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**Moroccan Cereals  
Policy Reform at  
the Crossroads:**

**Final Report of the  
CMR Project**

*CMR Report No. 20*

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## PREFACE

The authors of this report, David Wilcock and Lynn Salinger, are, respectively Chief of Party of the Cereals Market Reform (CMR) Project (May 1991-September 1994) for prime contractor, Development Alternatives, Inc. (DAI) of Bethesda, Maryland; and agricultural and trade economist for subcontractor Associates for International Resources and Development (AIRD) of Cambridge, Massachusetts.

The views represented in this report are the authors' own, presented to further open debate of these important policy issues at a final project seminar in Rabat in September 1994. The views, thus, do not necessarily represent the positions of either the U.S. Agency for International Development Mission in Morocco or the Government of Morocco.

This report is based on the authors' extended experience with Moroccan cereals policy issues (intermittently over seven years for Wilcock and over nine years for Salinger) and on 45 reports previously published by the project (19 main project reports, 18 working papers, and 8 quarterly progress reports). These project reports are listed in the References section and are available from either USAID or MAMA/DPAE in Rabat or from DAI in the United States.

Two notes on terminology:

(1) We have used the term "soft wheat" to refer to what is known as *blé tendre* in Morocco. It is also sometimes referred to as "bread wheat." It is distinguished from durum wheat (or *blé dur*). For the North American reader, note that the "soft wheat" referred to here may encompass five classes of wheat in the U.S. grading system: hard red winter, hard red spring, hard white, soft red winter, and soft white. The "soft wheat" subsector is the heart of the cereals reform program in Morocco.

(2) We use the term "subsector" in two overlapping ways. First we use it to refer to the broad commodity subdivisions of the agriculture sector, such as the "cereals subsector" or the "oilseeds subsector." We also use it to focus somewhat more narrowly on a true commodity-specific grouping, such as the "durum wheat flour subsector." This corresponds to the very useful French term, *filière*, for which there is no exact translation in English, used to describe the vertical linking of all the industries involved with the commodity as it moves from farmer to consumer.

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## ACRONYMS

AAEA	American Agricultural Economics Association
AIRD	Associates for International Resources and Development
AMIPROS	Association Marocaine des Importateurs des Produits du Sol
APM	Association Professionnelle de la Minoterie
ASAL	Agricultural Sector Adjustment Loan
ASAL2	Second Agricultural Sector Adjustment Loan
ASIL	Agricultural Sector Investment Loan
ASIL2	Second Agricultural Sector Investment Loan
CIF	Cost, insurance, and freight
CMA	Coopérative marocaine agricole
CMR	Cereals Market Reform Project
CNCA	Caisse Nationale de Crédit Agricole
CPM	Comité Professionnel de la Minoterie
CRS	Catholic Relief Services
DAI	Development Alternatives, Inc.
DE	Direction d'Élevage
DEPAAP	Direction des Entreprises Publiques et Assistance aux Associations Professionnelles
Dh	Dirham
DPAE	Direction de la Planification et des Affaires Économique
DPV	Direction de la Production Végétale
DRC	Domestic resource cost coefficient
DS	Direction de la Statistique/Ministère du Plan
DVRA	Direction de la Vulgarisation et de la Réforme Agraire
EEP	Export Enhancement Program
ENA	École Nationale de l'Agriculture
FDA	Fonds de Développement Agricole
FOB	Free on board
FNBT	Farine Nationale de Blé Tendre
GATT	General Agreement on Tariffs and Trade
GIS	Geographical Information Systems
GNP	Gross national product
GOM	Government of Morocco
IAV	Institut Agronomique-Vétérinaire Hassan II
ICEA	Ingénieurs-Conseillers Economistes Associés
ID	Implementation Date
INSEA	Institut National de la Statistique et de l'Économie Appliqué
KG	Kilogram
LP	Linear Programming
LSMS	Living Standards Measurement Survey
MA	Minoterie artisanale
MAMVA	Ministère de l'Agriculture et de la Mise en Valeur Agricole
MAPP	Morocco Agribusiness Promotion Project
MARA	Ministère de l'Agriculture et de la Réforme Agraire (previous title for MAMVA)
MAROCMOD	A computer model developed by Purdue University
MI	Minoterie industrielle
MICS	Minoterie industrielle à céréales secondaires
MIS	Market information system

MT	Metric tons
MTASAP	Medium-Term Agricultural Sector Adjustment Program
ONICL	Office National Interprofessionnel des Céréales et des Légumineuses
RCC	CMR (in French)
PAC	Programme alimentaire compensatoire
PFI	Prélèvement fiscal à l'importation
PL-480	Public Law-480 (US Food Assistance)
PRCC	Project Réforme de la Commercialisation des Céréales - CMRP (in French)
QI (Qx)	Quintal (Qx: Plural Quintax)
SAL	Structural Adjustment Loan
SCAM	Société coopérative agricole marocaine
SPSS	Statistical Package for the Social Sciences
SW	Soft wheat
TR&D	Tropical Research and Development
USAID	United States Agency for International Development
USCAM	Union des SCAM
USDA	United States Department of Agriculture
VAT	Value-added tax
WFP	World Food Programme

## EXECUTIVE SUMMARY

Comprehensive cereals marketing policy reform has been planned or has been in the process of being implemented for almost 10 years. The Government of Morocco (GOM) finds itself again at the crossroads (Chapter One). Which policy road to take? In one direction lies a road that is filled with continued government control over cereals imports, and the domestic pricing, marketing, and milling of soft wheat. It is a road that GOM will choose if it decides that price stability and continued excess profits to certain privileged groups are more important than the consumer benefits associated with the road that stretches in the other direction.

The second road, the free market road, has some risks: prices will vary more than they have, some private groups will have to compete with each other, and some public groups will have their roles dramatically altered. At the crossroads, some of these groups are trying to keep policy makers on the familiar "road of control." What the opponents of the free market road are ignoring are the greater benefits from efficient and competitive markets that go along with increased risks. The main efficiency benefit is that all Moroccan consumers will have a wider choice of higher-quality cereals products at lower prices. Given the weight of cereals in Moroccan gross national product, this can represent a significant economic contribution, freeing resources that can be used for other purposes as the country seeks to become more competitive and more of a participant in growing world markets.

The Cereals Market Reform (CMR) project, begun in May 1991 and concluding in September 1994, provided technical assistance to GOM to inform the process of cereals marketing policy change and to assist in the development of realistic policy options. The U.S. Agency for International Development in Rabat engaged a consortium of six partners, led by Development Alternatives, Inc., to undertake this work.

During its 40 months of activity, the CMR project has rendered a variety of services to the Government of Morocco's Ministry of Agriculture (MAMVA) and, more broadly, to the cereals *interprofession* (professionals in the cereals subsector) of Morocco. These have included long- and short-term training of GOM personnel, public education on cereals marketing reform topics, and technical assistance. The latter was organized in two phases. In the first phase of six months, a synthesis of existing knowledge on cereals production, marketing, trade, and consumption was produced. Combined MAMVA/CMR working groups also produced a priority listing of key problem areas to be investigated in the second phase over the subsequent two years and 10 months. The project also provided capital resources (vehicles and, office equipment) to MAMVA and ONICL (the Office National Interprofessionnel des Céréales et des Légumineuses).

The genesis, the unfolding, and — ultimately — the record of the CMR project must be reviewed in the context of 10 years of agricultural sector analysis and policy reform in Morocco (Chapter Two). The cereals sector reform program represents just one of several key agricultural subsectors targeted for significant price, trade, and marketing reform under the aegis of GOM's Medium-term Agricultural Sector Adjustment Program. The process of structural adjustment, from diagnosis to prescription to negotiation to implementation to change, has been long and not necessarily direct in any of the targeted subsectors.

