



**Information and Knowledge basis for
Policy Formulation and Law Making
in Morocco¹**

Lahcen ACHY, INSEA (Morocco) & DULBEA (Belgium)

¹ I would like to thank Dr. Noha El Mikawy for her very useful comments and suggestions on a previous draft on this paper. My thanks are also extended to Dr. Mouna Cherkaoui, Dr. Abdelkader Berrada, and to participants in the workshop on "Laws and Economic Reforms" held in Rabat in November 2004. All remaining errors and imperfections are mine.

Table of Contents

INTRODUCTION	3
1. KNOWLEDGE MANAGEMENT	4
1.1. Knowledge for Development	4
1.2. Knowledge Culture: Supply and Demand	6
1.3. Knowledge Measurement	10
2. KNOWLEDGE BASIS IN MOROCCO	11
2.1. Statistical Information System in Morocco	13
2.2. Government Departments Producing Policy-Oriented Studies	16
2.3. Policy-Oriented Research within Universities.....	20
2.4. Private Think Tanks	23
2.5. International Donors.....	24
2.6. Specialized Economic Newspapers and Magazines	25
CONCLUSIONS	28
REFERENCES	40

For many years the received wisdom in economic development focused on building infrastructure and factories. Government officials could proudly show these constructions to visiting economists as the tangible evidence of development. [...]. We now see this strategy as incomplete- indeed as only focusing on “the easy part” of development. [...]. We now see economic development as less like the construction business and more like education in the broad sense that covers knowledge, institutions, and culture.

(Joseph E. Stiglitz 1999)

INTRODUCTION

The main purpose of this paper is to examine and assess the “*knowledge basis*” for policy formulation and law making in Morocco. The basic assumption of the paper is that the quality and effectiveness of policy-making depend to a large extent on the quality of knowledge basis upon which decisions are founded. The quality is in turn determined by the political, institutional and cultural environment in which information and knowledge is produced, disseminated, and exchanged among the various stakeholders.

The paper starts by stressing the role of knowledge in its broader sense as a source of economic development². The *World Development Report* (1998/99) identified *knowledge* as being key to development. Growth accounting studies show that capital accumulation can only explain a small fraction of economic growth. They reveal that growth performance is largely attributed to the *knowledge management component* of the productive system. Understanding how knowledge is produced, disseminated, and effectively used by an economy becomes an essential piece of any development strategy.

A second issue relates to the specific component of knowledge used in designing, legally formulating, and implementing economic reforms and policies. The paper analyzes the conditions under which this type of knowledge is

² There are various forms of knowledge: knowledge that firms use in their production processes, knowledge that policymaking institutions use to formulate, monitor and evaluate policies, and knowledge that people use in their economic transactions and social interactions.

produced and how seriously it is taken into account by the Executive as well as by the Legislative bodies.

A third issue dealt with is that of knowledge measurement. A substantial effort has been devoted recently to quantify and appraise the many aspects of knowledge and compare countries on that basis. Increasingly, international institutions and academics refer to the *knowledge divide* as being the real frontier among rich and poor countries.

The second part of the paper focuses on *knowledge basis for policy formulation and law-making* in Morocco. This part covers various institutions producing and disseminating statistics, studies, reports, press articles or any other form of knowledge that can potentially serve or affect policy formulation by the governmental departments, and law-makers through the legislative process.

1. KNOWLEDGE MANAGEMENT

1.1. Knowledge for Development

In neo-classical economics only two factors of production, namely labor and capital, have been explicitly recognized. The effect of knowledge in its multiple forms (education, learning, innovation) has regarded as an exogenous factor. *New growth* theory, also known as *endogenous growth* theory, views technology and knowledge as intrinsic components of economic systems. Knowledge has become the third factor of production. It is the basic form of capital and economic growth is mainly driven by its accumulation. Romer (1990), a leading economist in the field of endogenous growth, argues that technological development needs sufficient human capital. Human capital is formal education, training and on-the-job learning embodied in the workforce³.

³ Using a typical model of technology diffusion, where economic growth is explained by "a catch-up" process in the level of technology, Borensztein et al. (1998) show a strong complementarity between technology transfer and human capital. Foreign knowledge transmitted through FDI has

It is now widely recognized among international institutions, academics, and policy-makers around the world that *knowledge management* is crucial to economic development. It is knowledge more than income level that is becoming the real factor that differentiates developed and developing countries. Empirical evidence based on a growth accounting approach tends to strengthen this view. It shows that growth performance in fast-growing countries, such as East Asia, is mainly explained by knowledge measured by *total factor productivity*. Capital accumulation, instead, can only account for a modest fraction of economic growth.

Conceptually, knowledge is different from capital and labor and has many characteristics of a *public good*. First, knowledge is a *non-rivalrous* good, which means that one person's use of this or that bit of knowledge does not preclude the use of the same bit by others. Second, knowledge is *non-excludable* in the sense that knowledge creators cannot prevent others from using it. Once knowledge is generated and made public, there is zero marginal cost to sharing it with other users.

The inability to extract all the returns to knowledge represents a disincentive to its private supply and requires public action to provide the right incentives. The risk of knowledge under-provision makes it necessary for the government to intervene setting up institutions and funding research and innovation activities as to restore market failure. But in an open and globalized world, no country can produce all knowledge it needs. A substantial component of knowledge arises from learning from others. New growth economics shows that growth performance depends on how quickly an economy learns. In the learning economy, individuals and firms will be able to create wealth in proportion to their capacity to learn and share innovation.

an overall positive effect but its magnitude depends on the stock of human capital available in the host country.

Knowledge about facts, *know-what*, is certainly not the only asset in a knowledge economy. *Know-how*, *know-who*, *know-when* and *know-where* matter more⁴. Knowledge transcends the simple acquisition or accumulation of information. Knowledge is not about large libraries and greater number of terminals, computers and so forth, but knowledge is based on “understanding” rather than the traditional way of capturing the world through authority, uncritical repetition, and mechanical reproduction (Edward Said, AHDR 2003).

In the same vein, tacit knowledge, or knowledge gained by experience, is as important as formal education and training. In a *knowledge-based economy*, active involvement of the stakeholders is required. “Best practices” that are imported without local adaptation would not produce the same effect. A complete appropriation of knowledge can only be achieved through a participatory approach where those who are in charge of using knowledge are actively involved in adapting, if not generating it.

1.2. Knowledge Culture: Supply and Demand

One prominent feature in contemporary Arab history, according to the AHDR (2003) is the dominance of or obsession with political stability over knowledge generation, intellectual products and their dissemination among the public. Autocratic and absolute regimes have restricted freedom of expression and the flow of knowledge, ideas, information that are effectively or potentially critical to the ruling regime. Some political openness has been recorded in some countries recently. This is the case of Morocco.

However, other constraints to knowledge supply have not yet been resolved. The first is the incentive framework, which is still unable to boost scientific, social and cultural research. Job and career prospects for high diploma holders (masters,

⁴ Know-how refers to skills, the ability to do things on a practical level, know-who refers to knowledge of who knows what (the world of networks and social relations), know-when and know-where are increasingly critical in a dynamic and changing economy. Notice that educational

and PHD) are better in administration or private sector than in research institutions. The second issue explaining short-supply of knowledge is funding. Universities and research centers are often extremely poor and under-equipped, opportunities for continuous education for professors and researchers are very limited. The modest amount of financial resources allocated to knowledge creation and dissemination is often badly allocated and serves to finance large and costly conferences covered by official media and to “*flock trips*” abroad at the expense financing useful, effective, and well-targeted research activities.

