

## **Morocco Household and Youth Survey (MHYS) 2009-10**

### **Basic Information Document (BID)**

#### **Background**

The Sustainable Development Sector of the Middle East and North Africa (MENA) Region of the World Bank utilized a mixed-method approach to study Moroccan youth and their engagement in economic and social activities. The project specifically sought to analyze the economic, social, and institutional factors that impede the economic and social inclusion of Moroccans aged 15 to 29. The Morocco Household and Youth Survey (MHYS) was conducted to enable quantitative analysis, while qualitative data from targeted focus-groups supplemented the MHYS. The MHYS was implemented from December 2009 through March 2010.

The MHYS was designed and implemented by the Sustainable Development Sector at the World Bank Group. Assistance was received from Morocco's Ministry of Economy and General Affairs, the Ministry of Youth and Sports, the National Agency for Social Assistance, and the Ministry of Agriculture and Maritime Fisheries. The survey benefitted from financial aid of Silatech.

The MHYS has a nationally representative sample of 2,000 households, in which 1,216 households are located in urban areas and 784 households in the rural areas of Morocco. The data collected focuses on demographic and educational characteristics, economic activities, migration, and social program participation. The MHYS collected data on household asset ownership (in order to construct a household wealth index and to sort households into welfare deciles). The MHYS also administered a short consumption module at the household level.

The MHYS includes a separate instrument administered to 2,883 young individuals between the ages of 15 and 29, and representing about 90 percent of the youth in the surveyed households. Information was collected on topics such as economic inclusion, community participation, and use of key public services. The survey was thus able to examine little-studied issues relating to youth such as participation in the labor force, intermediation, career choice, perceived job possibilities, use of time, use of recreational and educational activities targeting youth who have completed formal education.

The MHYS is unique in its focus on youth as a special group. When considering that youth (aged 15 to 29) constitute roughly 30 percent of Morocco's total population, the MHYS enable deep analysis on a large demographic group. The results derived from the MHYS can provide evidence for policymakers in creating programs that promote and increase the Moroccan youth economic and social inclusion.

The purpose of this document is to provide details on the MHYS 2009-2010, which will cover the survey instruments, sample design, survey implementation, weighting factors, and the data sets.

## Survey Instruments

The MHYS consists of two separate surveys: a Household Questionnaire and a Youth Questionnaire.

The Household Questionnaire is organized thematically, covering issues such as demographic and educational characteristics, economic activities, migration, and social program participation. A more detailed presentation of the Household Survey can be found in Table 1. While this was a Household Questionnaire, the sections on educational characteristics, economic activities, health and social security, migration, and women in decision making were done at the individual level. The remaining sections, housing characteristics and durables, shocks, and the consumption module were done at the household level.

The Youth Questionnaire is also organized thematically and explores the topics of economic inclusion, community participation, and the use of key public services. The Youth Questionnaire had a sample size of 2,883 Moroccan's between the ages of 15 and 29. A detailed presentation of the Youth Questionnaire can be found in Table 2. With the Youth Questionnaire, all the sections were done at the individual level.

**Table 1: Household Questionnaire**

Section	Name	Level of observation	Description
	Coversheet	Household	Household identifier variables
0	Identification of Household Members	Individual	Roster of individuals living in the household, gender, and relation to the household head
1	Household Roster	Individual	Roster of individuals living in the household, gender, relation to the household head, age, marital status, and youth questionnaire identifier
2	Educational Characteristics	Individual	Educational attainment and school characteristics
3a	Economic Activities in last 12 months	Individual	Primary economic engagement, employee status, and length of primary economic engagement
3b	Secondary Economic Activities in last 12 months	Individual	Secondary economic engagement, employee status, and length of secondary economic engagement
3c	Economic Activities in the last 7 days	Individual	Economic engagement, employee status, and length of economic engagement
3d	Unemployment	Individual	Labor force participation and explanations for choosing to be or not be part of the labor force
4	Health and Social Security	Individual	General health status and health services provided by current job
5	Housing Characteristics and	Household	General household details

