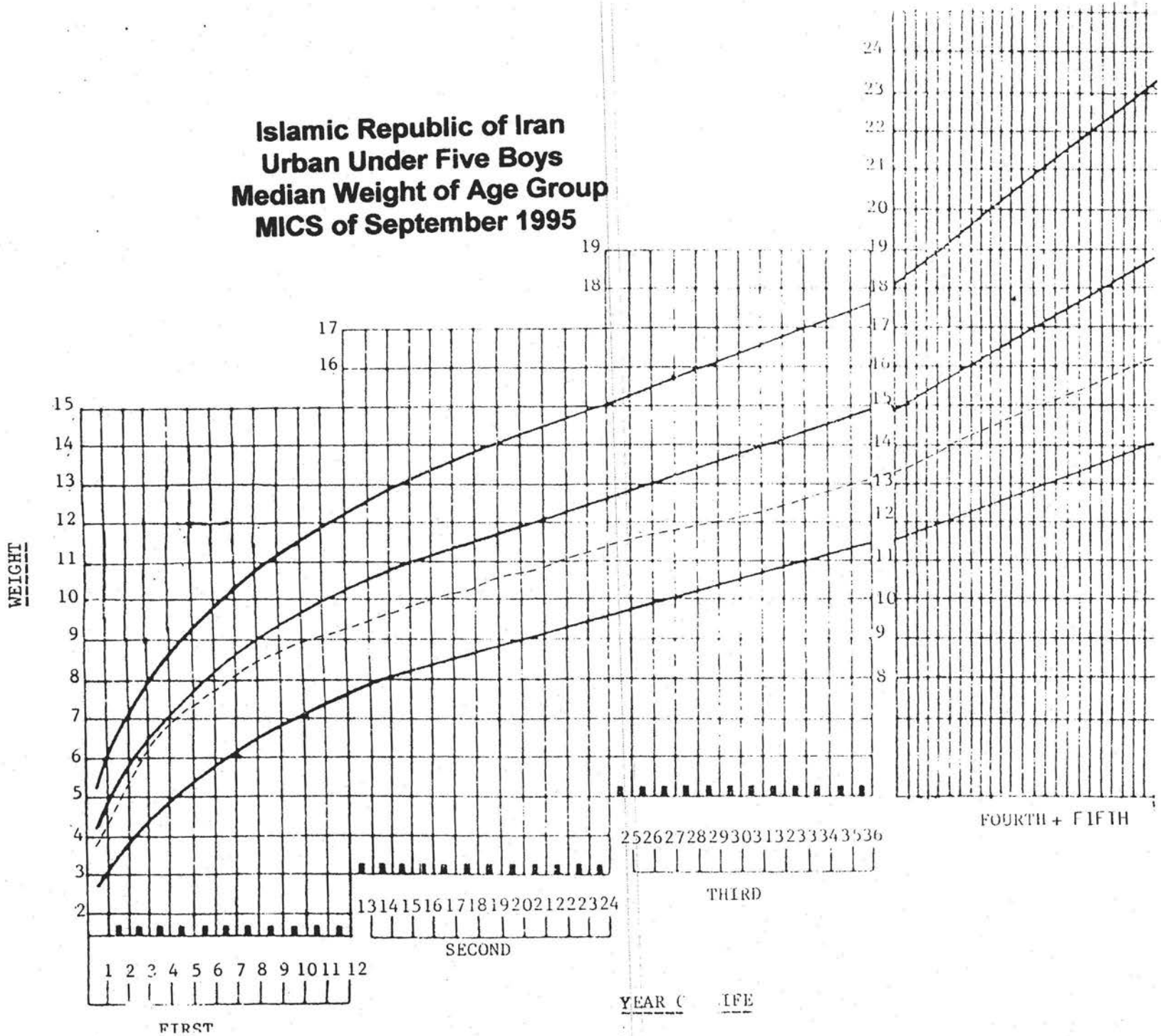
**Islamic Republic of Iran**
**Rural Under Five Boys**
**Median Weight of Age Group**
**MICS of September 1995**