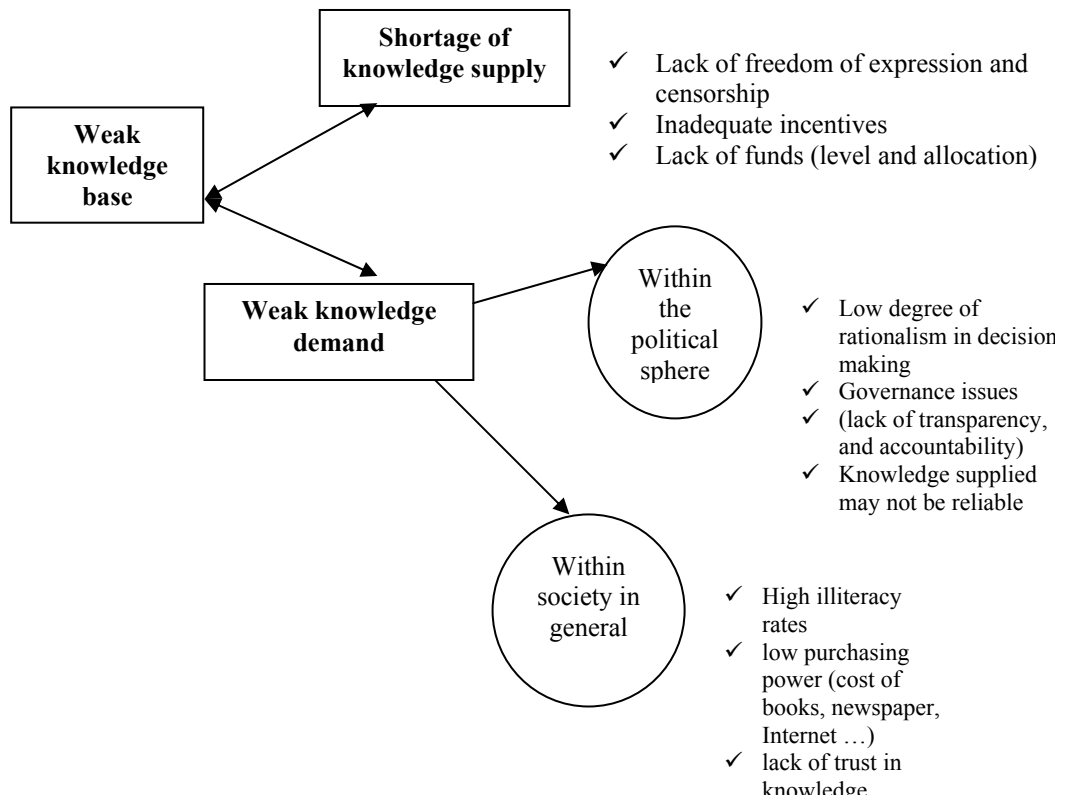
Within any organization, knowledge supply may be discouraged when “leaders” and “chiefs” present ideas or achievements of their staff as exclusively their own. As a consequence, knowledge that needs to flow freely among members start to be hoarded to create an artificial scarcity or monopoly. The control of information becomes an essential attribute of power and encourages those who have it to keep it.

The demand for knowledge suffers also from various hindrances. Within the political sphere, it is common place that demand for knowledge grows stronger in proportion to the *degree of rationalism in decision-making* (AHDR 2003). This means that when the political process lacks transparency and political actors are weakly accountable to their constituencies, knowledge in policy formulation and law-making is not an absolute requirement. Objectives and targets embodied in economic plans designed in Morocco, for instance, during the sixties and the seventies tended to be non-realistic and inconsistent⁵. As a matter of fact, most of these objectives have never been achieved. Instead of recognizing, among other factors, the weakness of the knowledge-basis on which these plans were built, policy-makers systematically hid behind exogenous factors (drought or international business cycle).

system in Morocco, similarly to other countries in the region, put all the stress on know-what (knowledge of facts) at the expense of all other types of knowledge.

⁵ One of these objectives is *generalization of schooling*, which is now expected to be hit in 2007.

Figure 1: The main determinants of supply and demand of policy-oriented knowledge



Publicly, policy-makers exhibit their openness to policy-oriented knowledge and recognize its value added in the process of policy formulation and law making. However, they often complain about the ineffective, and rather theoretical advice, they get from knowledge institutions when they turn to them for assistance.

The *weakness of rationalism* has also been the rule in the business sector due to rent seeking behavior, excess protection of the domestic market, and lack of competition. It has been more rewarding to lobby for privileges before the state than spend money in extending the knowledge basis (designing new products, exploring markets, improving productivity, and so forth).

High illiteracy rates and high cost of goods and services that embody knowledge tend also to reduce the demand for knowledge. A national survey on the Moroccan book industry conducted in 2001 indicates that the low demand for books is attributed to the low level of literacy and income. A third factor is the price of books, which seems to be due to the inability of firms to fully exploit scale economies, the high cost of raw materials (i.e. paper), and the absence of any preferential fiscal treatment (Achy and Sekkat 2004). Access to internet is another area where cost tends to curtail demand for knowledge. Data from the International Telecommunication Union (ITU) reveal a clear negative correlation between internet penetration and the internet cost⁶.

Another factor explaining the weak demand for policy-oriented knowledge by the public is its apprehension about its credibility and independence from political interference. Many journalists and NGO leaders are very skeptical about taking statistical data, or ministerial reports for granted⁷. National communication campaigns undertaken recently in parallel to the population census contributed to

⁶ If we can admit that these prices reflect the cost of knowledge goods, we cannot exclude that they also reveal a political choice. It is the duty of the state to make knowledge goods affordable by a large share of the population. This would need a clear commitment, and a sound strategy in favor of knowledge and culture.

⁷ During an interview, a Moroccan NGO leader said that since the government was for a long time manipulating election results, and distributing parliamentary and local seats among political parties

enlighten the public on how statistical information is collected and disseminated, but revealed a deep misunderstanding even among opinion leaders such as journalists, labor and trade union leaders, as well as among university researchers.

Finally, cultural attitude can restrict demand for knowledge if any request of it is perceived as an admission of ignorance or if individuals or organizations tend to underestimate any knowledge produced elsewhere, overstating the importance of knowledge they supply. Anecdotal evidence indicates that these negative cultural attitudes exist in Morocco as in other countries in the region.

1.3. Knowledge Measurement

In order to rank and compare acquisition, dissemination and use of knowledge on a somewhat objective basis, different indices have been constructed either by academics or international institutions. A four-dimensional framework that captures the fundamental elements of the knowledge economy has been suggested by the world Bank. This framework takes into account economic and institutional dimension, education, innovation, and ICT infrastructure.

As far as Morocco is concerned, despite the government's efforts to liberalize and regulate the telecommunication sector, the IT infrastructure is still weak. In 2002, there are less than 40 *telephone mainlines per 1000 people*, which is very low either by regional or international standards (the average is 167 for middle income countries, 107 for MENA region and 585 for high income countries)⁸. However, a spectacular increase has been recorded in the mobile phone in Morocco over the last years. In 2002, the *number of mobile holders* is estimated to be 209 per 1000 inhabitants, compared to 58,7 in Tunisia, and 66,7 in Egypt. But, the boom in the mobile demand in Morocco has been partially achieved at the extent of fixed lines. The number of *fixed phone subscriptions* in Morocco

(which officials themselves recognize now), why administrative departments would be expected to release reliable data on inflation, unemployment, or poverty.

⁸ World Development Indicators (2004)

decreased by 4,3 percent per year between 1998 and 2003. This is currently impeding internet development.

The *number of personal computers per 1000 people* is another indicator of a country's readiness for knowledge economy. This indicator is also low in Morocco and does not exceed 23,6 compared to 45,4 in middle income countries, 38,2 in the MENA region and 467 in high income countries. Furthermore, *Internet users per 1000 people* is estimated to 24, which again compares very unfavorably to both middle income countries (80) and to MENA region (37).

Finally, the cost of information technology continues to be expensive in Morocco. For instance, the *cost of a local call per 3 minutes* is much cheaper in both high and middle income countries in comparison with Morocco. The *cost of an Internet connection* in Morocco is relatively comparable to other countries and regions in absolute terms, but much more expensive by reference to purchasing power of users.

