# **MOROCCO: INFORMATION** SYSTEM AND NATIONAL **OBSERVATORY OF HUMAN DEVELOPMENT HOUSEHOLD** PANEL FOR THE EVALUATION OF PUBLIC POLICY ON **HUMAN DEVELOPMENT**

#### BY MOHAMED MOUIME

Head, Pole Information System, Observatoire National du Développement Humain

#### AND MOHAMED BENKASSMI

Responsable du Pôle Enquêtes et Méthodes, Observatoire Nationale de **Developmment Humain** 

#### INTRODUCTION

The National Observatory of Human Development (ONDH) is a young institution that was created in December 2006 as a result of the launching, under the aegis of His Majesty the King Mohamed VI, of the National Initiative for Human Development in May 2005. The ONDH mission is to analyse and evaluate programmes' and public policies' impacts on human development and to propose measures and actions leading to the development and implementation of a national strategy for human development under the framework of the National Initiative for Human Development.

Since its establishment, the ONDH has conducted several studies based on data produced by the national system of statistics and data and by international human development publications. To meet its needs in terms of adequate data, the ONDH has established its own system of information and initiated an ONDH Household Panel survey programme to better accomplish its mission.

This paper deals with the information system of the ONDH and with the ONDH project for surveys of household panels that it recently implemented in order to monitor, analyse and evaluate public policies on human development in Morocco.

#### Information system

The ONDH information system was developed according to the principles of a resultsoriented analysis. It contains a logical framework classified according to the objectives assigned to it in order to define the areas of application and the mechanisms for monitoring reports, surveys and specific evaluation missions.

The information system, *Al Bacharia*, consists of a Web portal, a data bank, a decision-making support system (performance indicators), a virtual documentation centre (electronic document registry and a glossary), a geographic information system and a system of statistical surveys. This paper focuses on the objectives of *Al Bacharia*, the data bank, the performance indicators and the survey panel.

#### Objectives of Al Bacharia

This system has five main objectives and focuses:

- 1. Developing an information system related to the targeted human development objective and amenable to the evaluation of public policies;
- 2. Establishing a monitoring system to alert, react, predict and analyse the gaps between the achievements and the objectives of public policy;
- 3. Analysing the effects of public policies in human development;
- 4. Becoming a node for information regarding human development; and
- 5. Developing partnership mechanisms and exchanges and acting as a centre of debate regarding human development.

The *Al Bacharia* information system is part of an ONDH strategic dimension because since its inception, the ONDH has adopted a global vision of the architecture of its information system. Within this framework, a development plan was devised at the start of ONDH work. It is consistent and in line with the strategy, the occupations, processes and technology of ONDH. Resources and infrastructure are continuously adapted in order to maintain a level of global service quality. The constantly evolving system consists of functional modules that respond to specific needs; the global resources and communication networks are also shared.

#### The data bank

The data bank is the central and unifying data storage system for themes related to understanding and analysing the human development components established by ONDH. The main mission of the data bank is to house and democratize information sharing regarding human development.

The data bank is available to both not only to internal users within the ONDH, but also to external users (e.g. government partners, administration, general public) for the use of tables, maps and documents (downloadable raw data is also available). ONDH staff can use the data bank to construct and add new themes and restorations to the system.

The data bank's open architecture ensures its sustainability and evolution. The architecture allows adding the necessary technical elements for its functional evolution with tools such as:

- Decision-making (e.g. building performance indicators, developing fine-tuned analyses, developing specific indicators);
- Statistics (correlating data and statistically extrapolating it to define trends or prospects and performing impact simulations); and
- Geographical (elaborating maps or geographic simulations).

The components of the data bank consist of four functional modules, including:

- The supervision module is aimed to secure data bank deployment. It provides a centralized solution for the administration of users and rights management. This module allows defining users and groups of users. It also ensures secure access for these users and groups to the various resources of the data bank, such as applications, catalogues and documents.
- The integration module allows the creation of tables in the data bank oriented to the decision-making structure. Tables can be populated by direct unit capture or by mass integration. The data bank consists of tables of axes containing dimensions and tables of measurements containing indicators. The integration module allows creating these and managing tables and creating scales for the capture for future units.
- **The valuation module** is used to create catalogues of information. It allows for making available logical visions of the information contained in the data bank classified by field of analysis. The valuation module primarily makes the technical complexity of storage transparent, enabling easy data access. It also allows the transformation of raw data into recoverable, organized and easy-to-understand documents.
- The user mode contains two distinct areas, an area for the general public and a limited access zone, which is subject to control. The latter allows users increased freedom in searching for information, and a more comprehensive document content. Moreover, it gives users the opportunity to make inquiries and view the results in either graph or tabular form (simple or cross-table). Lastly, it allows users to retrieve the results of the inquiries or documents, download them in several formats and save them in a dedicated space for subsequent consultations.

The human development data bank opened to the public in January 2012. It is available at <www.albacharia.ma>.