In addition, the evolution and accomplishments of the CMR project must also be considered in light of the protracted international agricultural trade liberalization discussions held under the GATT, in which Morocco participated actively. At some point, Moroccan policy makers recognized that they need not acquiesce to two distinct sets of reforms and conditions, and won agreement from multilateral lending

partners that the pace and scope of multilaterally negotiated reforms (GATT) would take precedence over any reform package identified and negotiated directly between Morocco and partners (in other words, ASAL/SAL/ASIL). In retrospect, this won considerable room for policy maneuver for Morocco, both in timing and in the identification of the actual reform agenda. The Uruguay Round agreement of GATT is a considerably looser agreement than the policy reforms hammered out under ASAL, ASAL-2, and ASIL-2.

An important lesson for donors of agricultural sector adjustment in Morocco is that the process of reform is a long one, and one which cannot easily be scheduled to suit the confines of a three-year project. Structural adjustment is a complex process: it is too politically sensitive to be rushed through, and yet in the process of involving various interest groups in the dialogue, economic issues become politicized and positions become entrenched. Thus, the political economy constraints encountered during implementation of CMR (resistance to elimination of the consumer soft wheat flour subsidy, to full liberalization of international trade in cereals, and to elimination of a market-intervention role for a cereals marketing board) should have been predictable. In retrospect, therefore, a three-year relationship hardly affords a technical assistance team sufficient time to develop the understanding and coalitions required for fundamental reform.

Focus during CMR's latter phase was on four main themes, each of which is discussed further below:

- Impacts on the cereals subsector of changes in price, trade, and marketing policy;
- Food security implications of liberalization, including the possible elimination of the consumer subsidy on FNBT (soft wheat);
- Assessment of the perspectives for the Moroccan wheat milling sector under a competitive market environment; and
- Identification of the institutional reforms required to accompany policy reform.

### **PRICE, TRADE, AND MARKETING POLICY**

One of the most critical unresolved issues at the end of CMR remains that of cereals trade policy (this and the following section are discussed in detail in Chapter Three). As a net importer of cereals, Morocco's domestic price for grains and their derivatives is largely determined by world prices. Thus, whatever policy Morocco introduces at the border affects the prices at which they trade on the domestic market. GOM has practiced a combination of fixed producer pricing, public procurement of domestically produced grains, public distribution of imported and domestically produced grain, and fairly restrictive trade policies to maintain a stable domestic price for cereals, both over time and over space, to producers and consumers alike.<sup>1</sup>

Today, post-GATT, GOM must develop and implement an operational tariff scheme for agricultural products, including cereals. Such a scheme must satisfy both GOM's apparent objectives of price stability and defense of nominal, if not real, prices to producers, while at the same time being

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<sup>1</sup> These domestic prices are high relative to falling world prices.

GATT- as well as ASIL2-consistent. In other words, the scheme must establish ad valorem tariffs that are at or under the ceilings agreed upon between GOM and the GATT. The CMR project has provided a range of applied research tools to help MAMVA assess the temporal and spatial price implications of alternative border price policies.

Moroccan policy makers have instituted sometimes hefty rates of protection for the benefit of domestic producers in defense against what are perceived to be abnormally low and excessively variable international prices. The policy makers are aware of the short-run economic opportunity costs of maintaining higher domestic prices, but cite concerns about longer-run implications for rural-urban migration and domestic political stability in the event that domestic prices deteriorate. Policy makers are also aware that the necessity of minimizing the governmental budget impact of such protectionism means higher consumer prices for basic food stuffs. Even the consumer soft wheat flour "subsidy" is merely a financial transfer, compensating for the high cost of flour milled from domestically produced grain, rather than a true economic subsidy. At times, the protection policy introduces contradictions internal to the agricultural sector, as in the case of high rates of protection on maize, which penalizes domestic poultry producers and consumers. GOM values stability over economic efficiency, and who can blame it? Plenty of other governments have fallen because they upset the economic status quos in their countries.

The CMR project has argued that this ranking of preferences (stability over efficiency) entails certain costs, which can be grouped into four broad categories: economic inefficiency; systematic discouragement of the development of market-based risk reduction mechanisms; maintenance of a flawed subsidy program concurrent with lack of action on more sustainable public programs of food or income assistance; and lack of coherence in the direction of overall GOM economic policy, which supports an increased market orientation.

## FOOD SECURITY

Reflecting GOM concerns, food security has been a recurring theme in the CMR project. The project has concluded that Morocco's economic evolution has permitted a notable improvement in the security of food supply, either through domestic production or through the growth of importing or financial borrowing capacity. Transport, port, and storage infrastructure, as well as the domestic trader network, appear more than adequate for assuring timely distribution of cereals across the country, with two caveats. The bulk storage infrastructure is not optimal for assuring the lowest possible cost of distribution under free market conditions, and the heretofore weak public market information system available to producers and consumers has required support from CMR to make it a modern, functioning system.

To satisfy the most nervous policy makers that potential food security risks (whose probabilities are rather low) that might follow market liberalization could be contained via the maintenance of a small soft wheat security stock, CMR experts made recommendations on the potential size (75,000 tons of soft wheat) and cost of such a stock, and the operational guidelines that should govern it. ONICL's position supports the establishment of a much larger stock (600,000 tons), administration of which would maintain ONICL's position of control over domestic grain marketing. The CMR project has warned that the existence of even a small stock is likely to have important destabilizing effects on private importers and traders, although with transparent management rules these can be minimized. CMR has also strongly encouraged the notion that any stock be considered a transitional strategy (three or four years) at best, whose size and overall justification be formally evaluated on an annual basis.

Last, the identification of food-insecure groups is politically problematic in Morocco. Although the household data exist for a more thorough analysis of the subject, government reticence has prevented such analyses from taking place. Thus, who is poor and potentially food insecure remains a controversial topic. Nevertheless, although elimination of the consumer soft wheat flour subsidy might not entail a large unit cost to the poorest consumers, there are indications that energy and nutrient deficiencies do exist in many Moroccan diets, which must be taken into account as GOM examines how it could provide more targeted food or income assistance to its poorest households.

### THE WHEAT MILLING INDUSTRIES

Recognizing the complexity of the Moroccan wheat milling industry, the CMR project launched an extensive applied research program to evaluate industrial and consumer demand for wheat flour; artisanal mill operations, particularly under drought conditions; technical and marketing characteristics of industrial durum and barley mills; the potential impact of elimination of *péréquation* and grain transport and storage subsidies on the operation of the subsector via the development of a linear programming model; and the likely structural and behavioral reactions of the milling industry to free competition via structured interviews.

Along with a massive public education campaign that finally brought cereals market reform into the public arena (other agro-industries had been involved much earlier in policy reform discussions with GOM), the CMR work on wheat milling identified several public measures that might help to ease the milling firms' transition from a regulated to a liberalized market environment. These might include industrial extension and training programs, elaboration of improved cereal grading and flour quality standards that will help the industry perform better to meet consumer needs, state promotion of improved private grain marketing and storage facilities to assist firms to become more competitive with imports, and the provision of financial compensation to milling firms to promote the structural transformation of the sector.