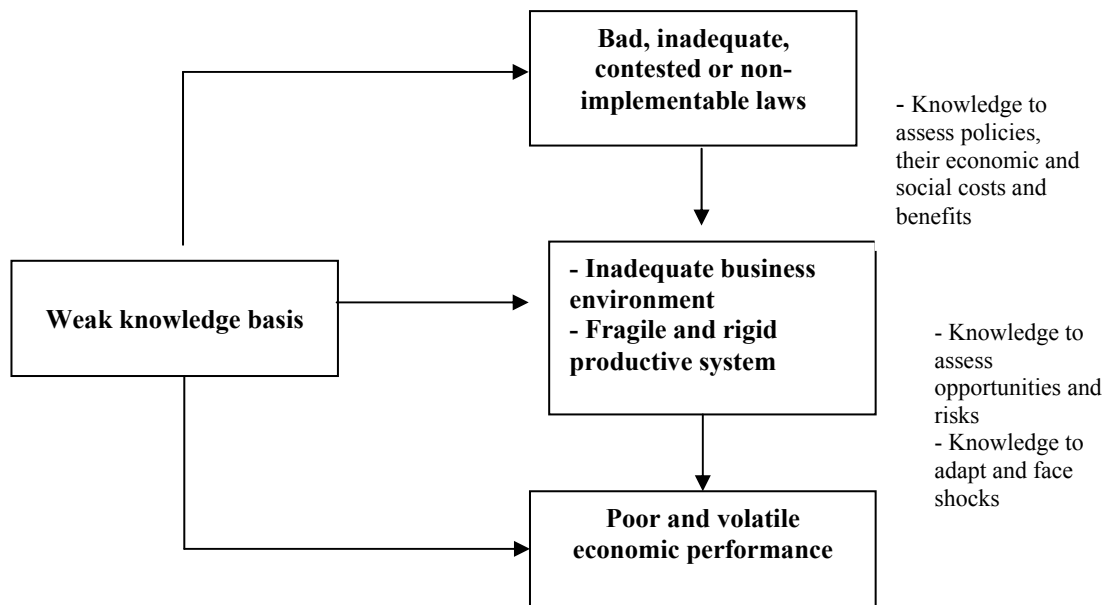
2. KNOWLEDGE BASIS IN MOROCCO

Theoretically, the quality of the legislation depends largely on the quality of knowledge on which policy development is based. It is also linked to the context in which information is produced, disseminated, and exchanged among the stakeholders. This is why it is crucial to assess the knowledge basis and address different questions that link economic information and the law making process. Laws and regulations cannot emerge independently from their economic and social context.

Constitutional knowledge and legal expertise are crucial to produce coherent laws, constitutional and consistent with other laws, but these conditions are not sufficient to design appropriate and “implementable” laws. First, law making is not a pure technical process, it is a *participatory process*. The population' representatives are in charge of expressing the views of their constituents. But lobbying cannot only be done on ideological basis without reference to evidence,

facts, and figures. As indicated earlier, the demand on this type of knowledge depends on the degree of rationalism in the decision-making. Second, legislation has become an *increasingly complex* activity that requires very specialized knowledge. Various examples reveal this complexity such as health insurance, food safety, bio-technology, environmental issues, overlapping trade agreements and so forth. Designing appropriate laws in these areas need expertise, and careful analysis. Third, legislation is a *time-consuming process*. Policy formulation and legislation process require careful and in-depth studies before deciding on which laws or which administrative regulations are more appropriate, and which combination of laws and regulations is more suitable.

Figure 2: Knowledge Basis and Economic performance



The rest of this section provides a critical assessment of the main component of the knowledge basis in Morocco.

2.1. Statistical Information System in Morocco

Modern but very decentralized statistical information system

The main feature of the statistical information system in Morocco is its relatively *high degree of decentralization*. Various ministerial departments and public institutions are involved in collecting data and producing regular economic information in their area of concern. Macro-economic statistics are mainly produced by the department of statistics, which represents the heart of the information system in Morocco. However, other departments such as the Treasury and External Financing Directorate from the Ministry of Finance, Bank Al-Maghrib and the Foreign Exchange Office provide useful data and indicators on government finance, monetary policy, and balance of payments (see annex 1 for main providers of statistical information in Morocco).

Statistical information system continue to suffer from lack of coordination

With various ministerial departments, public agencies, and private organizations collecting and producing statistical data, coordination and harmonization are imperative. The COCOES⁹ (*Statistical Studies' Coordination Committee*) is legally in charge of coordinating statistical producers as stipulated by the *statistical law* (royal decree n° 370-67 of August, 10, 1968)¹⁰. Practically, the COCOES is no longer operational and no legal or regulatory mechanism has been designed to ensure consultations among ministries and other administrative departments collecting or producing statistics. Statistical methods and classifications used may differ from one department to another, making comparisons very difficult. The case of statistics on the manufacturing sector produced by the Ministry of trade and industry and the Department of Statistics is just one example.

⁹ COCOES : Le comité de Coordination des Etudes Statistiques.

¹⁰ According to this law, any public administration needs to ask for a visa from the COCOES, whenever it intends to carry out, either by itself or using private services, any statistical survey.

The government authorities are increasingly aware of these issues. The draft law creating a new and operational body, CNIS¹¹ (National Statistical Information Council) and amending the former legal basis commanding statistical information is in the pipe.

Statistical information is generally accessible to the public

Although, the legal framework governing production and dissemination of statistics does not make any explicit reference to the *right to get access* by the public to these statistics, substantial efforts have been made over the last decade to ease data access. Most of statistical data providers communicate their output to the users through their website and publish various statistical reports. *Contact persons* can also be approached electronically for further information or inquiries. However, this is not yet a general practice. In addition, responsiveness of contact persons is not always automatic.

Box 1: Access and cost of statistical information

The Department of Statistics has in recent years open a special bureau for users and the press. This project as a part of the new “*Statistical window*”, in cooperation with Eurostat.

This special bureau provides users with recently published data or time series on the basis rates¹² determined by decree (n° 2-00-123 of June 20, 2000).

-Yearly or irregular statistical series

* At least 10 series	50 DH
* Extra series (for each)	5 DH

- Quarterly or monthly statistical series

* At least 10 series	100 DH
* Extra series (for each)	10 DH

The DS has also a commercial service in charge of selling its publications. This commercial service has an exclusivity, since the DS publications are not available in bookshops. A comprehensive catalogue is available on the web site. The prices vary between (50 DH and 200 DH).

Most statistics are easily accessible at the national, urban and rural, and regional levels. Statistics are usually not available for more geographically disaggregated levels. This can be seen as a weakness, since many economic and social

¹¹ CNIS : Le Conseil National de l'Information Statistique

projects tend to be designed and implemented at the local level. Raw statistics (individual household or individual firm) are in principle confidential, but can be made available for researchers under restrictive conditions, which entail a formal ministerial authorization.

There is a positive perception of the quality of information

A recent survey undertaken by the IMF reveals that three quarters of professional users are satisfied with available statistics. Full satisfaction is expressed by research organizations, entrepreneurs, and government agencies. There seems to be relatively less satisfaction among banks, employers' association, and the press.

The *scope* of statistics and their *frequency*¹³ are viewed as the main strengths of statistics produced in Morocco. The *timeliness*¹⁴ of data, however, is seen as the main weakness. Professional users consider that more efforts need to be done in order to improve this aspect and curtail the delays in releasing statistics. Moreover, data is released very irregularly without any calendar set in advance similarly with what is done in developed countries.

Users of statistics need more pedagogy

The lack of methodological notes explaining in an understandable manner the meaning of statistics published is often an issue for large categories of real and potential users. Sometimes, users expressed their need to know how statistics were obtained and how they should be interpreted. In some cases methodological notes are provided but in very technical terms. Examples of misinterpretation of statistics among journalists are frequent¹⁵. Recently some

¹² The prices are provided in the Moroccan Dirham. At the moment, the exchange rate is 1 US Dollar is approximately 9 DH.

¹³ *Frequency* is about periodicity of data. For example, Morocco produces monthly statistics on consumer price index, and quarterly data on unemployment.

¹⁴ Timeliness indicates how *fresh* are available data. It refers to the time lag between collection and dissemination. Although frequency may be high, data is only released several periods later, which reduces its relevance for the decision making process.

¹⁵ Just to provide an example, recently an administration published some data on financial structure of Moroccan manufacturing firms. These data reveal that *21 percent of firms' resources* originate from short-term Bank credits. But the journalist titled his article as follows "*Only, one*

training seminars on statistical information have been organized by the High commissariat of Planning. These training sessions targeted mainly labor and trade union staff, as well as some journalists. The aim was to initiate them to understand and effectively use statistics produced in Morocco.