# Islamic Republic of Iran
# Urban Under Five Girls
# Median Weight of Age Group
# MICS of September 1995

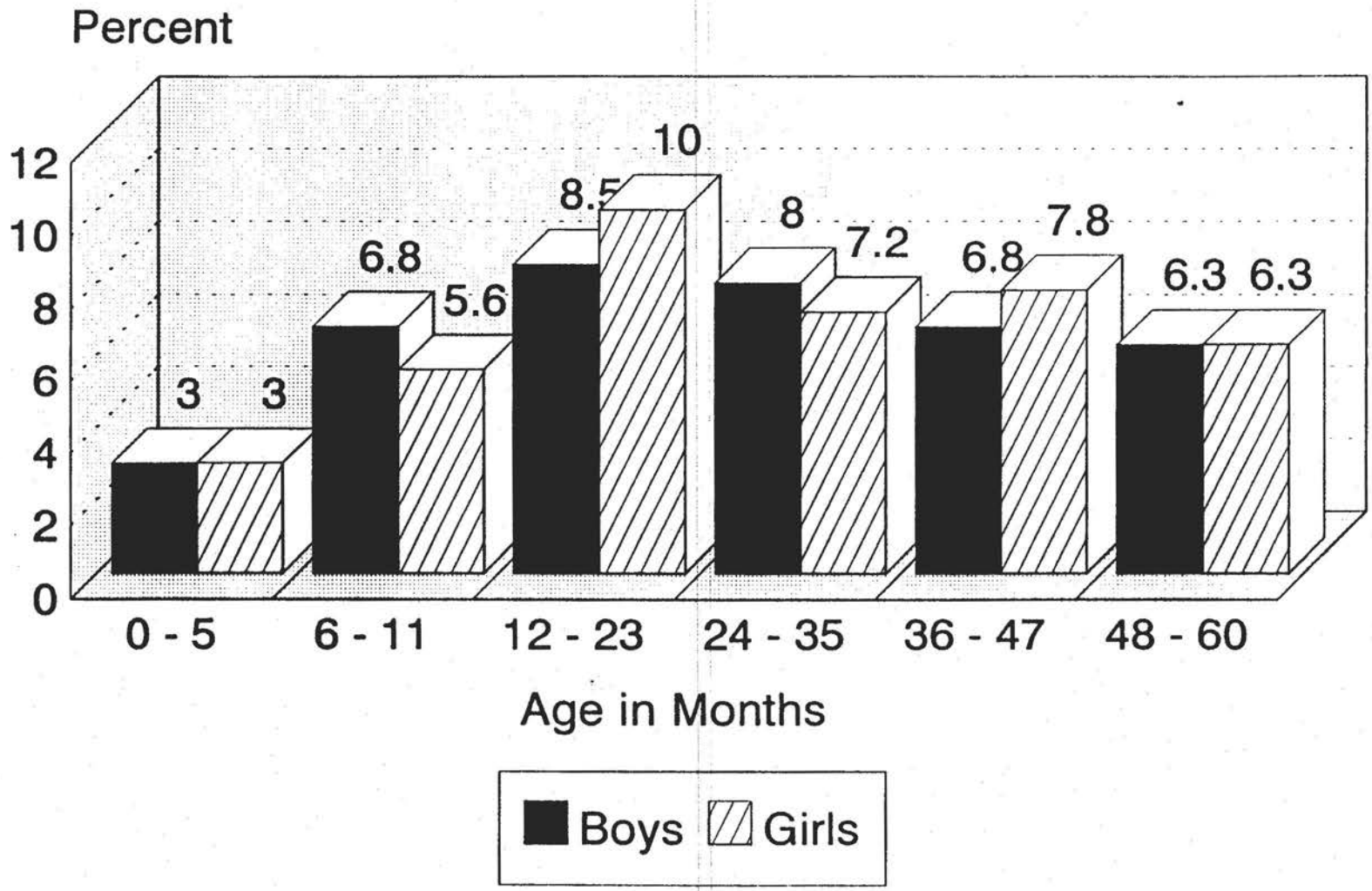


# Islamic Republic of Iran
# Urban Under Five Boys
# Median Weight of Age Group
# MICS of September 1995



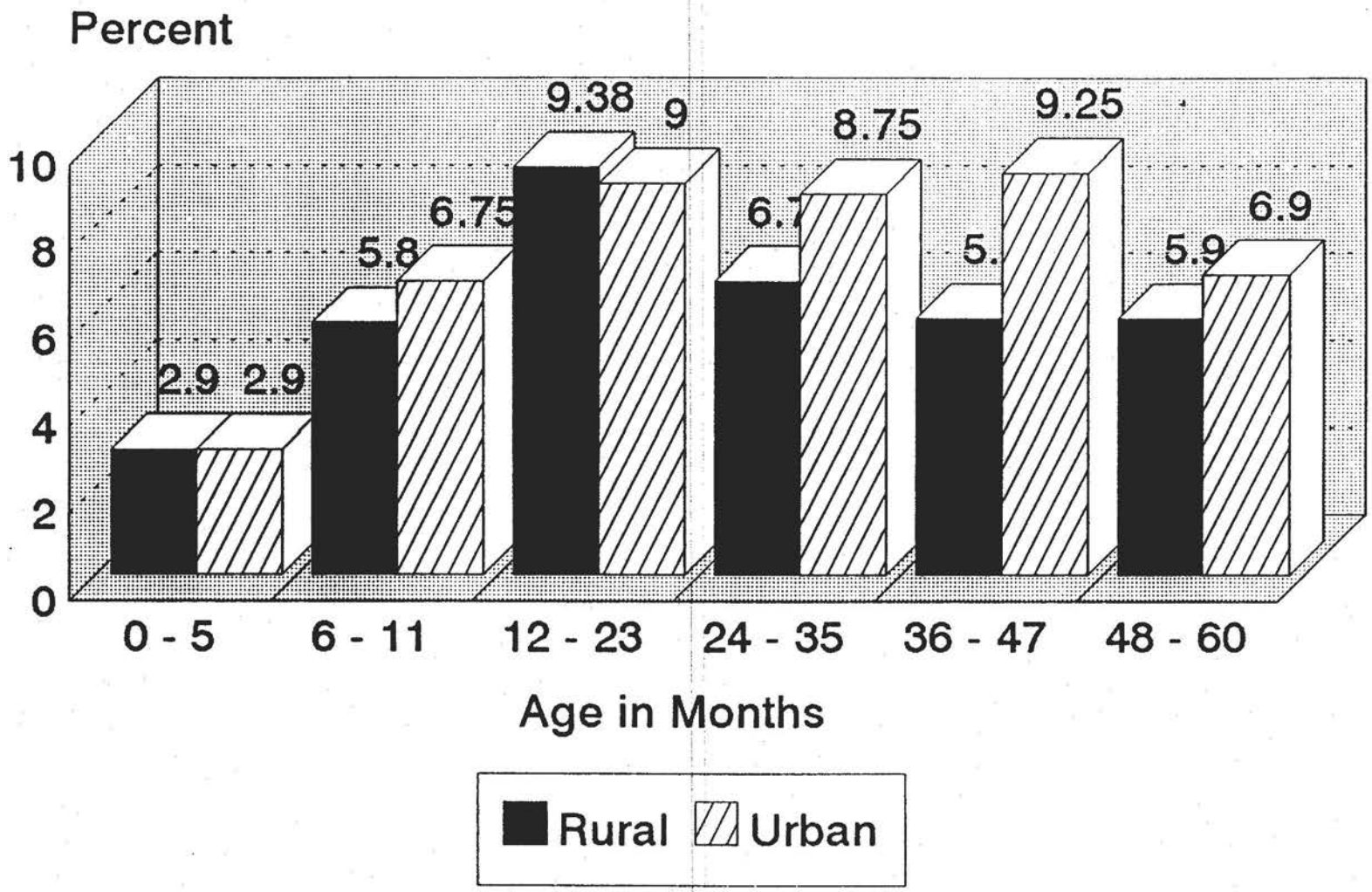
V.2.5.3 Wasting disaggregated by gender and area