### REFORMING PUBLIC INSTITUTIONS

For true economic reform to be implemented, changes in policy must be accompanied by changes in institutional attitudes. The CMR project has therefore also paid attention to how agricultural sector liberalization would affect the data collection and analysis responsibilities of MAMVA, what kind of institutional restructuring of ONICL will be required to convert it from an institution of market control to one of supervision and promotion, how to resolve the 20-year impasse on the future of Morocco's grain storage cooperatives, the institutional future for Moroccan cereals, and cereal product demand analysis.

Recommendations for institutional strengthening in the data collection and analysis arena include a redressment of the imbalance between a finely honed agricultural production data collection and analysis effort and a virtual dearth of data collection and analysis in the areas of marketing, processing, and consumption of agricultural products. Public dissemination of statistical and analytical work lags far behind. In cereals market information, institutional redundancy and weakness exist in ONICL and in the Planning Agency within MAMVA (DPAE), which both attempt to collect and report cereals price information. Last, there has not been an agricultural census done in Morocco in 20 years. Without

accurate information, MAMVA policy makers are in the dark about whom they are actually protecting with their high producer prices.

The CMR project has recognized an implicit "decision" by GOM to retain ONICL in the face of cereals sector liberalization. If the institution is to convert from its *dirigiste* role to one more promotional in nature, CMR has recommended that ONICL focus on:

- Information services (cereals stocks and supply utilization, greatly expanded market information systems, international cereals market information);
- Subsector promotional services (internally within Morocco: maintaining a subsector registry, maintaining subsector ethical standards, encouraging domestic market competition, strengthening professional associations; externally: advising potential investors, managing an investment promotion fund, brokering potential joint ventures);
- Management of GOM food security operations in cereals, and providing technical support services (training, definition and enforcement of technical grades and standards, laboratory analyses).

For this vision to be achieved, ONICL must receive a clear legal mandate spelling out the functions that are supportive to private sector development.

One of the consequences of ONICL's long management of cereals trade and domestic marketing has been a lack of private investment in modern bulk handling and storage infrastructure. Another dimension is that no private trader or importer currently has any modern grain storage facilities. This area represents a major opportunity for private sector investment and business development, once the private sector is convinced that GOM really will liberalize soft wheat marketing. A major constraint to such investment, however, is the continued presence of grain storage cooperatives (representing over half of installed inland bulk storage capacity). Run by ONICL directive and under the thumb of local governors, these "cooperatives" have had, with a few notable exceptions, a poor record buying and selling grain for the state. Approximately half of the bulk storage infrastructure, if not new, is in good working condition. The other half requires renovation, in some cases extensive renovation. The biggest looming problem with the cooperatives is how to ensure that their storage capacity will be available to a largely private cereals trade. CMR's position is that GOM should assign resolution of the cooperatives problem a high priority or begin to offer attractive incentives to investors to construct alternative facilities as quickly as possible.

Repeatedly during CMR, the limited data on Moroccan consumption patterns and the weakness of demand analysis, either conducted by the government or by the Moroccan private sector, became apparent. This lack of focus on demand reflects certain traditional attitudes about consumers that must begin to shift as economic policy becomes more market-oriented. Within MAMVA, there is a clear need to establish a unit, probably within DPAE, that would focus on food consumption, nutrition, and demand analysis. Alternatively, the Direction de la Statistique has learned a great deal in the past few years in the conduct of the Living Standards Measurement Survey, which could be built upon to develop such an analytic capacity. Until they begin to listen to the consumer, Moroccan flour mills will be unable to adapt their products to their customers' needs, which will be the name of the game in a liberalized cereals economy.

The final chapter (Four) of this report serves as a pragmatic summary with two objectives. First, it provides a checklist of the main reforms that are to be put into effect in April 1995, and summarizes

about 20 supporting measures that will help assure that the transition to the liberalized market is as smooth as possible. Secondly, it sketches out a medium-term (five-year) strategy for facilitating optimal cereals market development. The main lines of that strategy are recommendations aimed at:

- MAMVA institutional changes that will allow the ministry to play an expanded role supporting private sector growth and modernization. This would be based on the enhanced provision of information, analysis, and agro-industry promotional services;
- Adoption of anti-trust and risk reduction measures to ensure that cereals markets function competitively while allowing private firms to manage the risk that is associated with fluctuating cereals prices; and
- Special help GOM may wish to give to key stakeholder groups — farmers, millers, and consumers — in the aftermath of the transition to a liberalized market.

## CHAPTER ONE

### INTRODUCTION AND PROJECT SUMMARY

Comprehensive cereals marketing policy reform has been planned or has been in the process of being implemented for almost 10 years. The Government of Morocco (GOM) finds itself again at the crossroads. Which policy road to take? In one direction lies a road that is filled with continued government control over cereals imports and the domestic pricing, marketing, and milling of soft wheat. It is a road that GOM will choose if it decides that price stability and continued excess profits to certain privileged groups are more important than the consumer benefits associated with the road stretching in the other direction.

The second road, the free market road, has some risks: prices will vary more than they have, some private groups will have to compete with each other, and some public groups will have their roles dramatically altered. At the crossroads, some of these groups are setting up barricades and smoke screens, trying to keep policy makers on the familiar "road of control." What the opponents of the free market road are ignoring are the greater benefits from efficient and competitive markets that go along with increased risks. The main efficiency benefit is that all Moroccan consumers will have a wider choice of higher-quality cereals products at lower prices. Given the weight of cereals in Moroccan GNP, this can represent a significant economic contribution, freeing resources for other purposes as the country seeks to become more competitive and more of a participant in growing world markets.

#### 1.1 OBJECTIVES AND STRUCTURE OF THIS REPORT

The authors want to meet three basic objectives with this report:

- Explore the evidence generated by three years of the Cereals Marketing Reform (CMR) Project work that supports or contradicts the position that GOM can finally choose the free market road in cereals marketing;
- Because this is a final project report, tell the story of the CMR project in terms of what it accomplished between May 1991 and September 1994; and
- Offer a set of summary recommendations of further work that GOM can organize to help smooth the transition to a liberal market future.

This report is structured as follows:

- In the balance of Chapter One we describe briefly the history and objectives of the CMR project and highlight some of its accomplishments.
- The context of the project within the larger program to reform the structure and functioning of Moroccan agriculture is discussed in Chapter Two.
- Chapter Three is the heart of this report. Here we discuss the major policy issues still being resolved as the government prepares for final market liberalization.

- Chapter Four provides summary recommendations on priorities for further work that needs to be done to assist in the transition to free cereals importing and domestic marketing, and on how Moroccan cereals can be made as competitive as possible with imports.

## 1.2 THE CEREALS MARKETING REFORM PROJECT

### 1.2.1 Project History

The CMR project was originally designed by the U.S. Agency for International Development (USAID) in 1987 as a multiple activity project that would be one of two major components of U.S. support for the reform of cereals marketing in Morocco, as had been agreed to by GOM and the World Bank, particularly under the second Agricultural Sector Adjustment Loan (ASAL II).<sup>1</sup> Originally the project was to have funded applied marketing and local cooperative development work in the field, as well as undertake applied policy studies and institutional restructuring, particularly involving the Office National Interprofessionnel des Céréales et des Légumineuses (ONICL). The project, as eventually finalized, was much smaller in scope and focused primarily on providing technical assistance for studies in collaboration with GOM and other Moroccan public institutions and the private sector in the cereals subsector. These studies were designed to inform the process of policy change and to assist in the development of realistic policy options.<sup>2</sup>

A group of U.S. and Moroccan institutions was awarded a contract to undertake this work by USAID/Rabat in late 1990. The final contract was signed with the Ministry of Agriculture (MAMVA) in February 1991, and activities began in Morocco in May 1991. The original CMR contract team included:

Prime contractor, Development Alternatives, Inc. (DAI) of Bethesda, Maryland, and sub-contractors:

- AgroConcept of Rabat, Morocco;
- Associates in International Resources and Development (AIRD) of Cambridge, Massachusetts; and
- The Department of Agricultural Economics at Purdue University in West Lafayette, Indiana.