2.2. Government Departments Producing Policy-Oriented Studies¹⁶

In-house policy-oriented studies is a relatively new phenomenon in Morocco

Policy-oriented studies produced within the ministerial departments and made available to the press but also to the general public is a relatively new phenomenon in Morocco, which emerged in the late nineties. Before that time, the Moroccan administration used to outsource any policy-oriented study to the private sector consulting firms. More often than not, the studies were carried out by foreign experts. The reports were confidential and hardly mentioned in the press. In addition, no accumulation of knowledge from various studies is achieved within the ministerial departments. Each new cabinet starts from scratch with new studies and new reports. The former reports and studies disappear generally as soon as the new cabinet is appointed¹⁷.

The potential of budget laws and economic plans as policy instruments have never been seriously exploited

The “development plans” and “budget laws” have been the only “policy-oriented” documents that were available to the public. The first is a collection of objectives and sometimes “dreams” without any careful study of their economic and financial feasibility. The mechanism of “*follow-up and assessment*” of development plans has been very weak. The second, the “*budget laws*”, tends to be highly influenced by short-term prospects and social tensions.

firm out of five rely Bank credits!”, which is not the same. The problem is that all the article is built on this misunderstanding.

¹⁶ See annex 2.

¹⁷ These remarks emerged from multiple interviews with civil servants in various public administrations. It has to be noticed that although these practices have diminished they have not completely disappeared.

SAP programs and trade commitments increased policy makers awareness of policy-oriented studies

Different ministerial departments are nowadays engaged in producing in-house policy-oriented studies. Different factors contributed to the current situation. These factors strengthened the “need” for policy-oriented studies in order to monitor more closely the economy and implement appropriate economic and social reforms. However, the margin for improvement is still substantial.

The first is the Structural adjustment program in which the Moroccan authorities embarked since 1983. The critical assessment of the Moroccan economic and social “management” by the World Bank and the IMF, and access to their reports by the press and the general public created the need for a *different discourse* from government authorities. No longer could they continue to claim that “*everything is ok*”.

The second factor emerged as the result of multiple bilateral, regional and multilateral commitments of the government authorities. These commitments are different from “*commitments to citizens*”, their content is concrete, strictly scheduled, and may not be easily reversed. *Trade policy review mechanism*, to which Morocco is subjected as any other member of the World Trade Organization (WTO), has been an opportunity for policy-makers to learn to be rigorous, consistent and transparent. The questions asked by other countries’ representatives to the Moroccan delegation have created the need for more capacity building and policy-oriented knowledge.

Juxtaposition of structures producing different and confusing forecasts

Different ministerial departments are producing economic forecasts, undertaking business surveys, modeling the economy, and assessing policies. However, more often than not there is no communication or coordination among them. Within the former *Ministry of Planning* (currently High commissariat for planning)

the *National Institute of Business Analysis* (INAC)¹⁸ is in charge of producing economic forecasts on macroeconomic and sectoral aggregates. However, the same exercise is undertaken in almost every ministry. The General Economic Policy Directorate (DPEG) from the Ministry of Finance is also producing macroeconomic forecasts¹⁹. The output provided by these different institutions tend to be conflicting and very confusing for the private sector, the press and the general public.

More synergy may be created among these departments but the current vertical organization does not allow for that. Horizontal connections among different departments are absent even within the same Ministry. The “*inter-ministerial committee*” is generally the structure created to tackle cross-cutting issues among different ministries. Although this structure may be effective in dealing with some horizontal issues, it does not solve the problem of juxtaposed and overlapping structures.

Insufficient coverage of the main economic and social challenges

The direct consequence of the lack of communication and coordination among different ministerial departments in charge of policy-oriented studies is their limited scope and weak coverage of the main economic and social challenges facing the country. The areas that are mostly covered are *social and demographic issues* by two departments within the high commissariat of planning: the *Living Conditions Observatory* (ONV) and *Demographic Research and Studies Center* (CERED)²⁰. The first deals with data from Consumption and Household Budget Surveys (CHBS) and Living Standards and Measurement Surveys (LSMS). The ONV benefited from financial and technical support provided by the World Bank in measuring and analyzing poverty and economic vulnerability. The second deals with demographic issues such as migration, child mortality, gender issues, urbanization, and so forth. CERED is mainly supported by the United Nation Population Fund (UNPF).

¹⁸ INAC : Institut National de l'Analyse de la Conjoncture.

¹⁹ See annex 3.

The *department of planning and financial resource management* from the *Ministry of Health* is also producing data on the basis of *ground surveys* and studies on demographic and social issues such as infant and maternal health, contraceptive practices, causes of mortality, health care system accounts, and so forth.

The DPEG produces working papers on a regular basis on various issues ranging from demographic transition and labor market to issues related to exports' competitiveness and impact of free trade agreements on the Moroccan economy²¹. These working papers are signed, which represents a non-usual practice in the public administration, and provides substantial incentives for their authors. However, DPEG working papers tend not to use other policy-oriented research produced in Morocco or outside. There generally very few indications references used.

The DPEG working papers are largely reported by the press but rarely analyzed or criticized. One reason may be the lack of specialized journalists in economic issues. The second reason may also be the fact that some of DPEG working papers are based on simulations from economic models that are not available to the public. Therefore, it is hard to assess their findings on a convincing basis. However, DPEG working papers can be qualified as an initial and positive step in producing regular policy-oriented research by an administrative staff and communicating the output to the public. There has been no assessment on the extent to which these reports are used by members of parliament or by policy makers in the executive branch.

The DPEG also plays a central role in preparing the budget project, presented to the government then to the parliament, by forecasting the government financial aggregates and producing a "*Financial and Economic Report*" which explains the

²⁰ See annex 4.

²¹ See annex 5.

choices made in the budget project. Financial and economic reports (2001, 2002 and 2003) are available (full text) on the web site.

Other fields of policy making are not covered enough by in-house research produced government departments such as education challenges, trade reforms, and informal sector issues, and so forth.

2.3. Policy-Oriented Research within Universities²²

Universities are overcrowded and teaching, not research, predominates

Access to university in Morocco is open and free of charge to all students who have successfully passed the end of secondary school exam (*baccalaureate*). However, the general environment is not conducive to research²³. Other factors that explain the weak supply of research, in general, and policy-oriented research, in particular, range from the dominance of bureaucratic structures, the lack of an appropriate incentive framework for academic staff, the lack of synergy among different research units, and the low and volatile funding of the scientific research²⁴. Universities were and continue to be under-equipped, and even basic infrastructure such as space office, computers, libraries with recent books and journals, are very scarce.

Before 1997 (promulgation year of the new status of university professors), seniority was the exclusive criterion for promotion. Research output was mentioned in the former status of 1975, although academic staff were supposed

²² See annex 6 for an overview of the higher education system in Morocco.

²³ Twelve out of 100 pupils enrolled in basic education reach university and not more than five obtain a diploma. In 1999, Morocco posted the lowest grade among the four MENA countries that participated in the Third International Mathematics and Science Test (IMST). In higher education, students per professor ratio stands at 28. If taking into account that only full and associate professors can teach and supervise graduate students, the burden is even higher.

²⁴ Small grants of short duration are allocated after a long process of selection and a set of bureaucratic requirements.

implicitly to do research and receive a “*research premium*” as a component of their wages²⁵.

University suffers from its image of producing unemployed people

The rate of higher education graduates enduring long-term unemployment undermines the image of university and reveals to some extent its inability to match properly the needs of the demand-side of the economy. Figures from the labor force survey carried out in 2001, indicate that unemployment rate among higher education graduates amounted to 27 percent compared to 12,5 percent for the whole labor force. The private sector entrepreneurs often complain about the quality of the educated job-seekers and their lack basic skills needed in the marketplace.

Although educational system does not bear alone the responsibility of high unemployment rates among its graduates, the image of university producing “losers” is frustrating for the academic staff and tends to discourage private as well as government agencies from relying on academics for policy-oriented studies or recommendations. An overview of the programs taught in faculties of economics, for instance, reveal easily their failure in addressing critical public policy issues, using modern economic tools, and combining both theoretical and empirical findings.