# Wasting Below Two Standard Deviations
# Islamic Republic of Iran



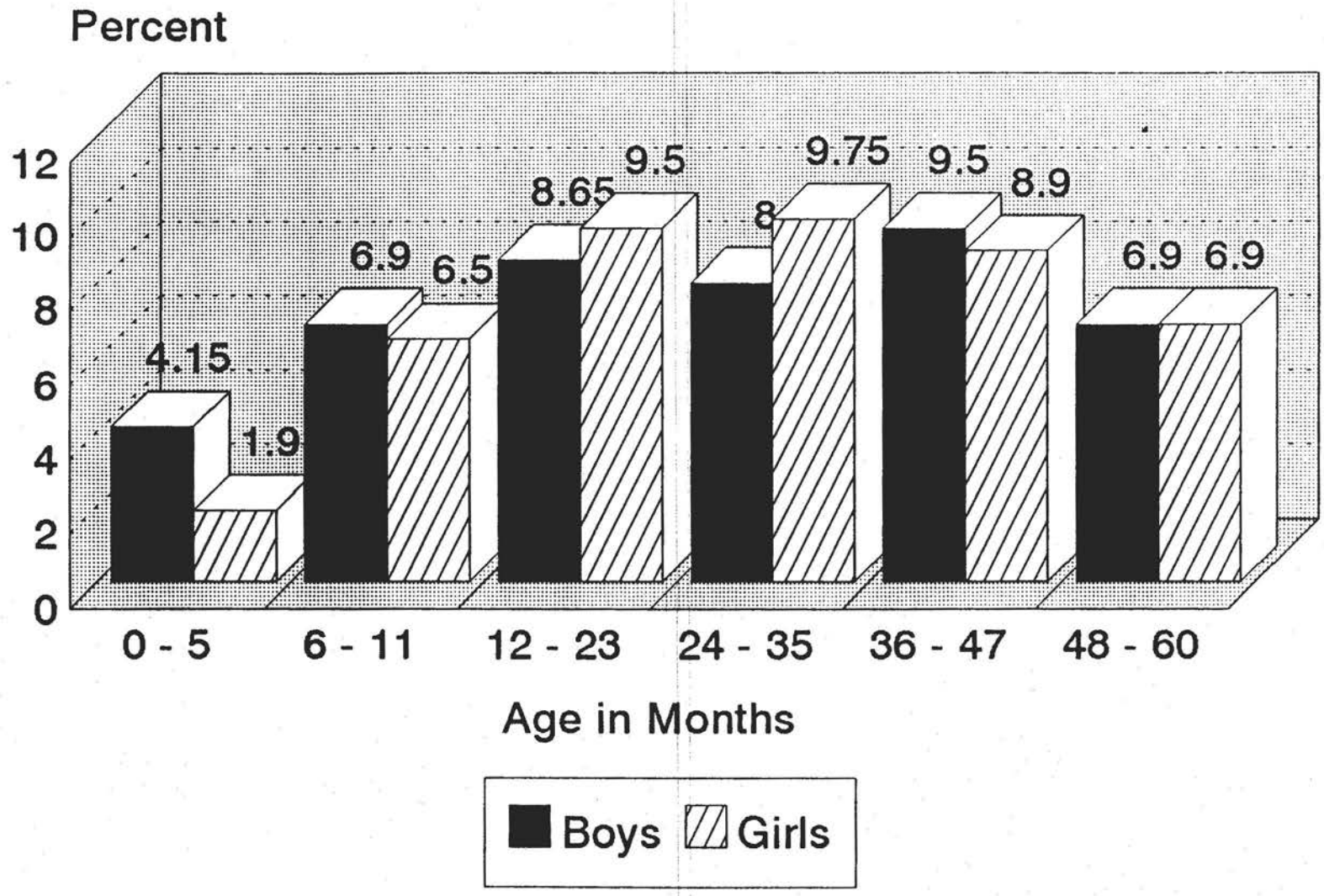

MICS of Sept. 1995, I.R. Iran

# Wasting Below Two Standard Deviations
# Islamic Republic of Iran



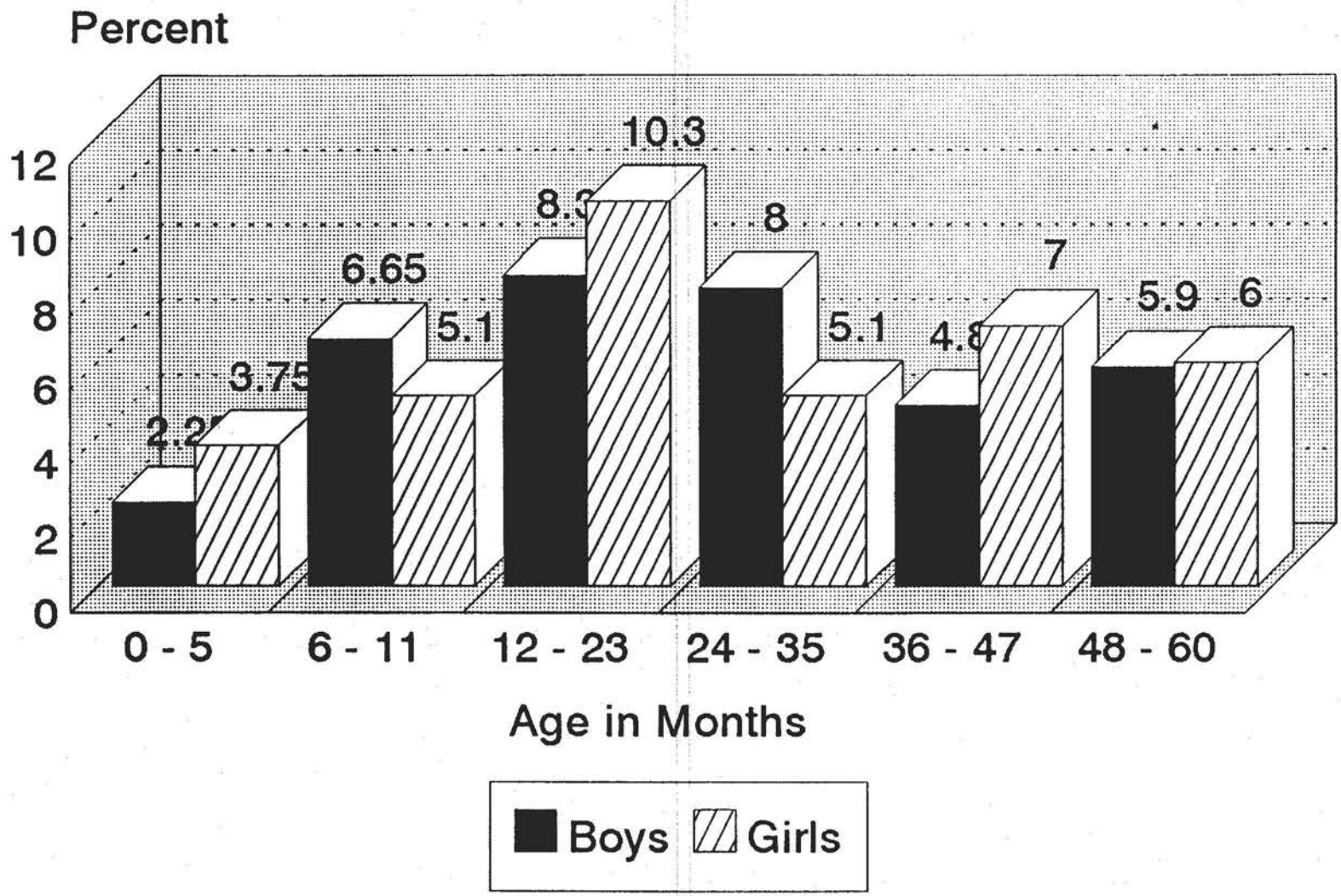

MICS of Sept. 1995, I.R. Iran

# Wasting Below Two Standard Deviations - Urban Islamic Republic of Iran




MICS of Sept. 1995, I.R. Iran

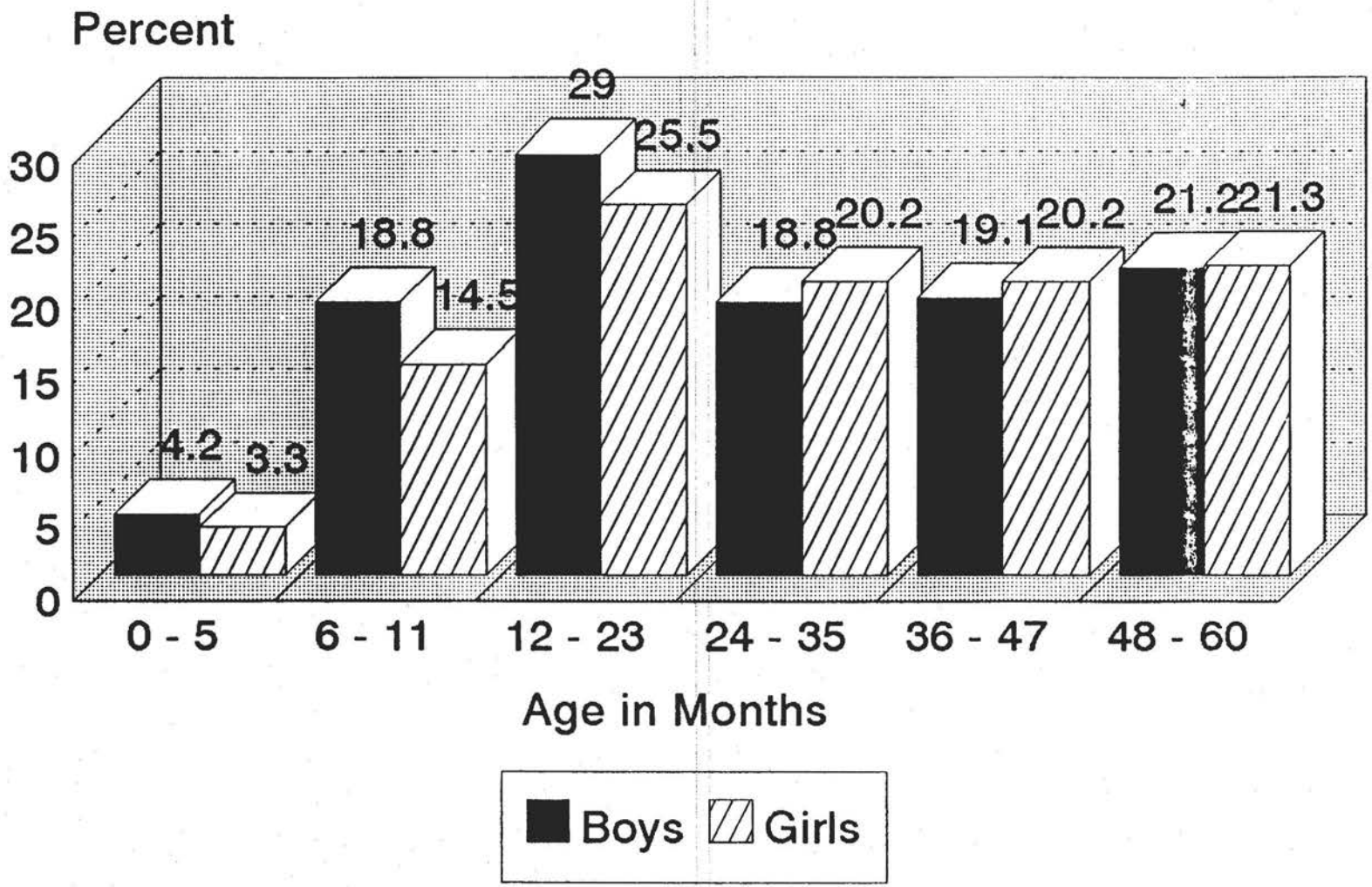
# Wasting Below Two Standard Deviation - Rural Islamic Republic of Iran