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<sup>1</sup> The other component of U.S. support was the use of large quantities of PL 480 commodities to provide food assistance to targeted groups of low-income Moroccan consumers under the Programme Alimentaire Compensatoire (PAC) that was administered between 1987 and 1992 in Morocco by Catholic Relief Services (CRS), in cooperation with the ongoing programs administered by four *Directions* in three different ministries. This important but little-noticed program was evaluated by CRS in 1991 in "Etude d'Evaluation Finale du Programme Alimentaire Compensatoire." Some of the highlights in this report were included in P. Boyle's paper reviewing the general food aid situation in Morocco, "Situation et Perspectives de l'Aide Alimentaire au Maroc" (CMR Working Paper No. 2, December 1991).

<sup>2</sup> With its reduced scope, the CMR project was eventually funded as a subproject to USAID Project 191, Assistance in Economic Analysis — a project that also provided assistance to the Ministry of Economic Affairs.

During project implementation two additional subcontracts were signed between DAI and:

- ICEA-Entreprise of Paris, France; and
- The Institut National de la Statistique et de l'Economie Appliqué (INSEA) in Rabat, Morocco.

The original contract, with funding of \$2.1 million, was designed to be completed in two years. DAI was given a no-cost contract extension to three years primarily to allow three MSc trainees funded by the project to complete their degrees in the United States. Toward the end of the original two years, the CMR Technical Committee in MAMVA requested additional funding from USAID to conduct a Phase III of complementary studies during the third year of project life. In July 1993, USAID/Rabat approved an additional \$600,000 in Phase III funding. Unfortunately, in December 1993, this additional funding was withdrawn because of cuts in the Mission's overall budget.

### 1.2.2 Summary of Project Objectives and Accomplishments

As described in the original Project Agreement signed in September 1989 between USAID/Rabat and GOM and in the Phase I Work Plan written by the CMR Technical Committee, the primary objective of the project was:<sup>3</sup>

To assist the Government of Morocco in the elaboration of a national cereals marketing strategy that would contain recommendations on tariff reform, domestic marketing, external trade, and storage designed to maximize the efficiency of the marketing system while taking into account objectives of long term economic growth and national food security.

The Technical Committee document goes on to note that:

National food security must take account on one hand of local production conditions and possibilities (weather problems, storage, etc.), and, on the other hand, of financial imperatives (such as budget limits and balance of payments concerns, comparative advantage, etc.).<sup>4</sup>

The primary objective was supplemented by two secondary objectives: training Moroccan counterparts in methods of economic policy analysis, and contributing to institutional strengthening, primarily of collaborating units in MAMVA (ONICL, DPAE (Direction de la Planification et des Affaires Economiques), DPV (Direction de la Production Végétale), and DEP (Direction des Entreprises Publiques)

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<sup>3</sup> The CMR project has had two official supervisory committees, both chaired by the Secretary General of MAMVA: The Project Technical Committee and the Interministerial Guidance Committee. The Technical Committee, made up of representatives of different MAMVA units — ONICL, DPAE (Direction de la Planification et des Affaires Economiques), DPV (Direction de la Production Végétale), and DEP (Direction des Entreprises Publiques) — turned out to be the group that provided primary direction to the project, meeting every three to five months. See Chapter Two for additional comments on the way the committee functioned.

<sup>4</sup> CMR Report No. 1 (PRCC Comité Technique, "Project RCC, Phase I: Programme de Travail," Juin 1991). For this report, all CMR documents are referred to by number in two series, main reports and working papers; they are listed in References.

— the old DVRA). Here we briefly summarize accomplishments under the two secondary objectives, then return to a review of accomplishments under the main project objective.

### 1.2.2.1 Training

About 16 percent of the total USAID funds were used to accomplish the project's training objective in five ways:

- Three students (two from ONICL and one from DPAAE) were sent to complete MSc degrees in agricultural economics at Purdue University. Each wrote a Master's thesis on a topic relevant to cereals marketing policy reform in Morocco, and the two cadres from ONICL received additional short-term training at the U.S. Department of Agriculture (USDA), one in international cereals marketing data systems, and the other in the collection of local cereals production, marketing, and storage data.
- Three students in the agricultural economics department at the Ecole Nationale de l'Agriculture (ENA) in Meknes were given small grants to complete their *Third Cycle* degrees on topics of interest to the CMR project: grain storage, demand for different wheat flour products, and the economics of wheat milling — all using original data collected in the Meknes region. A fourth student from ENA/Meknes received a CMR grant to help AgroConcept personnel create the wheat flour subsector linear programming model (described below).
- The CMR project funded a series of short-term training activities:
  - English language courses at the American Language Center in Rabat were provided to approximately 20 cadres from MAMVA and ONICL over a period of a year and a half;
  - A two-week training course on agricultural policy modeling was given to approximately 20 MAMVA and ONICL staff members in May 1992;
  - Training on the use of the Statistical Package for the Social Sciences (SPSS) software was provided to ONICL staff members in July 1993;
  - In conjunction with the USAID 182 project, 4 DPAAE staff members were sent to the United States for short-term training at USDA/Washington, the annual meetings of the American Agricultural Economics Association, and Purdue University; and
  - A MAMVA/DPAAE staff member was sent to Paris to participate in a World Bank-sponsored workshop of risk reduction mechanisms in liberalizing economies.
- Ten public education seminars on cereals marketing reforms were given to different public and private sector groups including:
  - The February 1992 Phase I Synthesis conference, the first public meeting on cereals reforms sponsored by MAMVA, and a similar presentation made to the Interministerial Coordinating Committee in March 1992;

- A successful seminar for all ONICL middle and senior staff on the likely changes the reform program would bring to the organization in June 1993;
  - A public debate at the Institut Agronomique et Vétérinaire (IAV) Hassan II in February 1993 on the project's paper on food security;
  - Two day-long "industrial policy extension" presentations to approximately 70 of the 85 members of the industrial wheat millers association (APM/CPM or Association Professionnelle de la Minoterie/Comité Professionnel de la Minoterie) in June 1993, plus another at a seminar sponsored by US Wheat in April 1993; and
  - Four other public lectures organized for faculty at IAV, students at ENA, feedmillers and poultry producers, and ONICL staff and millers on commodity futures markets.
- Finally, about 30 staff members from MAMVA and ONICL partner units received hands-on training while working on different CMR working groups and study efforts, particularly in the project's Phase I; some also worked on specialized studies in Phase II.

#### **1.2.2.2 Institution Building**

In addition to the training described above, the CMR project directed 12 percent of its budget to the purchase of two vehicles (for DPAAE), and office equipment (a photocopy machine, a dozen computers, four computer printers, significant amounts of computer software for DPAAE and ONICL) that aided the project in doing its work but also in building the partner institutions.

The project was housed principally in MAMVA/DPAAE but also maintained an office, primarily for consultant use, at ONICL. The major contributions to institution building were the opportunities to interact in problem-solving and analytical situations with GOM colleagues, the training provided, and four diagnostic studies that focused on developing new GOM institutional capabilities needed in an economy that was in transition to market-based operations (sections 3.2 and 3.4):

- "The Market Information System for Cereals: Proposed Action Plan" (CMR Report No. 9, May 1992);
- "Agricultural Data Needs of the Moroccan Ministry of Agriculture" (CMR Report No. 12, July 1992);
- "ONICL: Current Situation and Institutional Future" (CMR Report No. 16, June 1993); and
- "Recommendations for a Food Security Stock in Morocco" (CMR Report No. 18, January 1994).