Some university professors are involved in political parties and the policy-making arena

Although research produced by university is very scarce, university professors tend to affect the policy making process through their political participation. Currently, four former university professors are ministers (Minister of Finance,

²⁵ The new status, introduced three criteria for promotion: *pedagogic output* (production of manuals, supervising master and doctoral programs, training), *research output* (articles, proceedings or books), and openness and *communication and enlightening output* (conference organization, civil society activism, political activism and innovation). Each professor chooses the weights²⁵ to attribute for each of these criteria. Although it is not already possible to assess the impact of this new system on research, one might say that the impact is not expected to be significant.

Minister of education, Minister of social affairs, and Minister of Islamic Affairs). Other portfolios were occupied by university professors in recent years such as the Administrative Modernization, Fisheries, Justice, Tourism, and Planning. University professors are well-represented in ministerial cabinets as well as in the parliament and its committees. Out of the six parliament committees three were headed by university professors over the period 1997-2002.

The question is to what extent these academics are effectively disseminating a knowledge culture and using it in dealing with public affairs. Many observers think that most of these intellectuals have been rather assimilated by the political power because they bestow on the political circle some credibility, either in the eyes of the population or international institutions. Those professors are provided with limited room for action or for applying their knowledge in policy making²⁶.

Very modest funds are being allocated to scientific research

Before 1996, there were no specific funds in the higher education budget allocated to research²⁷. The specific budget for research amounted to 40 million DH for the period 1996-1998 and 45 million DH for the period 1999-2001 which is 15 million DH per year.

According to the most optimistic estimates, research funding in Morocco does not exceed 0,3 to 0,4 percent of its GDP. For the sake of comparison, South Africa devotes 1,2 percent of its GDP to research, 1 percent for Brazil, and 0,84 for India²⁸.

²⁶ In a press article «The left-wing and the economy», M. Jaidi wrote that it is time to explicit the objectives for which the left-wing leaders are participating in the government, and what is the strategy underlying their decisions.

²⁷ 1996 is also the year in which scientific research is cited explicitly in the denomination of the Ministry of Tertiary Education.

²⁸ Developing countries spend on average about 0,5 percent of GDP on research and industrialized countries 2,5 percent.

Research output is scarce and peer-review is practically unknown

As has been noticed earlier, effective research produced by university is very scarce. Some faculties publish their journal (one or two issues per year), usually *without any referring process*.

Except for “*Critique Economique*” which is published independently and focuses exclusively on economics; other journals that are produced within the law and economics faculty contain articles on both law and economics in both languages Arabic and French. These articles are *not largely disseminated* (no web site for any of these journals). There is barely reference to these articles in the press, and they serve mainly as references to doctoral students in Morocco from the same faculties. All in all, their impact on the policy-making process is very limited. Research output remains largely an individual effort with a narrow focus, and supply-driven.

University research centers seem to be the weakest link in the current architecture. Few universities have a real web site and practically none of them (at least in economics and law) use the internet to communicate their research (full text) or even in abstracts.

2.4. Private Think Tanks

An overview of private think tanks active in Morocco allows a classification into four main categories:

- **Think tanks sponsored by political parties.** They represent a channel for political leaders to enlarge their audience and potentially their political base. They are effective in attracting high executives and academics to the political field.

- **Think tanks created by “disappointed” or “rebellious” political activists.** Disagreement or dissatisfaction with respect to internal

functioning of political parties led some people to give up politics in favor of civil society activism. The framework of a think tank offers them an alternative for exercising their leadership more autonomously, without any political affiliation.

- **Think tanks created as a first step to assess the feasibility of a political party.** Since it is more credible and attractive for potential affiliates to belong to a think tank than a political party, some leaders start building their reputation in a think tank before moving to a political party.
- **Private professional think tanks** created to produce independent policy-oriented studies that can serve policy-makers but also private entrepreneurs. The Moroccan Center of Short-term business cycle (CMC) is an example of such think tanks. CMC was created in the early nineties. It stands at the crossroads between university, the government and the private sector. CMC produces regular thematic reports on critical issues of the Moroccan economy such as employment, free trade and investment.

Private think tanks in Morocco (those that are active and known by the public²⁹) share two characteristics: 1) they are mainly concentrated in Rabat and Casablanca; 2) they are largely headed by socialist or pro-socialist scientists. Recently, other parties started to understand the role of think tanks in interacting with other people, but also in hiring militants and enlarging their electorate basis.

2.5. International Donors

International donors and organizations such as the World Bank, International Monetary Fund (IMF), and United Nations Development Program UNDP) are playing a greater role in undertaking economic, social and political studies on Morocco. These studies are largely disseminated by the press and tend to be largely referred to by researchers and government departments. Among the strengths of international donors' reports with respect to their Moroccan

counterparts: a) they are generally based on a consultation process in which administrative departments are involved; b) these reports are in most cases followed by public presentations to the press; c) they are immediately posted on the internet. A recent interview by the ERF staff with M. Kabbaj, adviser to the King Mohamed VI, shows that reports and studies issued by international institutions represent the first reference in policy making in Morocco. Statistics and policy-oriented papers produced by different ministerial departments are also taken into account.

Arab Policy-Makers describe the policy process

(an interview with Mohammed Kabbaj, Adviser to King Mohammed VI)

Q. What type of research units/ organizations does your excellency deal with and how are they likely to influence economic-policy making?

A. Generally, we make use of two different types of specialized units/ organizations in policy making. The first includes international institutions such IMF, United Nations Economic and Social Council (ECOSOC), in addition to reports and studies conducted by international banks. Secondly, we rely on studies carried out by the Statistical Directorate and Economic Policy Directorate (DPEG) of the Ministry of Finance, in addition to some reports by sectoral studies bureaus. Those institutions/ units that have the greatest impact are those that conduct studies that assess socio-economic conditions or sectoral status, and those which portray case studies of other countries experiences, which help us to better assess and evaluate current situation.

Q. What kind of improvement would you like to introduce to the decision-making mechanism should you have the choice of doing so?

A. In order to improve the decision making mechanism, the decision making process must be first simplified. One must first fully understand the expected implications of any decision to be taken on socio-economic and political fronts. This can only be achieved by undertaking extensive analysis before taking a decision and basing the decision on sound and informed data and analysis in order to be better able to assess the overall situation.

Newsletter of the Economic Research Forum, Volume 10, Number 04, Winter 2003.

2.6. Specialized Economic Newspapers and Magazines

Effective participation in policy formulation and law making by the public requires an intellectual base and an understanding of the issues under study. The role of the media, in general, and printed press, in particular, is of great importance. It is

²⁹ For a list of the most obvious think tanks see annex 7.

expected to provide the public with necessary information to engage in substantive dialogue and policy debate.

Access to media

In general, Arab countries have lower information media to population ratios (number of newspaper, radio and televisions sets per 1000 people) compared to the world average and the average of middle-income countries. Indeed, in this respect, the Arab world is not much better off than low-income countries in some areas.

The low number of newspapers per 1000 people, 53 newspapers in the Arab countries versus 285 in the developed countries, indicates two significant gaps. First, Arab citizens do not generate a large demand for newspapers due to their literacy rates and high cost of newspapers compared to income. Second, the decline in the quality, independence, and professionalism of Arab journalism makes its products unattractive to broad categories of Arab leaders.

In varying degrees, Arab media personnel in most Arab countries encounter serious difficulties in gaining access to information, documents, data and official and unofficial news sources. Authorities often hinder their efforts citing official secrecy or national security.

The media in most Arab countries lack multiple sources of information. They principally depend on foreign information sources, especially Western news agencies. Although all Arab countries have their own news agencies, these agencies are state-owned and oriented to serve and promote state policies.

The main focus is still on official news and on senior political officials. [...]. News of interest for the majority of the population, and which relates to their daily concerns or which could enrich their scientific and cultural knowledge, is scarce.