	Durables		
6a	Agricultural Assets	Household	General information on agricultural activity and assets owned by household
6b	Climate Change and Shocks in Agriculture	Household	Climate change shocks to households agricultural activities and severity of shocks
7a	Incidence of Shocks and Household Responses	Household	Shocks to households and household coping mechanisms
7b	Assistance from Social Programs	Household	Participation in social programs available to the household
8a	Migration of Household Members	Individual	Migration patterns and reasons for migrating
8b	Migration of non-residents	Individual	Relation of non-residents to household, migration patterns, and remittances
8c	Migration and Climate Change	Household	Migration patterns due to climate shocks, and remittances
9a	Decisions on Consumption in the Household	Household	Consumption decision making patterns and consumption expenditures
9b	Expenditures on Frequently Consumed Food Items; Less Frequent Non-Food and Food Expenditures	Household	Consumption expenditures and food source procurement; Expenditure on less frequent non-food and food products
9c	Infrequent Expenditures	Household	Expenditures on various activities such as education, clothing, donations, trips, funerals, and weddings.
10	Women in Decision Making	Individual	General information on the role of women (15-49) in determining the decisions within the household

**Table 2: Youth Questionnaire**

Section	Name	Level of Observation	Description
	Coversheet	Household	Household identifier variables
1	Employment Preferences	Individual	General attitude towards participating in the labor force
2	Education	Individual	General educational attainments and perceived benefits from education
3	Employment during the last 7 days	Individual	General employment activity during the last week and satisfaction from employment
4	First Job	Individual	Perceptions regarding decision for engaging in first job
5	Employment History	Individual	General employment trends
6	Entrepreneurship and Independent Farming	Individual	Motivations for engaging in self-employment/agriculture, constraints in doing, and financial abilities to engage

			in self-employment activities
7a	Unemployment	Individual	Labor force participation and explanations for choosing to be or not be part of the labor force
7b	Job Search	Individual	Different methods for individuals seeking a job and motivations for accepting or decline a job
8	Job Services Access	Individual	Availability of job services and the utilization of such services
9	Financial Behavior	Individual	General financial patterns and trends
10	Participation of Youth in Educational Institutions and in Youth Centers	Individual	Experience in youth educational institutions and participation in available youth centers
11	Participation of Youth in Family	Individual	Participation of youths in family activities and perceptions on family social norms
12	Access of Youth to Recreation and Social Activities	Individual	Availability of recreation facilities and social institutions and utilization of the facilities and institutions
14 <sup>1</sup>	Satisfaction and Communication	Individual	Utilization of the internet, levels of satisfaction with different aspects of life, and emigration patterns
15	Time Use	Individual	Disaggregation of the time spent on different activities done during the day

### Sample Design

The sample size for the Household Questionnaire was 2,000 households with 1,216 found in urban locations and 784 in rural locations. The 2,000 households were drawn from the 2004 General Census of Population and Housing. For determining the number of households in urban and rural locations, proportionality of the possible locations was used to ensure representativeness. The proportionality was based off the disaggregation of Morocco into primary units in which there are about 600 households. In the end, 125 primary units were randomly selected, with 76 rural primary units and 49 urban primary units. From these 125 primary units, 16 households were randomly selected giving us the total sample size of 2,000 households.

For the Youth Questionnaire, the sample size was 2,883 individuals between the ages of 15 and 29. These 2,883 individuals came from the selected households in the Household Questionnaire. If there was an individual or individuals between the ages of 15 and 29 living at the selected household, the Youth Questionnaire was administrated. More details on sample design are provided in Appendix 2.

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<sup>1</sup> Section 13 was not administered and has been removed from the questionnaire.