#### **1.2.2.3 Technical Assistance**

The majority of the CMR budget (72 percent) was devoted to the costs of providing technical assistance in Morocco. The contract called for a resident long-term chief of party for two years plus a total of 64 person-months of short-term technical assistance (28 U.S. and 34 Moroccan) over the life of the project. DAI provided Dr. David Wilcock as the resident advisor between July 1991 and July 1993.

In addition, through careful use of project resources, DAI and its subcontractors were able to provide 53 person-months of U.S. and 42 person-months of Moroccan technical assistance. This represents a 48 percent increase in total level-of-effort over what USAID had planned for in its initial budgeting.

The project's technical assistance was planned to be used in two phases: a six-month Phase I focusing on synthesis of voluminous information and past work on cereals in Morocco and diagnosis of the policy situation and priority problems in late 1991; and a 15-month Phase II concentrating on more detailed studies of different dimensions of the subsector. The need for these studies would be debated at a seminar reviewing the results of the first phase.

In Phase I most work was done by four working groups made up primarily of personnel from MAMVA partner units, assisted by U.S. and Moroccan consultants. The groups examined and wrote reports on the following parts of the subsector:

- Trends in Moroccan cereals production over the past 10 years, reported in Houmy et al. (CMR Report No. 4);
- The structure and functioning of domestic cereals marketing, storage, and processing of cereals. This group also looked at how marketing was financed and did an extensive statistical analysis of the different series of local *souk* and *halle aux grains* prices. Results were reported in Aloui et al. (CMR Report No. 5);
- Organization and trends in Moroccan cereals imports and in problems in export markets related to the payment of export subsidies in Europe and North America. Reported in Salinger et al. (CMR Report No. 6); and
- Cereals consumption, with sections analyzing past quantitative demand analysis, the use of food aid, and the results of the rapid reconnaissance study of the quality, price, and distribution of the subsidized soft wheat flour or Farine Nationale de Blé Tendre (FNBT). Results were reported in Britel et al. (CMR Report No. 7).

During the two-day seminar that ended Phase I in February 1992 (attended by approximately 125 representatives from government and the privates sector), these detailed reports were summarized, key subsector policy issues were analyzed, and recommendations for follow-up work were made in the Phase I Synthesis Report compiled by Wilcock (CMR Report No. 8). At the seminar, the four working groups made recommendations that became the work plan for the more detailed follow-up studies.

In Phase II, work was organized around four main themes:

- Increasing competition in the Moroccan wheat milling industry. Results from this work and issues remaining are discussed in Chapter Three, section 3.3.
- Impacts on the subsector of changing cereals policy. This area of work included an assessment of the costs and benefits to the reform, modeling likely supply and demand responses in the Moroccan market and questions on the transmission of international price variations (section 3.1), and food security implications and alternatives to the current FNBT subsidy (section 3.2).
- Market-oriented approaches for making the Moroccan-grown cereals and Moroccan flour and flour products as competitive as possible with imports. This included work in the feed and

livestock industries (section 3.1) and bulk storage and handling (3.2), and work that was proposed on grades and standards and analysis of investment opportunities in the subsector.

- Institutional reforms to accompany policy reform. This included looking at changing data needs in MAMVA, improved information systems on markets and supply conditions in different parts of the subsector, development of market-based risk-reduction measures for the cereals subsector, and a badly needed restructuring of ONICL (section 3.4).

About 80 percent of the overall level of effort in the CMR project went into the studies and public education work involved in Phase II. One of the strengths of the CMR approach to technical assistance was that problem-solving priorities in the project were set jointly through the interaction of the project with key subsector private sector groups and with the GOM/MAMVA Technical Committee. The project's ability to respond to government concerns is illustrated by the fact that, despite the elimination of third-year funding by USAID, the project, late in year 2, was able to respond to two key requests for targeted assistance from GOM authorities. These were to produce a businessman's guide to subsector reform (section 3.1), and an analysis of the need for and operational specification of a soft wheat security stock that would accompany transition to total private sector management of soft wheat importing and domestic marketing (section 3.2).

This illustrates one of the keys of using technical assistance effectively in sectoral adjustment work: *an ability to adjust to and be a part of the process of reform*. One of the major impacts of this work has been the fostering of policy debate among key parties. As the project's midterm evaluation stated:

In a period of less than 20 months, the project has succeeded in moving the policy debate from the level of confidential negotiations between the World Bank and high-level GOM policy makers to a semipublic debate involving a much larger group of actors involved in the cereals market, including millers, domestic cereals traders and importers, representatives of farmers associations, and other governmental and quasi-governmental groups . . . . It is to the extreme credit of CMRP that the cereals policy reform dialogue has been heightened despite the reduction in pressure from the donors. In this regard, CMRP can perhaps be regarded as a model for the post-conditionality structural adjustment project.<sup>5</sup>

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<sup>5</sup> Dr. M. Gadbois, "Midterm Evaluation of the Cereals Marketing Reform Subproject (608-0191)," Tropical Research and Development, Inc., May 1993, p. vii (reproduced as CMR Report No. 15).

## CHAPTER TWO

### TEN YEARS OF SUBSECTOR ANALYSIS AND REFORM<sup>1</sup>

To understand what the CMR project in Morocco set out to accomplish and what it ultimately did accomplish, one has to understand Morocco's experience with agricultural sector adjustment in general. This chapter reviews the history leading up to the project, and offers an assessment of CMR objectives within the context of the overall reform program.

#### 2.1 PREREFORM SUBSECTOR ANALYSIS

In response to the intensifying economic contradictions and mounting fiscal pressures of the late 1970s and early 1980s, the Kingdom of Morocco launched a broad, medium-term (five-year) program in 1985 for the adjustment of its agricultural sector. MTASAP (the Medium-Term Agricultural Sector Adjustment Program) touched on virtually every aspect of the Moroccan agricultural economy (fertilizer, irrigation, extension, research, veterinary services, animal feeds, cereals, citrus, vegetables, dairy, meat, oilseeds, sugar crops, forestry, and food subsidies) and defined detailed action programs for each. These evolved over time in response to internal and external pressures. The program was implemented in phases, supported by the World Bank and co-financers with two adjustment operations.<sup>2</sup> Support of the agricultural sector investment program has been the follow-on strategy since 1992.<sup>3</sup>

ASAL-1 encouraged fiscal savings, established an interministerial coordination committee to build consensus on agricultural sector policy reforms and investment priorities, and supported the Agricultural Prices and Incentives Study.<sup>4</sup> By suggesting the study, it legitimized the role of economic analysis in the policy reform dialogue and helped to assure the prominence of such analysis in the future work of the

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<sup>1</sup> This chapter draws heavily from the World Bank's Project Completion Report for its Second Agricultural Sector Adjustment Loan, January 31, 1994.

<sup>2</sup> The Agricultural Sector Adjustment Loan (ASAL-1), in effect from 1985 to 1987, and the Second Agricultural Sector Adjustment Loan (ASAL-2), which ran from 1988 to 1992.

<sup>3</sup> Two investment loans have been supplied by the World Bank: the Agricultural Sector Investment Loan (ASIL), running from 1991 to 1993, and the Second Agricultural Sector Investment Loan (ASIL-2), just negotiated in May 1994.