#### Performance indicators

The performance indicators established by the ONDH compare Morocco to at least 120 countries for the 150 indicators selected in the framework. To accomplish this, a cluster classification is used to create groups (countries) that are relatively homogeneous and coherent. The groups can also be based on the relative observed values for the indicator in question. This method has allowed the identification classes of similar levels within a given collection of objects. It also allows the identification of countries with similar profiles on the basis of the chosen indicator. This segmentation, unlike classifications based on quartiles, can create

groups of different sizes (number of countries), but centred on very close values.

This method has been applied to the indicators retained by the performance indicators covering 11 components: access to services and basic infrastructure; activity and employment; business climate; economy; education and knowledge; environment and natural resources; governance; health and social welfare; population and demography; synthetic indicators of human development; and well-being and poverty.

It is a matter of providing a vision of human development based on a platform of composite indicators and the impacts of public policies as a function of established objectives. The design of these performance indicators took into consideration several fundamental principles, including:

- The goal that statistical restrictions do not constrain the information system, but rather that it responds to new demands and allows the evaluation of policies centred on human development;
- The performance indicators provide information that is evaluated, structured and organized in explicit and visual reading layers. The system explains and qualifies the results of the policies pursued in terms of human development and is open and evolutionary;
- The performance indicators contain, for each indicator, reference data, the years of observation (continuous or isolated), data regarding objectives or commitments made by public authorities, the signage of levels of achievement and a graphical presentation illustrating these results; and
- Each theme is accompanied by a signage allowing the synthesis of observed trends
  of the country or the studied areas in the theme based on the key indicators that
  are included in it. These indicators are presented as a graduated bar in four colours:
  red (for negative trends; insufficient), yellow (for low trends), light green (acceptable
  trend) and dark green (for good trends).

With the help of this tool, the ONDH evaluates Moroccan performance in terms of human development at the level of the 11 sections embedded within the framework. This evaluation indicates Morocco's position compared to a sample of countries and compares its achievements to public policy objectives.

## SURVEYS OF HOUSEHOLD PANELS AND EVALUATION OF HUMAN DEVELOPMENT PUBLIC POLICIES

### Why surveys of households panels?

The primary ONDH mission is evaluating public policy impacts on human development. It is an entity that is specifically responsible for evaluating actions carried out by public actors, and is at the centre of the conduct of evaluation studies.

Since its creation, the ONDH has undertaken several actions in its role of evaluator. In addition to using studies, censuses and surveys carried out at the national level and based on international experiences, ONDH has conducted studies that respond to new questions

of public policy impacts on human development. These studies allowed ONDH to gather different considerations in terms of evaluation and to develop its first annual human development report, directly submitted to His Majesty the King in June 2009.

The ONDH experience revealed a number of difficulties in terms of evaluation tools. The great level of expertise required in evaluation procedures (a relatively young discipline), is far greater than the resources available. In addition, available data poses two problems.

Much of the data needed for evaluation studies is not provided by the organizations producing the data, and where data does exist, it is not updated in a way that is sufficiently regular and frequent. For example, consumer surveys and research on standards of living that form the basis for poverty rate estimations are conducted approximately every five years. Between two given surveys, it is not possible to know how the poverty rate has evolved from one year to the next. In addition, this data only indicates the net change in the rate of poverty; one cannot estimate the rate of chronic poverty (percentage of households or individuals who were poor and who remain so) or the rate of poverty linked to the economic climate (percentage of households or individuals who were poor and who no longer are). These elements are essential for a useful and operational evaluation of policies on human development.

In addition, there are significant difficulties accessing basic data, necessary to conducting rigorous evaluations. In most cases, it is only possible to access figures published by the concerned departments. When additional data is needed, the process is time consuming and will often affect the evaluation studies under consideration.

These considerations led the ONDH to implement the household panels project to provide data for monitoring and evaluating public policies' impacts on human development.

#### Uses of the ONDH household panel

This household panel is designed by the ONDH to achieve several key objectives. The survey is aimed at simultaneously covering the full range of human development dimensions (e.g. access to infrastructure and basic services, consumption, education, employment, feelings of exclusion, health, housing conditions and comfort, income, participation, social conditions and subjective poverty). This will provide the advantage of having key human development indicators available on the same date, instead of working with indicators produced by different sources at different times and by different methodologies.

The level of sample representation of the ONDH household panel and survey will be valid for all indicators of interest at the regional, national, urban and rural levels. The ONDH recognizes that national-level results do not necessarily produce good evaluations, given the structural differences between urban and rural Morocco. The regional dimension is also strongly relevant and justifies the efforts to be deployed. The household panel will provide relevant results to use in conducting an evaluation. These results will also have the advantage of being very recent and regular (annual).