MICS of Sept. 1995, I.R. Iran

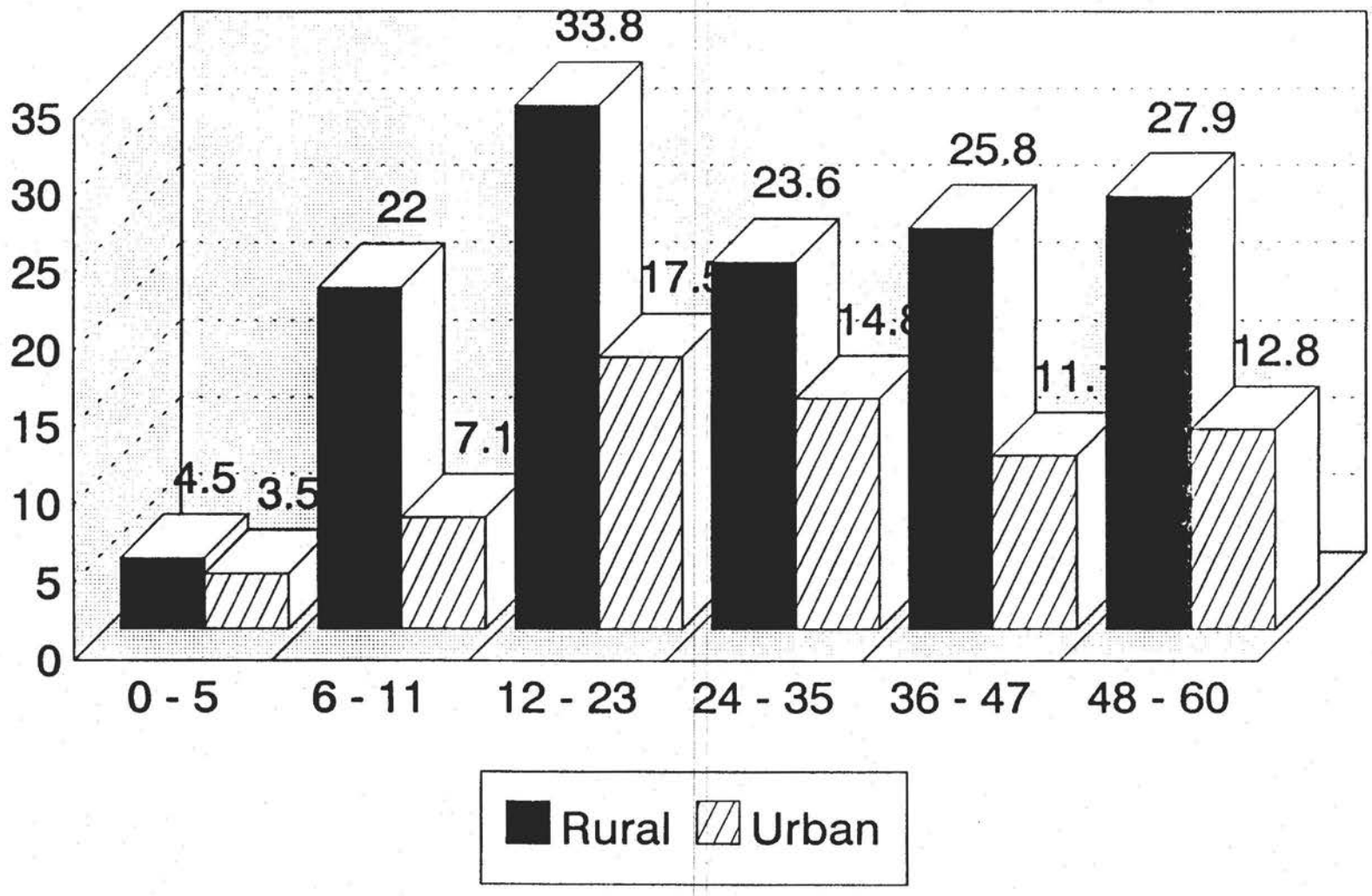
V.2.5.4 Stunting disaggregated by gender and area