<sup>4</sup> Ministry of Agriculture and Agrarian Reform and Associates for International Resources and Development, *La politique de prix et d'incitations dans le secteur agricole*, Rapport final, January 1986; and World Bank, *Kingdom of Morocco: Agricultural Prices and Incentives Study*, Report No. 6045-MOR, May 1986. Two separate Bank exercises examined interactions among cereals in a dynamic model of the grain subsector and targeted food subsidy programs that could replace the general consumer subsidies in effect at the time. World Bank, *Kingdom of Morocco: Agricultural Prices and Incentives Study*, Annex V: Simulation of the Moroccan Grains Markets: An Econometric Dynamic Model, and World Bank, *Compensatory Programs for Reducing Food Subsidies*, Report No. 6172-MOR, April 1986.

Directorate of Planning and Economic Affairs within MAMVA.<sup>5</sup> ASAL-1 avoided sectoral reforms and investments that would have cost the government money or led to restructuring of monopoly market situations. Negotiation and implementation of sectoral reforms and investment were an order of magnitude more complicated and thus more politically sensitive. Thus, they were delayed until a more informed understanding of the workings of the sector was achieved.

The prices and incentives study underscored several contradictions in patterns of protection and comparative advantage. First, farmers in irrigated areas benefited to a far greater degree than dryland farmers from indirect protection via subsidies on inputs. Second, nominal protection rates contradicted Morocco's agricultural comparative advantage (in other words, uncompetitively produced crops were highly protected, while crops in which Morocco had strong comparative advantage were taxed). Third, consumer subsidies on soft wheat flour and vegetable oil resulted in a shift in domestic demand away from commodities in which Morocco had had a traditional comparative advantage (durum wheat, used in couscous and bread production, and olive oil) and in favor of imported goods. Finally, the study identified a range of policy constraints that impeded efficient subsector operation (government fixing of producer, consumer, and input prices; margins for marketing, processing, and trade; also government regulation of international trade). These findings set the stage for reform of the agricultural sector under ASAL-2.

## 2.2 AGRICULTURAL SECTOR ADJUSTMENT: FOCUS ON THE CEREALS SECTOR

ASAL-2 was enormously ambitious in scope and at times exceedingly difficult to carry out. A seven-month delay in negotiation (caused in part by procedural difficulties, but also in part by mounting donor concern about Morocco's macroeconomic instability) foreshadowed its protracted implementation. By the time ASAL-2 was negotiated in September 1987, several policy decisions had already been made with regard to the cereals sector. GOM agreed to faster liberalization of the agricultural import program, promised to reduce consumer subsidies more quickly than had originally been anticipated, and agreed to the creation of an inferior good in the cereals subsector to better target delivery of the soft wheat flour subsidy.<sup>6</sup>

Prolonged GOM/World Bank debate over implementation of ASAL-2, coupled with USAID's own internal reorganization, created sufficient doubt and uncertainty that USAID dramatically scaled back its intended support.<sup>7</sup> In addition, the bureaucratic wranglings took their toll on the project

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<sup>5</sup> A separate, long-term technical assistance project, Planning, Economics, and Statistics for Agriculture, also funded by USAID (1983-1993), assigned 4 expatriate advisors (2 economists and 2 statisticians), beginning in 1985, to DPAE for on-site training in economics and quantitative analysis, reform of sample survey and cost of production survey methodology, and modernization of MAMVA's computer capacity, among other things.

<sup>6</sup> The government agreed to increase the milling ratio for subsidized bread wheat flour from 77 percent (original *farine ordinaire*) to 80 percent. This higher proportion of wheat bran in the flour, it was believed, would create the effect of a "dirtier flour," and one which consequently would be less attractive to higher income consumers. Ironically, in developed countries "whole wheat flour," a higher extraction flour, is perhaps more highly prized by consumers of higher income.

<sup>7</sup> From 21 person-years of resident technical assistance (TA), for example, to 2, and from 197 person-months of short-term TA (expatriate and local) to 64.

implementation calendar.<sup>8</sup> Whereas the CMR project was originally envisioned to run concomitantly with ASAL-2, technical assistance under a newly signed CMR did not arrive in Rabat until mid-1991, by which time ASAL-2 had almost drawn to a close.<sup>9</sup> The World Bank proclaimed the adjustment process to be over,<sup>10</sup> and moved on to support the Ministry of Agriculture's investment budget.

It is important to understand the *dénouement* of ASAL-2 in the context of Moroccan cereals market reform and the CMR project. When CMR began, reform momentum was ebbing in all three organizations, GOM, the World Bank, and USAID. Also, internationally, long delays in progress of the Uruguay Round and its late resolution (December 1993) exacerbated the cereals reform inertia in Morocco. Had the Uruguay Round been resolved sooner, CMR would have been a useful mechanism for helping GOM adjust (or prepare to adjust) to post-Uruguay Round realities. For it is only in 1994, as the Uruguay Round takes effect, that the Government of Morocco is dealing seriously with the ramifications of reform of its cereals sector. Enthusiasm is renewed, and policy makers are actively seeking new mechanisms for implementing cereals market reform.

The Second Agricultural Sector Investment Loan (ASIL-2) picked up unfinished cereals sector reform as part of its objectives. ASIL-2 supports the formal deregulation of domestic marketing for cereals (soft wheat is notably still exempt from this), and the conversion to ad valorem tariffs on cereals by April 1, 1995. These tariffs are not to exceed 90 percent of the GATT binding for Morocco in 1996 and subsequent years. Also, they are to remain fixed throughout a marketing year, except in cases of international dumping, major exchange rate fluctuations, or substantial reductions in international prices. The only actual trade-related *condition* of ASIL-2 is the approval of the domestic market deregulation plan by the Council of Government by the starting date of the loan, expected in the fall of 1994.<sup>11</sup>

### 2.3 EXPLICIT AND IMPLICIT OBJECTIVES OF THE CEREALS SECTOR REFORM PROGRAM

MTASAP's objectives included restructuring of the public investment program; reform of pricing, marketing, and trade policies to promote economic efficiency and mobilize resources; strengthening of public sector services; improving land use productivity and natural resource management; and development of an institutional capacity for analysis, implementation, and monitoring of agricultural policy and resource use planning. These were to be achieved by reducing the degree of government intervention in the workings of the *filières*, or commodity-specific subsectors, with border policies

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<sup>8</sup> The request for proposal was issued on May 3, 1990. However, the contract was not actually awarded until early 1991.

<sup>9</sup> According to the Project Paper (p. 15): "This does not mean that the CMR project has missed the boat. Rather, the CMR project must look beyond ASAL II, with the goal of affecting policy decisions that will be taken during the 1989-93 period. Many of these policy decisions will address second generation problems and issues arising out of ASAL II."

<sup>10</sup> Widely quoted in the Moroccan press following a press conference in Casablanca with the Bank's regional director.

<sup>11</sup> World Bank, *Staff Appraisal Report, Kingdom of Morocco: Second Agricultural Sector Investment Loan (ASIL II)*, Report No. 12392-MA, May 27, 1994.

guaranteeing adequate protection at levels comparable with those enjoyed in the industrial sector and disengaging the government from direct interference in domestic market operations.

Many aspects of the cereals sector were thus targeted for reform under MTASAP. Some of these were covered in deregulation plans submitted to the World Bank and never carried out; some were never tackled at all. Evaluation of actual accomplishments under MTASAP suffers in ex-post analysis because of the discrepancy between the broad-sweeping actions (both tranche release conditions and medium-term, or "wish list," actions) listed in the policy reform matrix of ASAL-2's President's Report and the actual, narrowly defined conditions for tranche release as defined in the loan agreement, which is the legal document that binds both signatories to the loan.