An important asset that makes the ONDH household panel essential is the ability to conduct cross-correlation and causality analyses between human development situations and the factors that determine them. These analyses constitute a major contribution both to properly conducting evaluations of public policies for human development and to suggesting policy guidelines for action on the determining factors of human development.

The availability of complete files of data on individuals from the ONDH household panel will also provide the opportunity to conduct advanced analyses, to perform public policy simulations and to measure the expected effects. This provides a range of analytical experiments that the ONDH needs in order to refine its evaluation studies.

In addition to the opportunities that the household panel offers to the ONDH, the panels will enable the organization to respond to partner's data needs for public policy and human development studies. This is made possible by the ability to insert components or relevant questions that can meet a specific need of an ONDH partner in the panel data collection questionnaires. Another option offered by the project is to be able to follow specific subpanels of individuals or households that are of interest to a given partner. Partners can also request that ONDH conduct specific analyses on data collected by the panel.

It is useful to provide concrete examples to illustrate this point. In 2008, in order to conduct its evaluation study of the impacts of the National Initiative for Human Development, ONDH began conducting a reference survey on a sample of targeted areas and comparable non-targeted areas. The second stage of the survey, currently underway, will conclude the study. With the ONDH household panel, the evaluation of the impact will be integrated into the research to allow conducting impact evaluations of the National Initiative for Human Development in the short-, medium- and long terms.

Ministerial departments made several specific requests for evaluation studies that will utilize data from the ONDH household panels. For example, the Employment Ministry expressed the need for an evaluation of new public employment promotion programmes. This would entail identifying a sample of programme beneficiaries and non-beneficiaries to form part of the benchmark (counterfactual) and following them up with surveys over time in order to evaluate the effect of the new programmes on the beneficiary population in the short-, medium- and long term.

The Ministry of Housing wanted to incorporate a set of questions and follow a sample of households who benefited from programs of social housing (and households benchmarks) in order to be able to assess the impact of these programs on the beneficiary population in the short-, medium- and long term.

The Ministry of Education raised a similar request, concerning the factors of school dropouts, which can be determined by observing and monitoring over time the socio-economic characteristics of the populations concerned and a benchmark population.

These evaluations can only be rigorously conducted with data from the ONDH panel of households. The implications on the other departments in this project are an important guarantee for developing a culture of evaluation in Morocco. To this end, ONDH will be offering all partners sufficient access to the household panel data bank files, allowing them to conduct for themselves appropriate analyses under the framework of professional practices in use.

#### STATE OF ADVANCEMENT OF THE PROJECT

To implement the household panel, the ONDH proceeded as follows:

- 1. Consultations with specialists and pioneer global institutions on household panels;
- 2. Design and materialization of a large experimental study (April 2010–June 2011) to test:

- Methodological instruments (survey questionnaires, frequencies and durations) of data collection):
- Alternative methods of collecting data (written questionnaires, computer assisted personal interviewing, telephone);
- The capabilities of private data collection offices.<sup>21</sup>
- 3. Implementation of the mechanism (July 2011):
  - Research offices:
  - Consultants:
  - Partnerships, cooperation;
  - Network of experts;
  - Reinforcement of the central team;
  - Budgetary resources; and
  - Conclusion.

Evaluation professionals agree on the importance that entities responsible for an evaluation must be independent. Since its creation, ONDH has had this quality essential to the accomplishment of its mission—particularly because it is both politically and financially independent. In addition, the strong political will to institutionalise evaluation is reflected by the fact that the creation of the ONDH was decided by His Majesty the King himself and that the decree document states that the ONDH address its annual report on human development in the country directly to His Majesty.

To carry out effective and useful evaluation studies, it is also necessary to have adequate information and data that is responsive to the evaluation questions. Such data is not always available. Since its creation, ONDH has strived to gather existing data relating to the different dimensions of human development in the country. This data, produced by various ministerial departments, population censuses, demographic surveys, employment statistics, consumption, income, living standards, education and health are quite disparate, incomplete and not produced on a regular basis.

In addition, they only partially answer the substantive issues ONDH must process in its mission to evaluate public policies for human development. For example, it is not yet possible, even with all currently available data, to study the chronic poverty of households (i.e. identify the households and individuals who were poor and remain so, those who were poor but who are out of poverty, or to those who were not poor but who became so between two surveys). The demographic and socio-economic population characteristics would be extremely useful to understanding the determinants of the different types of poverty and

<sup>21</sup> ONDH is not a producer of statistics and does not have the human resources itself. It needs to hire private studies offices in the of field data collection.

better informing decision-making processes in the fight against poverty.

By implementing a system of household panel surveys, the ONDH expects to be better equipped to accomplish its mission of evaluation of public policies for human development. The partnerships it establishes with world leaders in the field of household panel surveys and with different national ministerial departments will allow optimizing the use of evaluation procedures in Morocco.

Several ministerial departments have expressed to ONDH their specific needs of data and analysis that this household panel will produce, and that will be used by these department partners to evaluate their own policies and human development programs.