## **Implementation**

The MHYS was implemented from December 2009 through March 2010. Prior to the implementation of the MHYS, there were two enumerator training periods from the 13<sup>th</sup> to the 16<sup>th</sup> and the 19<sup>th</sup> and 20<sup>th</sup> of October 2009 at the Center of Multimedia National Documentation Center of the High Planning Commission. The enumerator training was led by Professor Abdesselam Fazouane and Dr. Aberrahim. All the training was conducted in front of World Bank officials.

30 people attended the enumerator training, with the enumerators consisting of mostly Social Science Master students. The training consisted of having the enumerators review the questionnaires, how to conduct interviews – how to ask questions and probe for more information – and how to code all the different classifications and categories within the questionnaires.

After the training, 20 enumerators were kept on the team. Five were assigned as mission controllers and the remaining 15 became field investigators. There were a total of five teams composed of one mission controller and three field investigators.

During the actual survey period, each team would spend three to four days in each primary unit conducting their scheduled interviews. After the data was collected, the teams would enter the data into an SPSS-based program in which checks were conducted.

## **Data Set**

The MHYS contains many data files, with each file pertinent to a specific section. For the case in which there are multiple sections per data file, it is because they share similar levels of observations. Please see the Appendix for a complete list of the data files for the MHYS.<sup>2</sup>

The households are identified by the variable 'hid' which consists of the region, province, commune, and enumerator area in which the household is located. This allows the household members to remain anonymous yet statistically unique. This is extremely important especially when it comes to merging different datasets.

Merging data sets will depend on which files are being merged. The key to merging the MHYS data files will be to use unique variables. For the data sets, the 'hid' variable will be the unique variable used to perform the merge at household level; 'memid' will be the unique variable used to perform the merge at individual level. The variable 'q5' which signifies enumeration area is scrambled to preserve anonymity of sampled households.

The weights are provided in the data file 'weights' and can be merged with other files using the variable 'q5'.

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<sup>2</sup> It is important to note the data from the MHYS is not meant to act as a substitute for official employment data. For official employment data, please visit the Haut Commissariat au Plan's ENE which can be found at <http://www.hcp.ma/>

**Appendix 1: MHYS Data Files**

Household Questionnaire		
Data File	Description	Unique Identifier
hhold_section_1_2_3_4_8a	Household Roster, Educational Characteristics, Economic Activities, Health and Social Security, Migration of Household Members	hid, memid
hhold_section_5	Housing Characteristics and Durables	hid
hhold_section_6	Agricultural Assets and Climate Change and Shocks in Agriculture	hid
hhold_section_7a	Incidence of Shocks and Household Responses	hid
hhold_section_7b	Assistance from Social Programs	hid
hhold_section_8c	Migration and Climate Change	hid
hhold_section_9	Consumption Module	hid
hhold_section_10	Women's decision making	hid, memid

Youth Questionnaire		
Data File	Description	Unique Identifier
youth_file	All sections from the youth questionnaire	hid, memid