# Stunting Below Two Standard Deviation
# Islamic Republic of Iran



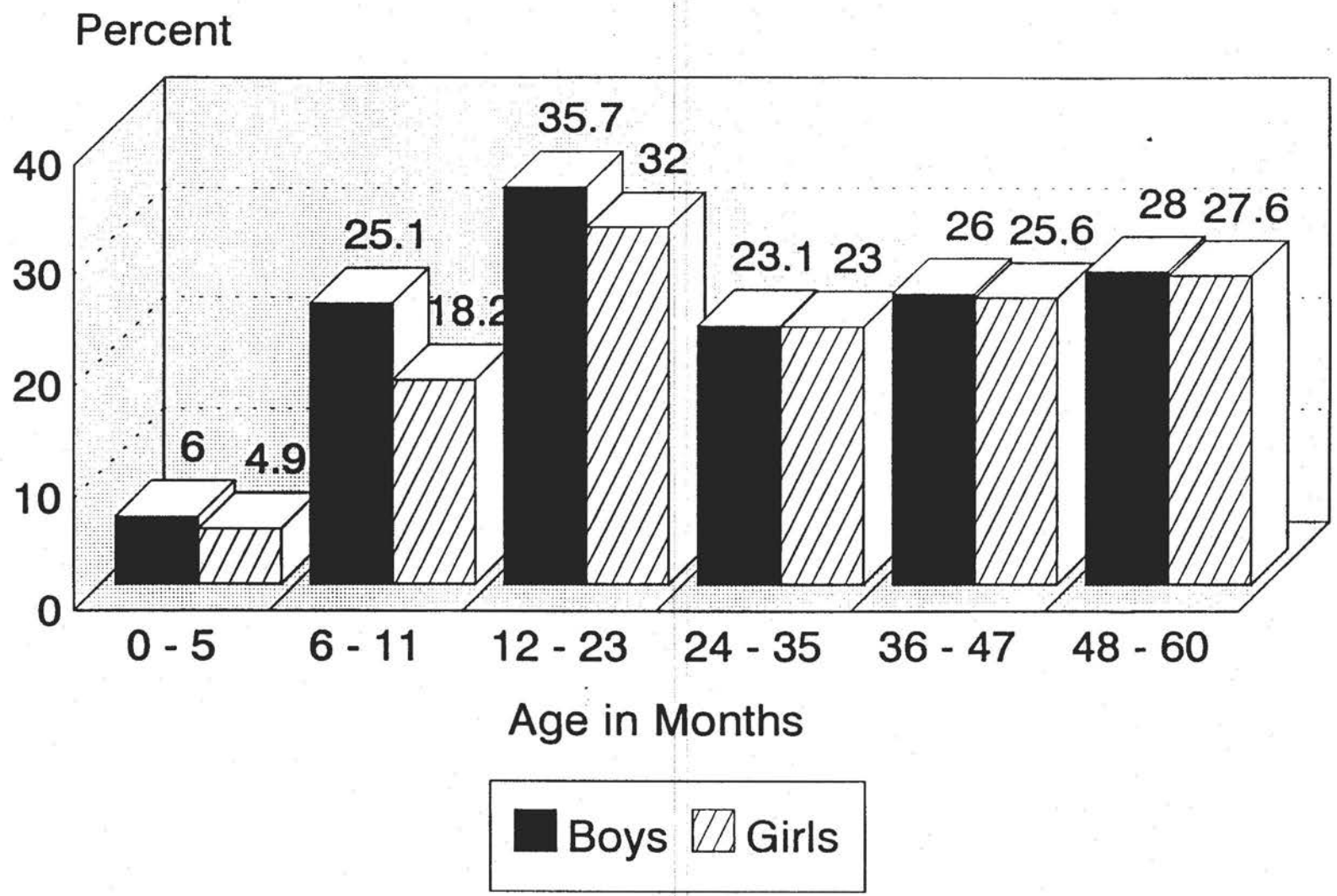

MICS of Sept. 1995, I.R. Iran

# Stunting Below Two Standard Deviations
# Islamic Republic of Iran



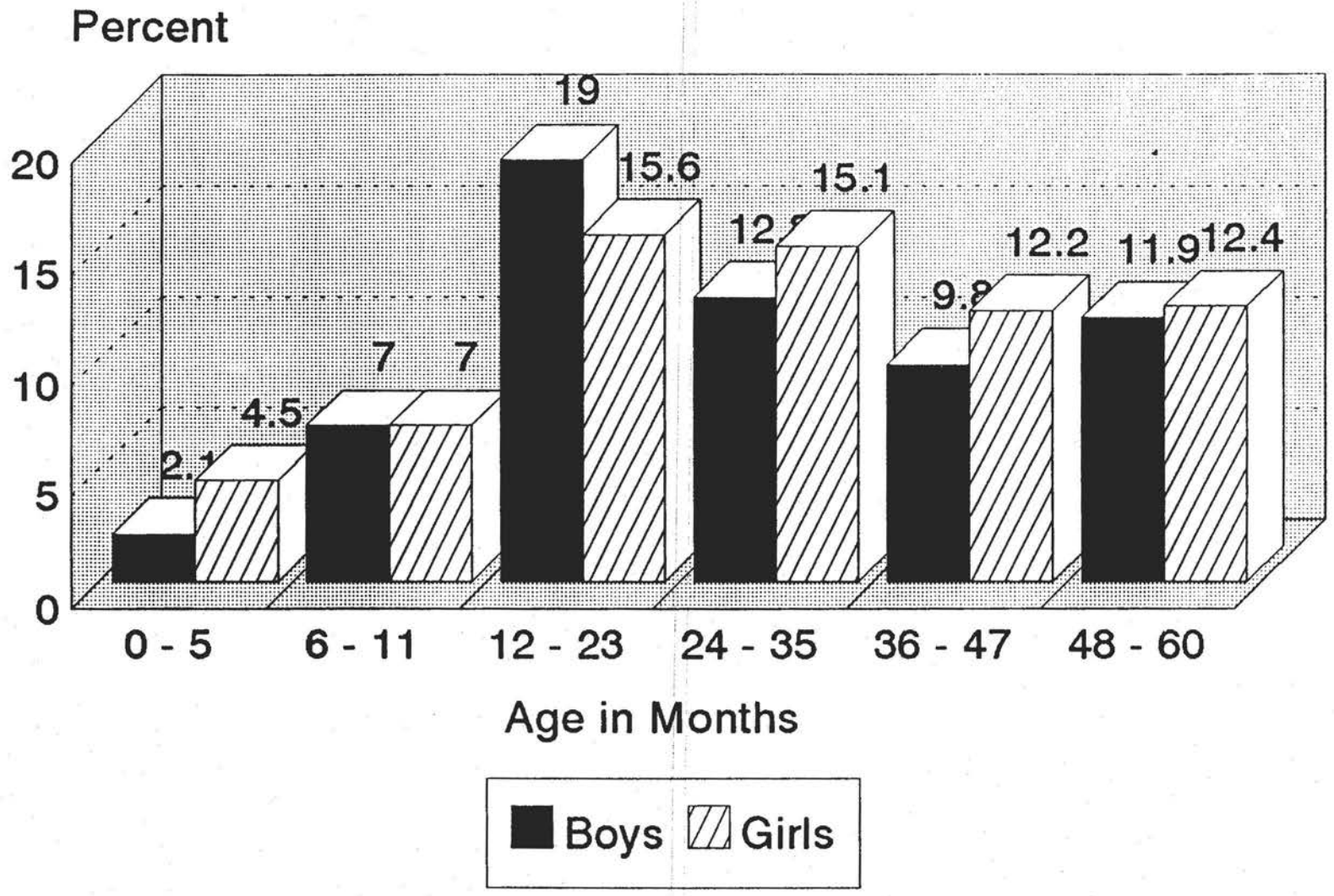

MICS of Sept. 1995, I.R. Iran

# Stunting Below Two Standard Deviations - Rural Islamic Republic of Iran




MICS of Sept. 1995, I.R. Iran

# Stunting Below Two Standard Deviations - Urban Islamic Republic of Iran




MICS of Sept. 1995, I.R. Iran

## VI. Conclusion:

As can be seen from the results of the MICS and the annexes to this report, all of the Mid-Decade Goals have been reached except the achievement of 80% usage of ORT as part of CDD. We are approximately 10 percentage points away from this goal. A concentration of efforts to attain a higher usage of ORT must be organized if this goal is to be attained.

The results shows that the incidence of diarrhoea is 15.2 percent in the past two week of the survey. This figure translates to 4 episodes per child per year (15.2 x 26%=3.95). The 1991 cluster survey showed 3.6 episodes per child per year and that of 1987 five episodes. All of the indications point to the fact that the CDD programme of Iran should redouble its efforts to achieve this Mid-Decade Goal.

The achievements in immunization has been exceptional. With the help of this feat, Iran has been able to establish a barrier in front of the importation of polio and other EPI diseases from the neighboring countries. Afghanistan and Pakistan, two of the neighboring countries, have the highest incidence of polio rates in the world.

It is believed that the work of the MOH&ME has been exceptional on all fronts of the MDG. The achievement of these goals has been due to the exceptional dedication of the personnel of this ministry and those government organizations collaborating with this ministry. Almost all achievements have been sustained, bringing the Year 2000 goals within easy reach of the Islamic Republic of Iran.

# Annex One

## List of Mid-Decade and End-Decade Goals

MID-DECADE GOALS

In order to maintain a sense of urgency, most of the developing world's governments have agreed to try to reach a limited number of goals by the middle of the decade. The following were considered achievable by the end of 1995:

* Elimination of neonatal tetanus

* Reduction of measles morbidity by 90%

* Reduction of measles mortality by 95%

* Achievement of 80% ORT use for diarrhoeal disease

* Eradication of polio (certain countries)

* Elimination of iodine deficiency disorders

* Success of the 'baby-friendly hospital initiative'

* Elimination of vitamin A deficiency

* Elimination of guinea worm

* Achievement of 80% immunization in all countries

**The following is the full list of goals, to be attained by the year 2000, which were adopted by the World Summit for Children on 30 September 1990. These goals were characterized as being technically and financially feasible.**

**Overall goals 1990-2000**

* A one-third reduction in under-five death rates (or a reduction to below 70 per 1,000 live births - whichever is lower).

* A halving of maternal mortality rates.

* A halving of severe and moderate malnutrition among the world's under-fives.

* Safe water and sanitation for all families.

* Basic education for all children and completion of primary education by at least 80%.

* A halving of the adult illiteracy rate and the achievement of equal educational opportunity for males and females.

* Protection for the many millions of children in especially difficult circumstances and the acceptance and observance, in all countries, of the recently adopted Convention on the Rights of the Child. In particular, the 1990s should see rapidly growing acceptance of the idea of special protection for children in time of war.

**Protection for girls and women**

* Family planning education and services to be made available to all couples to empower them to prevent unwanted pregnancies and births which are 'too many and too close' and to women who are 'too young or too old'. Such services should be adapted to each country's cultural, religious, and social traditions.

* All women to have access to prenatal care, a trained attendant during childbirth and referral facilities for high-risk pregnancies and obstetric emergencies.

* Universal recognition of the special health and nutritional needs of females during early childhood, adolescence, pregnancy, and lactation.

**Education**

In addition to the expansion of primary school education and its equivalents, today's essential knowledge and life skills could be put at the disposal of all families by mobilizing today's vastly increased communications capacity.

**Nutrition**

* A reduction in the incidence of low birth weight (under 2.5 kg.) to less than 10%.

* A one-third reduction in iron deficiency anaemia among women.

* Virtual elimination of vitamin A deficiency and iodine deficiency disorders.