News reports themselves tend to be narrative and descriptive, rather than investigative or analytic, with a concentration on immediate and partial events and facts. [...]. The news are generally presented as a succession of isolated events, without in-depth explanatory coverage or effort to place events in the general, social, economic, and cultural context.

Source: The Arab Human Development Report (2003)

The issue of the status of economic information and market economy is crucial. Economic information is a public good and needs to be supplied under a strict respect of ethical standards. But, economic information is also a private good governed by market laws of supply and demand. It is also a tool that can be used to manipulate the public opinion and create a particular representation of the world.

As far as Morocco is concerned, in addition to general newspapers that allocate some space to economic information and analysis, such as “*Le Matin*” or “*L’opinion*”, there are two specialized economic newspapers: “*L’économiste*” initially issued once a week and which is currently a daily economic newspaper, and “*La Vie Economique*” issued each Friday, are the main providers of economic information and analysis.

- o **La vie économique:** This weekly newspaper is one the oldest newspaper issued in Morocco. The first issues go back to 1935. It is considered as a reference in Morocco, it combines political, economic, and financial issues. Recently, a larger space is given to corporate economics, and corporate management.
- o **L’économiste:** Initiators of this newspaper, which started in 1991, have made their first experience in “*la vie économique*”. The transition from a weekly to daily paper had a negative impact on the quality of the article. There is much more fresh information but the expense of investigation and analysis.

There are a number of weaknesses in the Moroccan economic press. They tend to be very influenced by news at the expense of investigation and deep analysis. Most often, information is reported without any critical review or comments. The nature of its audience and its reliance on advertisement makes this press biased in favor of some specific issues. Statistics are sometimes misinterpreted and specialized issues are superficially dealt with. There is also very limited use of research produced in university and research centers, and background papers.

CONCLUSIONS

The main purpose of this paper has been to examine and critically assess the “*knowledge basis*” for policy formulation and law making in Morocco. Policy-making and law making are processes that involves various interests, and require a strong “*knowledge management*” component appraise alternatives, and make trade-offs.

The paper reveals that political, institutional and cultural factors are very crucial in understanding knowledge production, dissemination and exchange among various stakeholders. In the Arab world, autocratic and absolute regimes have restricted freedom of expression and the flow of knowledge. Some political openness has been recorded in some of the Arab countries recently, among which Morocco. But other constraints to *knowledge supply* have not yet been resolved. The first is the incentive framework, which is still unable to boost scientific, social and cultural research. The second is the issue of funding, which makes universities and research centers extremely poor, under-equipped, and opportunities for continuous education for professors and researchers are very limited. The modest amount of available resources is often badly managed and does not serve useful, effective, and well-targeted research activities.

The demand for knowledge is also an area of concern in Morocco. It largely admitted that this demand grows in proportion of the *degree of rationalism in decision-making*. This means that when the political process lacks transparency, and political actors are weakly accountable to their constituencies, knowledge in policy formulation and law-making is not an absolute requirement. Objectives and targets embodied in economic plans designed in Morocco, for instance, during the sixties and the seventies tended to be non-realistic and inconsistent.

The *weakness of rationalism* has also been the rule in business sector due to rent seeking behavior, excess protection of the domestic market, and lack of competition. It has been more rewarding to lobby for privileges before the state

than spend money in extending the knowledge basis by designing new products, exploring markets, and improving productivity.

High illiteracy rates and the high cost of goods and services that embody knowledge tend also to reduce the demand for knowledge in Morocco. Despite the government's efforts to liberalize and regulate telecommunication sector, the IT infrastructure is still weak³⁰ and costly. Although, the *cost of Internet connection* in Morocco is relatively comparable to other countries and regions in absolute terms, it is much more expensive by reference to purchasing power of users. Another factor that lies behind the weakness of knowledge demand by the public is its apprehension about its credibility and independence from the political interference.

The paper indicates that Morocco is endowed with a modern statistical system but largely decentralized and weakly coordinated. In addition to the "*directorate of statistics*", the main producer of statistical data in Morocco, various other ministerial departments and public institutions are involved in collecting data and producing regular economic information in their area of concern. The COCOES, (*Statistical Studies' Coordination Committee*), legally in charge of coordinating statistical producers' activities is no longer operational. A draft law for creating a new and operational body and amend the former legal basis is still in the pipe.

Policy-oriented studies produced within the ministerial departments and *made available to the press* but also to the *general public* is a relatively *new phenomenon* in Morocco which emerged in the late nineties. Different ministerial departments are nowadays engaged in producing in'-house policy-oriented studies. Different factors contributed to the current situation. The first is the Structural adjustment program in which the Moroccan authorities embarked

³⁰ In 2002, there are less than 40 *telephone mainlines per 1000 people*; which is very low either by regional or international standards. The *number of personal computers per 1000 people*, which is an indicator of a country's readiness for knowledge economy, is also low in Morocco, and does not exceed 23,6 compared to 45,4 in middle income countries, 38,2 in MENA region and 467 in high income countries. *Internet users* per 1000 people is estimated to 24, which again compares very unfavorably to both middle income countries (80) and to MENA region (37).

officially since 1983. The second factor emerged as the result of multiple bilateral, regional and multilateral commitments of the Moroccan authorities.

More synergy may be created among different administrative departments but the current vertical organization does not allow for that. Horizontal connections among different departments are absent even within the same Ministry. The “*inter-ministerial committee*” is generally the structure created to tackle cross-cutting issues among different ministries. Although this structure may be effective in dealing with some horizontal issues, it does not solve the problem of juxtaposed and overlapping structures.

Although the *right to get access* to statistics by the public is not explicitly stipulated in the *statistical law*, substantial efforts have been made over the last decade to ease data access. Most data providers communicate their output to the users through their website and publish various statistical reports. Raw statistics (individual household or individual firm) are in principle confidential, but can be made available for researchers under restrictive conditions.

The contribution of university research to the process of policy formulation and law making is very weak. The rate of higher education graduates enduring long-term unemployment undermines the image of university and reveals to some extent its inability to match properly the needs of the demand-side of the economy. An overview of the programs taught in faculties of economics, for instance, reveal easily their failure in addressing critical public policy issues, using modern economic tools, and combining both theoretical and empirical findings.

International donors and organizations such as the World Bank, International Monetary Fund (IMF), and United Nations Development programs UNDP) are playing a substantial role in undertaking economic, social and political studies on Morocco. Their studies are largely disseminated and tend to be largely referred to by researchers and governmental departments.

Regarding private think tanks active in Morocco, they represent generally another channel for political leaders to enlarge their audience, and potentially their political base or for “rebelled” political activists to have another alternative for exercising their leadership more autonomously, without any political affiliation. These think tanks remain very elitists and their action continue to be limited to large cities.

To sum up, different measures may be suggested to improve both knowledge supply and demand in Morocco.

The government is expected to ensure a larger access to knowledge and information under their different forms (basic education, continuous education³¹, newspapers, and internet). A participatory approach, where beneficiaries express freely their needs and implement "*knowledge for all*" programs, would be very recommendable.

Governmental departments producing statistics need to coordinate their actions in order to better allocate their human and financial resources. They also need to commit to international standards in the process of collection, production, and dissemination of statistics. In that respect, these departments would need to set a calendar for publication of their statistics, and ensure that information is released in conformity with this calendar.

Potential users of statistics should be involved in the process of elaborating sectoral surveys or national statistical operations. Taking the initiative of involving them can help in improving the quality of data collected, and in increasing response-rate to questionnaires.

Specific programs and seminars on statistical information produced in Morocco need to be designed for users, advocators, and journalists. These seminars are

expected to reduce misunderstanding between providers and users, and might also represent a substantial step ahead in transparency of statistics.

Finally, university research needs to take some concrete steps in order to participate more effectively in enlightening the decision making-process. But, this can only be possible if more funds are allocated to universities to ensure that professors and researchers get access to international journals, recent books, internet resources...

³¹ The department in charge of Youth is initiating a program called "*Popular universities*" this year (2005). The objective of this program is to provide an array of courses including philosophy, law, economics, management for all.