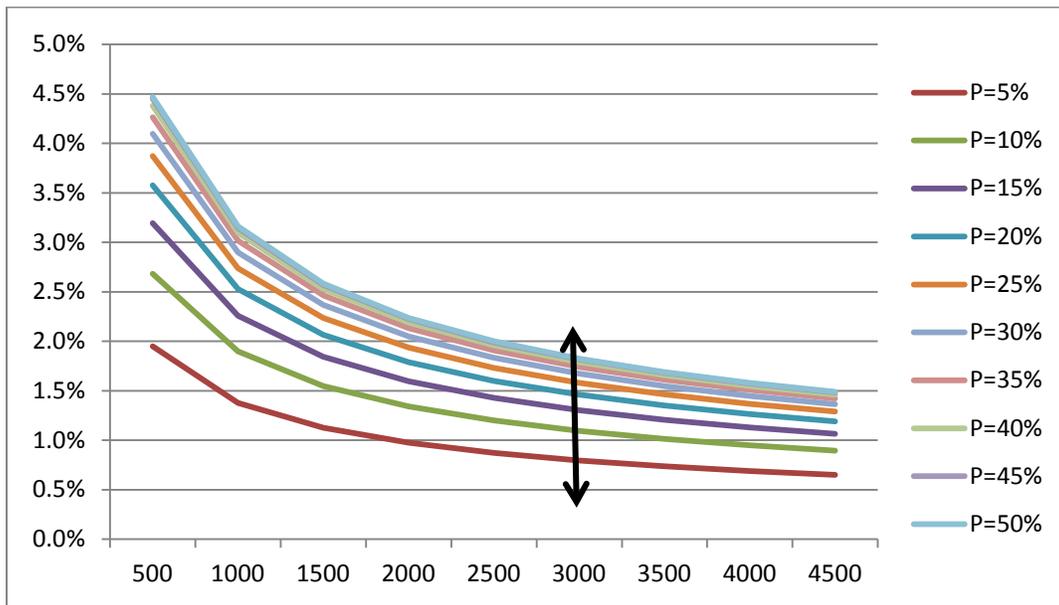
In addition, the data file “weights” has the household weight variable, with the unique identifier being ‘q5’.

## Appendix 2: Sampling plan

[by Professor Abdesselam FAZOUANE, World Bank consultant]

The first step is to determine the sample size. We have explored different sample sizes of youth (500-4500) and for different proportions (5% to 50%) showing the frequency of a given phenomenon regarding young Moroccans. Thus we have considered rare phenomena among youth (5%) and phenomena fairly represented (50%). The figure below shows the evolution of absolute errors on the estimated proportions of different levels (5% to 50%) by the level of sample size. We note that evolution is marked by a significant decrease in going from a size of 500 to 2500 youth, and then beyond this level of sample size, the drop starts declining.

**Figure 1.** Evolution of the absolute error on the estimated proportions in the sample size



For budgetary considerations, 3000 young people aged between 15 and 30 were selected as a sample size. For this sample size, see below the level of the absolute error. This table shows that the absolute error is only 0.8% for the estimation of a proportion of 5%, confidence interval [4.2% - 5.8%] with 95% chance that the true proportion is included in this interval. Also, the table shows that the absolute error reaches the level of 1.8% for the estimation of a proportion of about 50%, confidence interval [48.2% - 51.8%] with 95% chance that the true proportion is included in this interval. This information shows that the accuracy of indicators whatever their level is significant for a sample size of 3000 youth.

**Table 1:** (Sample size = **3,000** young people aged between 15 and 30)

Proportion (p)	Absolute error
P=5%	<b>0,8%</b>
P=10%	<b>1,1%</b>
P=15%	<b>1,3%</b>
P=20%	<b>1,5%</b>
P=25%	<b>1,6%</b>
P=30%	<b>1,7%</b>
P=35%	<b>1,7%</b>
P=40%	<b>1,8%</b>
P=45%	<b>1,8%</b>
P=50%	<b>1,8%</b>

Data from the General Census of Population and Habitat (RCPH 2004) indicated that there are 1.5 young people aged between 15 and 30 per Moroccan household, indicating that to reach 3,000 young people approximately 2000 households need to be interviewed. The 2000 households are selected from the sampling frame of the master sample prepared following the RGPH 2004.

It is important to note that the country was divided into several primary units (PU) each comprising about 600 households. These primary units were constituted according to a set of criteria reflecting the differences between urban and rural, boundaries of regions, districts, rural communities, cities and municipalities. The master sample represents 20% of the country, and it consists of 1848 primary units (PU 1124 urban and 724 rural PU). Two stratification criteria were considered for urban PU (city size and type of habitat) and one stratification criterion was considered for the rural PU (degree of isolation expressed by the distance from the paved road). Both distributions are given in the following tables.