* All families to know the importance of supporting women in the task of exclusive breast-feeding for the first four to six months of a child's life.

* Growth monitoring and promotion to be institutionalized in all countries.

* Dissemination of knowledge to enable all families to ensure household food security.

**Child health**

* The eradication of polio.

* The elimination of neonatal tetanus (by 1995).

* A 90% reduction in measles cases and a 95% reduction in measles deaths, compared to pre-immunization levels.

* Achievement and maintenance of at least 90% immunization coverage of one-year-old children and universal tetanus immunization for women in the childbearing years.

* A halving of child deaths caused by diarrhoea and a 25% reduction in the incidence of diarrhoeal diseases.

* A one-third reduction in child deaths caused by acute respiratory infections.

* The elimination of guinea worm disease.

# Annex Two

## A List of Mid-Decade Goals Indicator Values

# Base Line and Final Values for MDG Indicators
# Islamic Republic of Iran
# Oct. 1995

## 1. Immunizations

| | 1989* | 1990** | 1993& | 1995&& |
|---|---|---|---|---|
| BCG | 95% | 91% | 99% | 99% |
| DPT3 | 93% | 88% | 99% | 97% |
| Polio3 | 91% | 88% | 99% | 97% |
| Measles | 83% | 84% | 96% | 95% |
| Tetanus* | 47% | 77% | 50%++ | 82% |

*Pregnant women

++Please note that definition was changed in this time period.
(Ref: *SOWC 1992, **SOWC 1993,&SOWC 1995,&& MOH&ME EPI Cluster Survey of 1995)

## 2. NNT

| | Incidence rate/1000 live births | No. Of Cases |
|---|---|---|
| 1990 | 0.056 | 26 |
| 1992 | 0.014 | 18 |
| 1993 | 0.014 | 12 |
| 1994 | 0.015 | 21 |

**The district of Zahedan has the highest cases of NNT; incidence rate is 0.7 per 1000 live births.**

(Ref: Mid-Decade Goals, Declaration of Achievements in the Islamic Republic of Iran. 1995; The Government of the Islamic Republic of Iran.)

## 3. Measles:

| | Incidence rate/100,000 | |
|---|---|---|
| 1984 | 75.4 | |
| 1989 | 10.0 | |
| 1990 | 9.5 | |
| 1991 | 10.4 | |
| 1992 | 8.8 | |
| 1993 | 7.9 | |
| 1994 | 1.0 | (549 cases reported) |
| 1995 | 0.5 | (287 cases reported as of Sept. 95) |

(Ref: A brief report of EPI target diseases & Polio NIDs, IR.IRAN 1993, Dr. M. Azmoudeh and Dr. P. Vazirian, and for 1994 MOH&ME and MTR for Immunization Programmes of MOH&ME, 1995)

**Reported mortality due to measles in 1994 was zero cases.**

## 4. Polio Eradication

| | Polio cases** | AFP |
|---|---|---|
| 1991 | 55 | 67 |
| 1992 | 45 | 83 |
| 1993 | 108 | 177 |
| 1995 | 71 | 229* |

*As of September 1995

** These figures include the non-Iranians seeking cure in the I.R. of Iran.

(Ref: Mid-Decade Goals, Declaration of Achievements in the Islamic Republic of Iran, 1995; The Government of the Islamic Republic of Iran.)

## 5. Vitamin A

**Iran is not a Vitamin A deficient area.**

(Ref: MOH&ME)

## 6. IDD: Universal Salt Iodization:

**Adequately iodized salt at the household level.**

| | Rural | Urban | Total |
|---|---|---|---|
| 1994 | 52 | 76 | 65 |
| 1995 | 76 | 87 | 82 |

**Iodizes salt needs within the country: 240,000 MTON/year (4 kg per capita)**
**Iodized salt produced within the country: 396,000 MTON/year by 52 companies.**
(Ref: MOH&ME)

## 7. ORT

| Deaths associated with Diarrhoea | | ORT Use Rate |
|---|---|---|
| 1987 | 34,000 | |
| 1988 | 13,200 | 71 (SOWC 1992) |
| 1991 | 10,000 | |
| 1995 | 4,000 | 69.1 (MICS 1995) |

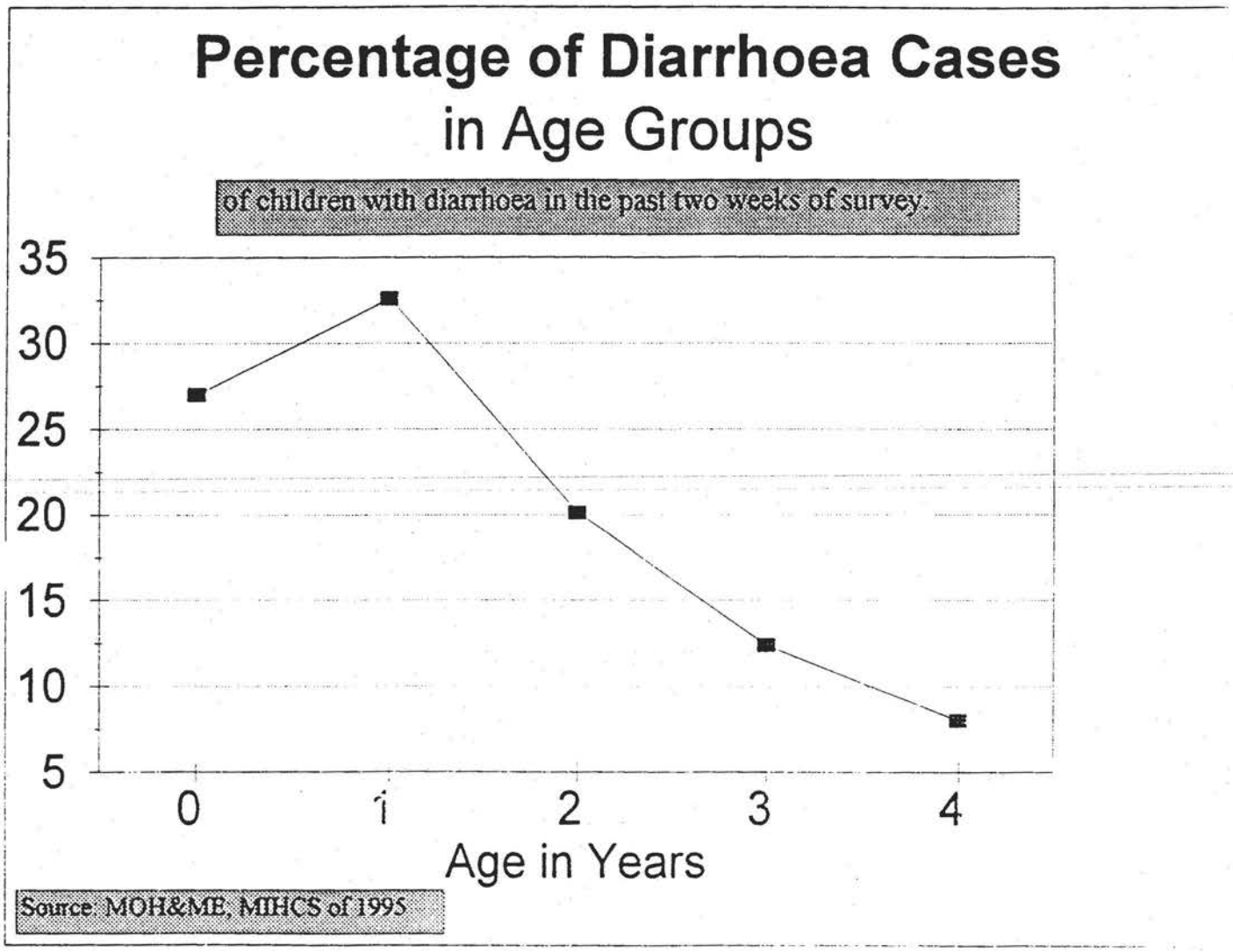
**ORT use rate as part of CDD - 1995** (Ref: MICS 1995)

| | |
|---|---|
| Urban | 68.1 |
| Rural | 65.4 |
| Total | 66.3 |

**ORS use rate as part of CDD - 1995** (Ref: MICS 1995)

| | |
|---|---|
| Urban | 34.9 |
| Rural | 38.0 |
| Total | 36.9 |

(For all non stated reference, Ref: MOH&ME)