Annex 1: The Main Providers of Statistical Information in Morocco

1. The department of Statistics (High commissariat for planning)

The Directorate of Statistics is the main producer of statistical data in Morocco, providing data produced on the basis of *population census and surveys* and data produced on the basis of *administrative statistics* collected from other departments

Census data: Four censuses have been undertaken so far (1960, 1971, 1982 and 1994). The last census has just taken place in September 2004. Data from censuses are available at the national level, for urban and rural areas, and on the regional level. Limited statistics are available at more geographically disaggregated levels. Census statistics are used in elections to design “election districts” and in allocating fiscal revenues transferred from the central to local level. Census data is also used in designing economic and social plans and in assessing needs in basic infrastructure, schools, hospitals).

Survey data: Two broad sets of surveys are carried out by the department of Statistics:

- o **Household surveys** such as *consumption and expenditure surveys* (1959-60, 1970-71, 1984-85 and 2000-01), *Living Standards and Measurement surveys* (1990-91 and 1998-99), *informal sector survey* (1988 and 1999-2000), *demographic survey* (1987), and *labor force surveys* (undertaken quarterly).
- o **Firm surveys** are undertaken periodically and may cover one specific sector (construction and public work sector, domestic trade survey) or more broadly industrial sector and services. In both cases statistics are available at the national level. Raw statistics (at the firm level) are in principle confidential, but can be made available for researchers under restrictive conditions.

Administrative statistics: such as *Foreign Exchange Office* for data on foreign trade and exchange rate, *Ministry of education* for data on school enrollments and related statistics, *National Office of Fishing* for data on fishing activity, *Ministry of Energy and Mining* for data on mining and energy, *Ministry of industry* and the *Moroccan Office of Tourism* for data on tourism industry.

All these statistics are published **yearly** in a single but comprehensive volume (*Annuaire Statistique du Maroc*) in Arabic and French. A more synthetic version is published yearly in (*Maroc en Chiffres*). **Quarterly**, the Directorate of Statistics publishes (*Bulletin Statistique*) and **monthly** (*Repères Statistiques*). These statistics are generally disseminated with presentations, comments, tables and graphs that facilitate the comprehension by the public. Dissemination is achieved through various channels (mailing to ministerial departments, public enterprises and private subscribers, and mass-media). Some of these statistics are posted on internet website: <http://www.statistics.hcp.ma>

2. Treasury and External Financing Directorate

Produced within the Ministry of Finance. The Treasury and External Financing Directorate produces statistics on domestic and external debt transactions as well as on Treasury revenues expenditure. These statistics are issued on a monthly basis. Web site address : <http://finance.gov.ma/dtfe/tbstat.htm> The budget submission to parliament has been accompanied, since the Finance Year 1999/2000 by an economic and financial report based on the Treasury Expenditure and Revenue. (content of this report?)

3. Bank Al-Maghrib

Most of these statistics are produced monthly from the statements provided by banks in conformity with the Banking law of 1993. In addition, the Moroccan Central Bank produces an annual economic report presented to the King and made available to the press and the public. The website address: <http://www.bkam.ma> Bank Al Maghrib web site is very rich; it has annual, quarterly and monthly reports for the three last years. It is also possible to download minutes of the Money and Saving National Council.

4. Foreign Exchange Office

Foreign Exchange Office produces Balance of payment statistics used by the Directorate of Statistics for national accounting purposes. Foreign Exchange office publishes yearly two volumes: Trade Balance Statistics and Balance of Payment Statistics. For the moment, the Foreign Exchange Office is relying on customs and exchange control data to generate its statistics. Due to the increasing liberalization process, this source will not be any more sufficient. The Foreign exchange office would need to develop other ways of collecting data directly from economic agents involved in cross-border transactions. Web site address: <http://www.oc.gov.ma>

5. The Ministry of Industry and Trade

It undertakes yearly a large survey that covers all formal manufacturing firms with at least 10 employees or that make a yearly turnover of at least US \$ 10 000. Sectoral data at the national, regional levels are published in a yearly report. Raw data is confidential but can be made available under some condition (formal application). Anecdotal evidence indicates that access to manufacturing survey data (micro data) is less restrictive compared to household survey data. Website address: <http://www.mcinet.gov.ma>

6. The Ministry of Agriculture and rural development

The Ministry of Agriculture and rural development undertakes large agricultural censuses (1973-74 and 1996), and publishes annual data on agricultural production and soil affectation among different crops.

Annex 2: The main departments in charge of producing policy-oriented studies

1. General Economic Policy Directorate (DPEG)³²

This directorate, created in 1995, is playing a major role in producing and disseminating economic reports, studies and “light” policy oriented-research. The staff counts 115 civil servant, with an executive rate of 74 percent. Most of the executives are economists and experts in statistics and computing (see annex 2 for DPEG divisions). The DPEG working paper series are largely disseminated in the economic press and economic supplements of general newspapers. These working papers (see annex 3) are also posted on the web site. Web site address: <http://www.dpeg.gov.ma>

2. Living Conditions Observatory

Living Condition Standard Observatory has been established in the late 1990s to reinforce the Moroccan government in understanding and hence tackling poverty and inequality issues. This Observatory has recently published different books on poverty, and vulnerability. However, these books are only available from the commercial service of the Directorate of Statistics. They tend to be less disseminated and less reported in the press.

3. Demographic Research and Studies Center (CERED)

The objective of this center is to produce demographic studies using census data household surveys. The CERED is supported by UNFP (United Nations Fund for Population). For a list of their recent publications see annex 4.

4. Planning and Prospects Directorate & Projection and Modeling Directorate

These two departments are in charge of economic planning (medium term perspectives), and designing models for assessing different economic policy alternatives. However, over the last two decades, planning administration has lost grounds in favor of short-term perspectives as reflected by financial law.

Annex 3: List of DPEG divisions

- Macroeconomic Synthesis Division
- Studies and Impact Assessment Division
- Information Division
- National and international Environment Division
- Sectoral policies' Assessment Division
- Forecasting Models Division
- Logistic and Computing Division
- Communication Division

³² On the Ministry of Finance web site, this Directorate is still called Directorate of Studies and Finance Forecasting (Direction des Etudes et des Prévisions Financières DEPF).

Annex 4: List of recent publications by CERED

Title	Year of publication
Social and demographic situation and demographic challenges in Morocco	2000
Urban dynamics and rural development in Morocco	1999
Vulnerable population: social and demographic profile and geographical distribution	1998
Matrimonial status and family strategies	1997

Annex 5: List of the latest DPEG working papers:

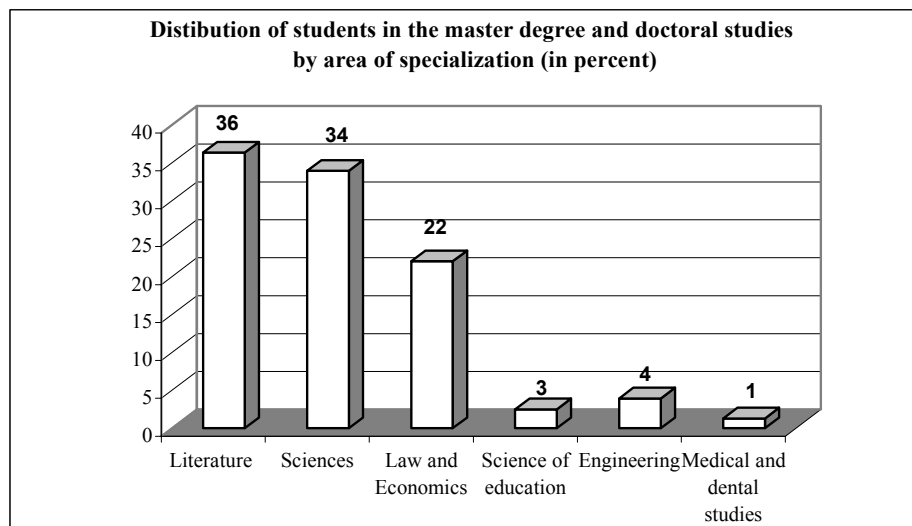
Title	Working paper number
Explanatory factors of the Moroccan exports' evolution	101
Impact of China's take-off on international and national economies	100
Review and sectoral analysis of Morocco's FTA with Turkey	99
The regulation of the electricity sector	98
Moroccan exports' competitiveness	97
Moroccan tertiary employment analysis	96
The impact of demographic transition on growth and employment	95

Annex 6: Higher Education in Morocco: A statistical overview

Statistics provided by the Ministry of Education and Scientific Research, reveal that there are 15 universities and 73 faculties in Morocco. There are in addition 20 colleges (Grandes Ecoles). While access to universities is open (except for medical and dental curricula), access to colleges is strictly selective.