**Table2a.** *Distribution of PU and urban households in the master sample according to the criteria: city size and type of habitat*

Size of the city	Type of habitat	Number of household	Number of Primary Units (PU)
Less than 100,000 inhabitants	Luxurious and modern habitat	9 732	31
	Old city (Medina)	36 610	46
	Illegal housing	25 868	31
100,000 to 500,000 inhabitants	Luxurious and modern habitat	29 635	31
	New medina	14 222	31
	Old medina	89 786	123
	Illegal housing	42 407	77
500,000 inhabitants and more	Luxurious and modern habitat	89 022	139
	New medina	28 494	62
	Old medina	266 376	446
	Illegal housing	68 634	107
<b>TOTAL</b>		<b>700 786</b>	<b>1 124</b>

**Table 2b.** *Distribution of PU and rural households in the master sample according to the criterion: level of isolation: distance from the paved road*

Distance to paved road	Number of household	Number of Primary Units (PU)
Less than 5 km	350 792	524
5 to less than 20 km	101 191	154
20 km and more	13 589	46
<b>TOTAL</b>	<b>465 572</b>	<b>724</b>

The PUs are also broken down into 12 sub-units of about 50 households. The sampling for this survey is based on the 125 primary units (76 urban and 49 rural PUs) from the 1848 PU of the sample master. Proportionality was considered to ensure the representation of both areas of residence (urban and rural). Then one secondary unit (SU) was selected per primary unit (PU) sample. Once the 125 SU are obtained, 16 households within each SU were selected, which made a total sample of 2000 households. Within each household, all young people aged between 15 and 29 were listed.

**Table3a.** *Distribution of urban SU of the sample according to the criteria: size of the city and type of habitat*

Size of the city	Type of habitat	Number of PU
Less than 100 000 inhabitants	Luxurious and modern habitat	2
	Old city (Medina)	3
	Illegal housing	2
100 000 to 500 000 inhabitants	Luxurious and modern habitat	2
	New medina	2
	Old medina	9
	Illegal housing	5
500 000 inhabitants and more	Luxurious and modern habitat	10
	New medina	4
	Old medina	30
	Illegal housing	7
<b>TOTAL</b>		<b>76</b>

**Table 3b.** *Distribution of rural SU of the sample according to degree of isolation: distance from the paved road*

Distance from the paved road	Number of SU
Less than 5 km	36
5 to less than 20 km	10
20 km and more	3
<b>TOTAL</b>	<b>49</b>

The probability of drawing a household (k) is given by:

$$P = P_{EM} \times P_{hi} \times P_{hij} \times P_{hijk}$$

With

$P_{EM}$  : Probability of drawing the master sample (20%)

$P_{hi}$  : Probability of drawing PU (i) in the stratum (h) of the sample

$P_{hij}$  : Probability of drawing SU (j) of PU (i) in the stratum (h) of the sample

$P_{hijk}$  : Probability of drawing the household (k) of SU (j) of PU (j) from the stratum (h) of the sample

Where :

$$P_{hi} = n_h \frac{Q_{hi}}{Q_h} ; P_{hij} = \frac{1}{m_{hi}} \text{ et } P_{hijk} = \frac{16}{Q_{hij}}$$

$Q_h$  : Number of households from stratum h (h=1, ..., H) H=11 for urban H=3 for rural

$Q_{hi}$  : Number of households in PU (i) from stratum h

$n_h$  : Number of PU from stratum h

$m_{hi}$  : Number of SU in PU (i) from stratum h

The extrapolation coefficient of household k is the inverse of the probability (P),  $\frac{1}{P}$

The random sampling of SUs was performed by experts from the Department of Statistics under the High Planning Commission (Division of Cartography and Geographic Information System), who were responsible for the master sample and mapping work.

A census of households was conducted for each of the SUs of the sample. The drawing of 16 households from each SU is processed on a systematic random sampling at one time only. A list of the first units to be drawn and the drawing process were provided to interviewers in accordance with the potential size of each SU (40 to 80 households).