Percentage of Diarrhoea Cases
in Age Groups
of children with diarrhoea in the past two weeks of survey.
35
30
25
20
15
10
5
0
1
2
3
4
Age in Years
Source: MOH&ME, MIHCS of 1995

## 12. Basic Education

**Number of Boys and Girls in Primary School**

| | No. Of Girls | No. Of Boys | %Gap |
|---|---|---|---|
| 1990 | 3718098 | 4544343 | 10 |
| 1995 | 4670563 | 5266806 | 6 |

**In 1993, 90% of female students and 92% of male students reached grade four, end of primary education.**

| | Female | Male | Total |
|---|---|---|---|
| 1994 Gross Enrolment | 105 | 117 | 110 |
| 1994 Net Enrolment | 93 | 99 | 96 |
| 1994 Grade IV Completion Rate | 93 | 94 | 93 |
| 1994 Grade V Completion Rate | 90 | 92 | 91 |

**Drop out rate by grade 4 in 1994 was 3 percent.**
(Ref: Ministry of Education)

## 13. Water and Sanitation:

| | Access to Safe Drinking Water | | |
|---|---|---|---|
| | Rural | Urban | Total |
| 1987 (Ref.: SOWC 1990) | 55 | 95 | 76 |
| 1990 (Ref: SOWC 1992) | 76 | 98 | 89 |
| 1995 (Ref: MICS of 1995) | 82.0 | 98.4 | 90.2 |

| | Access to Sanitation | | |
|---|---|---|---|
| | Rural | Urban | Total |
| 88-91 (Ref: SOWC 1994) | 35 | 100 | 71 |
| 1995 (Ref: MICS of 1995) | 73.7 | 86.0 | 80.5 |

## 14. Other Survey Results:

Population Indices & Usage of Iodized Salt

| INDICATORS | URBAN | RURAL | TOTAL |
|---|---|---|---|
| **Crude Birth Rate** | 20.4 | 25.4 | 22.5 |
| **General Fertility Rate** | 84.2 | 121.3 | 100.9 |
| **Total Fertility Rate** | 2.7 | 4.2 | 3.3 |
| **Population Growth Rate** | 1.5 | 2 | 1.75 |
| **Neonatal Mortality Rate / 1000 L.B.** | 17.6 | 23.7 | 20.3 |
| **Infant Mortality Rate / 1000 L.B.** | 20.3 | 38.3 | 28 |
| **Under Five Mortality Rate / 1000 L.B.** | 25.2 | 48 | 35 |
| **% of contraceptive use rate:** | | | |
| **-Pills** | 19.8 | 26.9 | 22.8 |
| **-Condoms** | 6.6 | 4.5 | 5.7 |
| **-I.U.D.** | 9 | 4.6 | 7.1 |
| **-Tubal Ligation** | 13.8 | 13.5 | 13.7 |
| **-Vasectomy** | 1.8 | 0.7 | 1.3 |
| **-Norplant & Injections** | 0.7 | 2.2 | 1.3 |
| **-All Effective Methods** | 51.7 | 52.4 | 52 |
| **Percentage of Total Population using Iodized Salt** | 87 | 76 | 82.3 |

Source: Cluster survey on Family Planning, Ministry of Health & Medical Education; May 1995.

Immunization Coverage (Percentage) in under one-year old Children and Pregnant Women:

| ANTIGEN | URBAN | RURAL | TOTAL |
|---|---|---|---|
| BCG | 99.3 | 98.7 | 99 |
| DPT3 | 96.5 | 98.5 | 97.4 |
| OPV3 | 96.5 | 98.5 | 97.4 |
| Measles | 94.7 | 95 | 94.8 |
| HBV3 | 75.8 | 87.2 | 80.6 |
| TT2 pregnant women | 72.9 | 93.9 | 82 |

Source: Cluster survey on Immunization for under one-year old children and pregnant women, Ministry of Health & Medical Education; April 1995.

# Annex Three

## The MICS Questionnaire

## Unofficial Translation and Farsi Version

IN THE NAME OF GOD

Questionnaire for the Survey of the MDG in the Islamic Republic of Iran, September of 1995

Date

ID <idnum> CODE ########

AA - FAMILY INFORMATION SECTION

{1} Province _____ ##

Name of District _____ Name of City _____

Name of Subdistrict _____

{2} Residency (1-Urban; 2-Rural) #

{3} Cluster Number ###

{4} Family Number in Cluster ##

{5} Presence of the Family (1-Interview took place;2-Interview did not take place after three visits to the location) #

Household Address _____

Name and Surname of the Head of Household _____

BB - ENVIRONMENTAL HEALTH SECTION

{6} Family Size ##

{7} How do you provide your water supply # (1- Use from piped water;2-Use from a sanitary source such as covered and chlorinated well;3- Boiled water and cooled or chlorinated water;4-Other mentioning source _____)

{8} How much time do you need to get water (in minutes) ##

If water accessible in the house use the code "00" and if more than 99 minutes use the code "99".

{9} Whether the household has a toilet with all of the conditions or not: #

According to the latest instructions from Water and Sanitation Department of MOH&ME, Tehran (1-Yes, Sanitary; 2-Yes, Non-sanitary; 3- No)

{10} Do you have any under five children (1- Yes; 2- No) #

{11} How many under five children (Born after 22 September 1990) do you have #

(12) Please fill out the following table for all under five children:

| Child NO. | Name and Surname | Sex 1 Girl 2-Boy | Actual date of Birth Day | Month | Year | Age in Months |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |

ID <idnum> CODE ########

CC - UNDER-FIVE SECTION
Please fill out the following sections for once for each under five child you find.

{1} Age (According to Question 12 of last section) ##
{2}Sex of under five child (1- Girl; 2- Boy) #
{3} WEIGHT ( in kilo grams) ##.###
{4} HEIGHT ( in centimeters) ###
{5} Did the child get diarrhoea during last two weeks(1-Yes; 2-No) #
IF Response of Question (5) is YES
Please indicate the amount of each item below consumed by the child relative to prior to diarrhoea:
{6} Breast milk(1-Totally stopped;2-Less than before;3-Same as before;4-More than before) #
{7} Water and Liquid(1-Totally stopped;2-Less than before;3-Same as before;4-More than before) #
{8} Food (1-Totally stopped;2-Less than before;3-Same as before;4-More than before) #

In the case that the question does not apply, such that the child does not drink milk, either before or after the diarrhoea incidence, please write the code 9 next to the item.

To cure the diarrhoea what did you use:
{9} ORS (1-Yes; 2-No) #
{10} Anti-diarrhoea drugs (1-Yes; 2-No) #
(11} Home remedy (1-Yes; 2-No) #
{12} Intravenous serum (1-Yes; 2-No)

DD - UNDER 36 MONTH SECTION
{13} Age (According to Question 12 of last section) ##
{14}Sex of under five child (1- Girl; 2- Boy) #
{15} Did you feed your child by breast feeding (1-Yes;2-No) #
{16} If yes till what age (in months) ##
{17} Did you feed your child by formula (1-Yes;2-No) #
If a negative answer was given, record 99 for question 18 and go to question 19.
{18} If yes how old was your child when you first initiated formula feeding ##
{19} How old was your child when you first started complementary feeding ##
If the child is being fed only with breastmilk, please record 99 for this question.

EE- UNDER SIX MONTH SECTION
{20} Age (According to Question 12 of last section) ##

In the past 24 hours, which of the following has been fed to your child:
(21)Breast milk(1-Yes;2-No) #
(22} Vitamins or ORS or Drugs(1-Yes;2-No) #
(23} Sugar water or Water or Juice or Tea or other liquids(1-Yes; 2-No) #
(24} Animal Milk or Formula(1-Yes;2-No) #
(25} Solid or Semi-solid Food(1-Yes;2-No) #

(Please note that the questionnaire was in two pages, printed on both sides, with the ID# and CODE# written on both page.)