Number of students in Higher Education in Morocco		
	2000-2001	2001-2002
University students	261630	266620
Students in colleges	8565	9390
Students in pedagogic institutions	15190	12330
Total	285385	288340
Share of females	44%	45%
Share of foreigners	1,2	1,4
University professors	9734	9773
College professors	1296	1301
Higher education professors	11030	11074
Share of females	21%	21%
Share of foreigners	0,36%	0,36%

There are around 14 000 students in the master and doctoral studies. Among them, 3100 are enrolled in Law and Economics, 4500 in Literature and Human Sciences, and 5000 in Sciences. During the academic year 2000-2001, Moroccan universities delivered 421 doctoral degrees of which 157 in Literature and Human Sciences, 227 in Sciences and no more than 17 in Law and Economics³³. Academic staff is composed by 11000 professors (61% of assistants-professors, 10% of associate professors and only 29 of full professors). Forty seven percent are in social and human sciences (economics, law, sociology, and linguistics), 36 percent in physics, mathematics, biology, geology, 8 percent are in medical sciences, 5 percent in engineering, and 4 percent in agricultural sciences.



³³ During the academic year 1999-2000, Moroccan universities delivered 380 doctoral degrees of which 116 in Literature and Human Sciences, 203 in Sciences and no more than 14 in Law and Economics.

Annex 7: The main think tanks involved in policy-oriented debates or studies

1. Moroccan Center of Short-term business cycle (CMC)

The CMC produces twice a year a comprehensive report on the Moroccan economy (comparable to Bank Al Maghrib yearly report but with more emphasis on issues of interest for the private sector, and in a more didactic style). In addition, CMC publishes a monthly newsletter on specific economic issues in Morocco. It has also a short-term economic profile note, which summarizes the main indicators and their expected evolution in the short term. CMC organizes workshop and round tables on timely economic issues and invite both policy makers, entrepreneurs and journalists to debate and express their views. The publications and activities of CMC are usually largely covered by the economic press and newspapers. CMC has several sponsors among which large private companies such as Group Afriquia (one of the largest financial holdings in Morocco), Maroc Telecom, National Security administration (CNSS), some insurance companies.

The CMC's president is Habib El Malki a Moroccan economist, ex-professor of development economics in Rabat University. He is a member of the political bureau of the socialist party (USFP) and currently the Minister of Education.

2. Aderrahim Abouabid's foundation for science and culture (FAB)

Abderrahim Bouabid is an historical leader of the Moroccan socialist party. FAB is a non-profit organization which is headed by a socialist economist Larbi Jaidi, professor of Economics in Rabat University. Mr Jaidi is also member of the scientific committee of CMC., and a regular columnist in one the most influent economic newspapers (la Vie Economique). FAB organizes round tables on political and economic issues.

3. Aziz Belal center for studies and research (CERAB)

CERAB is an independent NGO created in 1989. Aziz belal was one of the prominent Moroccan economists during the seventies. He was professor of economics in Rabat University. Belal was also one the main leaders of the Moroccan communist party (currently the Party of Progress and Socialism). The CERAB's president is Mr. Taib Chkili who is also the president of Rabat University (former Minister of Tertiary Education). The aim of this NGO is to promote research and thinking on human oriented development. The main research areas are: modern socialist thinking, governance system, agriculture and rural development, growth, employment and investment, economic and social policies. CERAB organizes periodically round tables on these issues.

4. Alternatives

Alternatives is an independent think tank created by two economists: Adelali Benamour (previously affiliated to the social party USFP) and Driss Ben Ali (previously affiliated to the progress and socialism party PPS). This think tank intends to offer alternatives with respect to traditional political parties. It is a club of thinking and exchanging ideas on political and economic issues. Some observers view alternatives as an alternative for those who are disappointed by political parties.

5. Morocco 2020

This a non-profit association created in 1995 by Ali Belhadj who is an entrepreneur graduated from an American Busines School. Ali Belhaj created recently a liberal political party (Alliances des libertés). The aim of this NGO is to think and contribute in the areas of economy, corporate

environment, and long term prospects of Morocco. This private think tank is mainly composed by relatively young executives and entrepreneurs (new generation of entrepreneurs).

6. Alliances Professionnelles

This is a non profit association headed by Najib Milkou created in 2000 (close to the independence party). This think tank is formed mainly by private entrepreneurs and executives from both private and public sectors. The aim of this NGO is to contribute to deal with youth problems, gender-related issues, defend Moroccan values, and promote corporate culture. Different conferences and round tables have been recently held by Alliances Pro (Integration strategy of informal sector, Saving mobilization, Justice reform, compulsory health insurance...).

Annex 8: Examples of policy-oriented documents produced by international donors

- o **The World Bank (WB):**
 - o Country Assistance Strategy, (2001)
 - o Poverty Update (on the basis of LSMS 1997-99) (2001)
 - o Social Protection Strategy (2002)
 - o Financial sector strategy note (2000)
 - o **The International Monetary Fund (IMF):**
 - o Consultation under article IV (2004)
 - o Financial System Stability Assessment (2003)
 - o **United Nations Development Program:**
 - o Human development report
 - o Different studies on governance issues
 - o **United States Agency for International Development (USAID) :**
 - o Studies on health issues,
 - o Decentralization issues and local governance
-

REFERENCES

Achy L. & K. Sekkat (2004), "Copyright Industries in Morocco", in Performance of Copyright industries in selected Arab countries, World Intellectual Property Organization.

Borensztein E., J. De Gregorio, J-W. Lee (1998), "How does foreign direct investment affect economic growth?", Journal of International Economics 45.

ERF (2003), "Arab Policy Makers describe the Policy Process", Newsletter, Volume 10, Number 04, Cairo.

McMahon G. & L. Squire (2003), "Explaining Growth", Palgrave Macmillan

Ministère de l'Enseignement Supérieur (2002), "Recherche Scientifique: Réalisations et Bilan (1998-2002)", Rabat, Morocco.

Romer, P. (1990), "Endogenous Technological Change", Journal of Political Economy 98 (5).

Sawi, Ali (2002), "Assist not only assess: where to put the comma?", discussion paper submitted to the legislative policy conference, Brussels.

Stiglitz J. (1999), "Public Policy for a Knowledge Economy", World Bank and CEPR working paper.

Stone, D. (2000), "Think tanks across the world", NIRA review.

UNDP (2003), Arab Human Development Report 2003: Building a knowledge society", New York.

Woodbury S.A (2000), "Economics, Economists, and Public Policy", Quarterly Review of Economics and Finance , n° 40.

World Bank (1998), World Development Report 1998/99, Washington DC.

WEBSITES:

Department of Statistics	http://www.statistics.hcp.ma
General Economic Policy Directorate (DPEG)	http://www.dpeg.gov.ma
Ministry of Industry and Trade	http://www.mcinet.gov.ma
Foreign Exchange Office	http://www.oc.gov.ma
Bank Al-Maghrib	http://www.bkam.ma
Treasury and External Financing Directorate	http://finance.gov.ma/dtfe/tbstat.htm
Ministry of Agriculture and rural development	http://www.madrpm.gov.ma
Ministry of Education and Scientific research	http://www.enssup.gov.ma
UNDP program for Morocco	http://www.pnud.org.ma
Parliament	http://www.Majliss-annouwab.ma
L'Economiste (Newspaper)	http://www.leconomiste.com
La VIE ECO (Newspaper)	http://www.marocnet.net.ma
Maghreb Arab Agency (News agency)	http://www.map.co.ma
Centre Marocain de Conjoncture (CMC)	http://www.lecmc.ma
Alliance professionnelle	http://www.alliancepro.ma