Under MTASAP, the government's objectives in the cereals sector were to:<sup>12</sup>

- Improve incentives to the grain sector (harmonizing protection rates with those in other sectors) by ensuring floor producer prices close to world market price trends;<sup>13</sup>
- Introduce more dynamism in the grain marketing system and use external trade as the major regulation and stabilization instrument of the grain markets by eliminating the state's import monopoly and use of quotas, to be replaced by tariff barriers consistent with production incentives;
- Increase the efficiency of the grain marketing system to reduce unit costs between farm and consumer and encourage on-farm and intermediate storage by deregulating grain marketing and price formation mechanisms; and
- Improve the consistency between food and agricultural policies for grain, eliminating the negative impact of the consumer flour subsidy on production and reducing the budgetary costs of the dual pricing system. These reforms were to be implemented in phases: durum, barley, and maize would be deregulated first, while deregulation of the soft wheat sector would have to await the elimination of the consumer subsidy.<sup>14</sup> It was expected that the flour subsidy would be eliminated by 1990, according to the President's Report's list of medium-term actions to be taken.

A summary of those ASAL-2 conditionalities specific to the cereals subsector or to the targeted compensatory food program is presented in the table on the following page.<sup>15</sup>

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<sup>12</sup> See Annex V to the President's Report (PR) for ASAL-2, Report No. P-4437-MOR, October 30, 1987.

<sup>13</sup> Remember that the preoccupation at the time was to bring producer prices *up*, to correct for effective taxation of the cereals sector.

<sup>14</sup> The linkage between the flour subsidy and the targeted compensatory program (in 1987) and, later, the entire subsector reform has always been insisted on by the government. Until elimination of the former, nothing, it was argued, could be done on the latter.

<sup>15</sup> Effectiveness (in other words, release of 1st tranche), 2nd tranche, and 3rd tranche release conditions taken from Schedule 4 of the Loan Agreement between the Kingdom of Morocco and the World Bank, signed December 4, 1987.

The hallmarks of a liberalized cereals sector were defined then and are still taken to be:<sup>16</sup>

- 1) **Grain producers** allocate their resources to those activities that maximize their returns, sell their products freely to whomever offers them the best price, not at an official level of support but at a price that reflects international levels plus some measure of tariff protection;
- 2) **Domestic grain traders** (producers, traders, even millers) market and store cereals at quantities, for periods, and at costs that they, and not the cereals board, determine;
- 3) **Flour millers** source their grain independently and produce milled cereal products according to their own quantity and quality specifications, with millers and **bakers** selling their products without concern for government price fixing and "moderation accords";
- 4) **International grain traders** determine for themselves the quantities of grains and grain products to be imported, at FOB prices and from countries of origin of their own determination, and deliver them to Moroccan clients subject only to a transparent and automatic *ad valorem* tariff scheme, which affords a reasonable level of protection (in other words, not excessive vis-à-vis levels in other sectors of the economy);
- 5) Grain and grain product **consumers** can freely buy a wide range of product qualities at a reasonable price vis-à-vis international prices;

ASAL-2 CONDITIONALITIES		
Condition	Timing	Remarks
1. Increase flour milling margins to international norms (about 15 DH/quintal).	Prior to negotiations	
2. Finalize mechanism and timetable for the settlement of government arrears to the milling sector over 1987/88.	Prior to negotiations	Had held up compliance with release of ASAL-1 second tranche.
3. Finalize work program for the design of targeted compensatory programs.	Prior to negotiations	
4. Establish producer prices for cereals harvested in 1988 by reference to the international prices of such cereals.	1st tranche	
5. Authorize millers to produce subsidized soft wheat flour at an extraction rate of at least 80%.	1st tranche	
6. Establish production quotas for such flour in order to meet demand thereof by targeted populations.	1st tranche	
7. Prepare and furnish to the Bank a food subsidy targeting plan to ensure adequate nutrition to Morocco's poorest populations.	1st tranche	

<sup>16</sup> PRCC, *Rapport de synthèse, PRCC Phase I*, prepared for *Atelier de Réflexion*, 26-27 February, 1992.

ASAL-2 CONDITIONALITIES		
8. Establish producer prices for cereals harvested in 1989 by reference to the international prices of such cereals, as per point 4.	2nd tranche	
9. Prepare and furnish to the Bank an action plan to ensure the deregulation of the cereals subsector (from farm gate to flour mill of domestically produced cereals), including elimination of a) licensing requirements applicable to cereals marketing, b) regulatory controls on handling, transportation and storage commissions, and c) regulatory restrictions regarding the domestic sources from which millers may purchase cereals.	2nd tranche	In February 1989, all cereals markets liberalized except for soft wheat. Regarding soft wheat, persisting consumer subsidy on high extraction rate flour complicated further liberalization, argued GOM. In July 1989, increase in consumer price of subsidized soft wheat flour and establishment of national and mill-by-mill quotas for subsidized flour.
10. Authorize millers to produce, in addition to the flour referred to in point 5, flour at any extraction rate and eliminate all regulatory controls on the prices at which millers may sell flour other than the subsidized flour.	2nd tranche	Already accomplished by loan effectiveness.
11. Expansion of the assistance programs, referred to in point 7.	2nd tranche	
12. Establish producer prices for cereals harvested in 1990 by reference to the international prices of such cereals, as per point 4.	3rd tranche	
13. Deregulate marketing system for domestically-produced cereals, in accordance with the action plan referred to in point 9.	3rd tranche	Never accomplished; absorbed into ASIL-2.
14. Settlement of all financial arrears as of December 31, 1988 between GOM and soft wheat millers.	3rd tranche	
15. Continued expansion of the food safety net programs, referred to in point 7.	3rd tranche	Fulfilled as of June 1990. However, assistance programs ended with conclusion by donors (USAID, 9/90; WFP, 1992) of their specific contributions.

- 6) A **national cereals office** has as its primary function to deliver timely domestic and international market information to the Moroccan cereals *interprofession* (the professionals who work at the different levels of the subsector) and the population at large; and
- 7) **Government policy makers** send a clear message to the *interprofession* announcing the rules of the game and then disengage themselves from further rule manipulation.

Today, as a result of MTASAP, Morocco's Ministry of Agriculture and its Planning and Economic Affairs Directorate have become much more skillful in their defense of Moroccan producer interests, both within the government and vis-à-vis external partners. The MAMVA officials who have weathered these last nine years of adjustment discussions — and there are a good number who have been

present throughout the process<sup>17</sup> — have honed their abilities to win sometimes economic, sometimes political concessions from their opponents.

One example of this is the particularly active role Morocco has played in the Uruguay Round negotiations. Morocco, which only joined GATT in 1987, was the first developing country to volunteer to submit its trade policies for review under the GATT's Trade Policy Review Mechanism.<sup>18</sup> Both MAMVA and the Ministry of Foreign Trade have been particularly active in this arena. Such institutional strengthening is testimony, in part, to the emphasis put on economic training from the very beginning of MTASAP. This is not to say that MAMVA/DPAE's apprenticeship in economic analysis has been brought to conclusion. Many of the DPAE staff who were sent to the United States for formal training have just recently returned to Morocco, and are still being integrated into the administration. Recent reorganization of DPAE and recruitment of some new lieutenants with stronger economic skills should help top management more profitably harvest the still raw talents of its staff.