به نام خدا

# پرسشنامه بررسی شاخصهای اهداف میان دهه در جمهوری اسلامی ایران
## مهر ماه ۱۳۷۴

تاریخ : /۷/۱۳۷۴

شماره ردیف براساس <ID NUMBER> کامپیوتر.....

کدشناسایی ☐☐☐☐☐☐☐☐
کداستان | منطقه | شماره | خوشه | شماره | خانوار

**بخش الف - اطلاعات عمومی**

۱- نام استان ..... ☐☐

- نام شهرستان ..... نام شهر ..... نام دهستان .....
نام روستا .....

۲- محل اقامت ۱- شهر ۲- روستا ☐

۳- شماره خوشه ☐☐☐

۴- شماره خانوار در خوشه ☐☐

۵- نتیجه بازدید از خانوار

۱- مصاحبه انجام شد ۲- مصاحبه پس از سه بار مراجعه انجام نشد ☐

- آدرس خانوار .....

نام و نام خانوادگی سرپرست خانوار .....

* کد شناسایی، مجموعه سوالات ۱ تا ۴ اطلاعات عمومی است که بایستی بر روی تمام اوراق پرسشنامه خانوار ثبت شود

**بخش ب - اطلاعات بهداشت محیط خانوار**

۶- تعداد افراد خانوار (افرادی که در این مکان زندگی می کنند و هم خرج هستند) ☐☐

۷- معمول ترین راه تامین آب آشامیدنی خانوار کدام است؟

۱- استفاده‌ازشبکه لوله کشی آب آشامیدنی
۲- استفاده‌از منابع بهسازی شده مثل: چاه، چشمه‌یا قنات بهسازی شده
۳- استفاده‌از آب جوشیده سردشده یا ضدعفونی شده‌با کلر
۴- سایر با ذکر نام ..... ☐

کدشناسایی ☐☐☐☐☐☐☐☐

۸- فاصله‌زمانی محل‌برداشت‌آب تامحل سکونت‌خانوارچقدراست؟(فقط زمان‌رفت، برحسب دقیقه‌وبایاده‌روی) ☐☐

اگر محل برداشت آب در داخل خانه بود کد(۰۰) و اگر بیش از ۹۹ دقیقه زمان لازم داشت کد(۹۹) گذاشته شود.

۹- وضعیت توالت خانوار (براساس آخرین دستورالعمل بهداشت محیط)

۱- دارد، بهداشتی

۲- دارد، غیربهداشتی

۳- ندارد ☐

۱۰- آیا در این خانوار کودك کمتر از پنجساله وجود دارد ؟

۱- بلی ۲- خیر ☐

۱۱- اگر بلی، چند کودك کمتر از پنجساله (متولدین ۳۱ شهریورماه ۱۳۶۹ به‌بعد) در خانوار وجود دارد؟ ☐

۱۲- جدول زیر را برای تمام کودکان زنده زیرپنجسال خانوار (از بزرگترین تا کوچکترین کودك) تکمیل کنید:

| شماره ردیف کودك | نام و نام خانوادگی کودك | جنس ۱- دختر ۲- پسر | تاریخ تولدواقعی | | | سن (برحسب ماه) |
|---|---|---|---|---|---|---|
| | | | روز | ماه | سال | |
| ۱ | | ☐ | ☐☐ | ☐☐ | ☐☐☐☐ | ☐☐ |
| ۲ | | ☐ | ☐☐ | ☐☐ | ☐☐☐☐ | ☐☐ |
| ۳ | | ☐ | ☐☐ | ☐☐ | ☐☐☐☐ | ☐☐ |
| ۴ | | ☐ | ☐☐ | ☐☐ | ☐☐☐☐ | ☐☐ |
| ۵ | | ☐ | ☐☐ | ☐☐ | ☐☐☐☐ | ☐☐ |

کدشناسایی

## بخش ج - اطلاعات مربوط به کودکان کمتراز پنجساله

**برای هریک از کودکان کمتر از پنجساله خانوار این بخش ازپرسشنامه را تکمیل کنید:**

۱- سن کودك زیر پنجسال براساس سوال ۱۲ بخش ب (برحسب ماه)

۲- جنس کودك زیر پنجسال ۱- دختر ۲- پسر

- اندازه‌ی قد و وزن کودك

۳- وزن کیلوگرم گرم

۴- قد (برحسب سانتیمترویا روش بلوکهای بهورزی)

۵- آیا کودك در ۲ هفته گذشته به اسهال مبتلا بوده است؟

۱- بلی ۲- خیر

**اگرپاسخ‌سئوال ۵، منفی است سئوالات ۶تا۱۲ پرسش نشود**

- مقدار تغذیه کودك در زمان اسهال و مقایسه آن با قبل از اسهال، چگونه بوده است؟ (*)

۶- شیر ۱- قطع کامل ۲- کمتر از قبل ۳- درحد قبل ۴- بیشتر از قبل

۷- آب و مایعات ۱- قطع کامل ۲- کمتر از قبل ۳- درحد قبل ۴- بیشتر از قبل

۸- [illegible] ۱- قطع کامل ۲- کمتر از قبل ۳- درحد قبل ۴- بیشتر از قبل

[illegible]

[illegible] به اسهال خود از چه چیزی استفاده کرده بود؟

۹- [illegible] ۱- بلی ۲- خیر

۱۰- داروهای ضداسهال ۱- بلی ۲- خیر

۱۱- [illegible] ۱- بلی ۲- خیر

۱۲- سرم خوراکی ۱- بلی ۲- خیر

کدشناسایی ☐☐☐☐☐☐☐☐

**بخش د - سوالات ۱۳ تا ۱۸ را از مادر دارای کودك کمتر از ۳۶ ماهه بپرسید.**

۱۳- سن کودك (برحسب ماه) از سوال ۱۲ بخش ب پرسشنامه ☐☐

۱۴- جنس کودك زیر پنجسال ۱- دختر ۲- پسر ☐

۱۵- آیا این کودك را با شیرمادر تغذیه کرده‌اید؟

۱- بلی ۲- خیر ☐

در صورت پاسخ منفی، به سوال ۱۷ مراجعه و کد ۹۹ برای سوال ۱۶ ثبت شود.

۱۶- اگر بلی، کودك خود را تا چند ماهگی با شیر مادر تغذیه کرده‌اید؟ ☐☐

* اگر کودك هنوز شیرمادر می خورد کد ۸۸ ثبت شود.

۱۷- آیا این کودك را با شیرخشک تغذیه کرده‌اید؟ ۱- بلی ۲- خیر ☐

در صورت پاسخ منفی، به سوال ۱۹ مراجعه و کد ۹۹ برای سوال ۱۸ ثبت شود.

۱۸- اگر بلی، شروع تغذیه کودك با شیرخشک از چند ماهگی او بوده است ؟ ☐☐

۱۹- غذای کمکی از چندماهگی برای کودك شروع شده است ؟ ☐☐

چنانچه هنوز کودك غذاخور نشده‌است، کد ۹۹ ثبت شود.

**سئوالات زیر را فقط از مادر دارای کودك کمتراز ۶ ماهه بپرسید**

۲۰- سن کودك (برحسب ماه) از سوال ۱۲ بخش ب پرسشنامه ☐

در [illegible] ساعت گذشته کدام یک از مواد زیر به کودك خورانده شده است؟

۲۱- شیرمادر یا شیرخام ۱- بلی ۲- خیر ☐

۲۲- [illegible] ۱- بلی ۲- خیر ☐

۲۳- [illegible] ۱- بلی ۲- خیر ☐

۲۴- شیرخام، شیرخشک ۱- بلی ۲- خیر ☐

۲۵- غذای جامد یا نیمه جامد (نرم) ۱- بلی ۲- خیر ☐