## 2.4 THE CMR PROJECT IN CONTEXT

Beyond the official charge from USAID (see Chapter One), the Secretary General of MAMVA and the Technical Committee as a whole strongly encouraged CMR from the beginning to promote the active participation of members of the cereals *interprofession* in the ongoing cereals sector reform dialogue. Agro-industrial players in the sugar and edible oils subsectors (both under the *tutelle* of the Ministry of Industry) were already used to such involvement. However, players in the cereals sector (millers, directors of storage cooperatives, international traders, and even ONICL itself) were unaccustomed at the start of CMR to the process of economic and financial analysis, followed by iterations of recommendations, reactions, and reforms. The project thus held numerous workshops and seminars to inform the cereals *interprofession* of its mandate and activities, and worked actively with its membership to develop viable reform recommendations and promote their dissemination to the broadest public.<sup>19</sup>

Terms of reference for the CMR project covered three substantive areas.<sup>20</sup> The project was to elaborate and expand on existing information to develop cereal market subsector analyses in order to provide a descriptive knowledge base for further work. This was completed by CMR during its first

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<sup>17</sup> Unlike the donors, which have seen several generations take up the reins of debate.

<sup>18</sup> See GATT, *Trade Policy Review: The Kingdom of Morocco 1989*, Geneva, 1990.

<sup>19</sup> For example, the first phase introductory workshop, *Atelier de Réflexion*, February 26-27, 1992; a workshop held to present a vision of ONICL's future role, *Actualité et Avenir Institutionnel: L'ONICL au service de la filière*, May 1993; a workshop held for millers, *La Minoterie en Concurrence*, June-July 1993; the drafting of a publication to announce the Foreign Trade Law's implications for the cereals sector, *Quoi de Neuf? La Réorganisation du Commerce Extérieur de Céréales et de Leurs Dérivés au Maroc*; as well as wide-ranging field and survey work done on mills, storage, international trade, and food security with consumers.

<sup>20</sup> USAID, *Request for Proposal*, May 3, 1990, pp. 16-19. The project was also expected to provide some long-term training overseas and in-country, as needed. Three individuals (two from ONICL and one from MAMVA/DPAE) were trained at the Master's degree level in the United States by the CMR project.

phase, completed at the end of 1991.<sup>21</sup> In addition, the project was to conduct analyses of the short- and long-run economic and social effects of the reform program. Impact variables specifically mentioned included cereal supplies, distribution, and consumption; market efficiency; government costs and revenue; employment; incomes; and nutritional standards of the population. Lastly, CMR was to work with its counterparts to develop a marketing strategy for cereals. These activities were carried out during the second phase of the project, which ran from 1992 to September 1994.

In its short tenure of just over three years, CMR had the good fortune to enjoy an extremely collaborative relationship with members of the Technical Committee and with the *interprofession* at large. The outputs of the project benefitted enormously from the vision of its MAMVA leadership, from the energies of DPAE and ONICL staff, and from the strong interest that producers, traders, millers, storage owners, and consumers of cereals and cereal products took in CMR during the course of its activities. The depth and breadth of CMR publications are just one testament to this effort.<sup>22</sup> The record of reform and revitalization of the cereals economy in Morocco is perhaps its more lasting achievement. And yet, at the conclusion of the CMR project, policy constraints to the automatic and transparent functioning of a liberalized cereals sector persist. The record to date on cereals market liberalization in Morocco, and CMR's role therein, is presented next.

## 2.5 OBSERVATIONS ON THE PROCESS OF CEREALS MARKET LIBERALIZATION: WHERE ARE WE NOW?

Cereals market reform in Morocco has brought numerous changes to Morocco's cereals subsector. Some of these move Morocco toward the goal of economic efficiency; others profess to do so but either remain unimplemented or actually further entangle the sector.

One of MTASAP's lessons, which is clear from the experience of many adjustment operations in Morocco and elsewhere, is that the process of reform is a long one, and one which cannot easily be scheduled to suit the confines of a three-year project.<sup>23</sup> Structural adjustment is a complex process: it is too politically sensitive to be rushed through, and yet in the process of involving various interest groups in the dialogue, economic issues become politicized and positions become entrenched. Thus, the political economy constraints encountered during CMR implementation (such as resistance to complete elimination of the consumer soft wheat flour subsidy, to full liberalization of international trade in cereals, and to elimination of a market-intervention role for a cereals marketing board) should have been predictable. In retrospect, therefore, a three-year relationship hardly affords a technical assistance team sufficient time to develop the understanding and coalitions required for fundamental reform.

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<sup>21</sup> See PRCC, *Rapport de synthèse*. Also, Abderrahim Houmy et al., *Tendances de la Production des Céréales au Maroc* (October 1991); Omar Aloui et al., *Commerce, Stockage et Transformations des Céréales: Rapport Principal* (January 1992); Lynn Salinger et al., *Commerce Extérieur, Rapport de la Première Phase* (March 1992); and Amal Britel et al., *Consommation des Céréales au Maroc* (October 1991).

<sup>22</sup> See Section 2 of References for a list of all CMR publications.

<sup>23</sup> As an example from the opposite end of the spectrum, phased liberalization of the fertilizer subsector in Bangladesh has been supported with a USAID-funded project since 1978 and is just now coming to a successful conclusion.

The government has already informally disengaged itself from all aspects of domestic producer price setting and marketing regulation for durum wheat, barley, and maize. Minimum support prices no longer exist because the government has no official policy supporting procurement of these grains (ONICL never managed to collect more than a minor percentage of these three).<sup>24</sup> Marketing, processing, and storage regulations no longer apply. Formal acknowledgement of these reforms in the form of approval by the Council of government of a deregulation plan, and subsequent submission to Parliament of a draft law for this deregulation (by the end of 1995) are part of ASIL-2. International trade in these three commodities is also supposed to have been liberalized; according to the ASAL-2 PR, the government was to have adopted "free external trade for maize, hard wheat and barley with tariff barriers set at levels which encourage production." However, international traders are still required to have government approval (ONICL and MARA) before importing (or presumably exporting, though that issue has not yet come up) these grains.<sup>25</sup>

In the early 1990s, when harvests were high, government authorization to import feed grains was denied, despite the fact that domestic prices were climbing precipitously, on the grounds that arbitrage agents were speculating on government policy and withholding stocks from the domestic market. Those stocks would have to be sought out first before imports would be authorized. Today, imports are either taxed or regulated to defend domestic prices well in excess of international prices (except in the case of drought, when feed barley is admitted duty-free). These border policies are still in a state of flux, however, as government experiments with policy definitions, introducing an additional element of risk into traders' planning horizons.

With regard to its most politically sensitive cereal, soft wheat, the government still intervenes actively in aspects of the subsector's operation. Technically, this is legally justified, given the acceptance of complete consumer subsidy elimination as a condition precedent to reform.<sup>26</sup> However, other persistent bottlenecks remain in the *filière*. Their ramifications are discussed in Chapter Three.

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<sup>24</sup> ONICL did procure barley this year in an effort to support domestic prices.

<sup>25</sup> With regard to this action, the Government's *Rapport d'exécution*, September 1990, states: "The system of quantitative restriction for durum, maize and barley has been eliminated, with nonetheless administrative intervention by ONICL" (p. 3, emphasis added). This is not exactly the same as elimination of all barriers, replaced only by tariff protection, as stated in the PR.

<sup>26</sup> The burden of consumer subsidies has been significantly reduced by eliminating luxury flour from the program. Production and marketing of luxury flour, as well as of luxury flour products, are supposedly now completely deregulated. However, "moderation accords" are still negotiated between the government and members of the milling and baking *interprofession* to establish ceiling prices for luxury flour and basic breads. Complete elimination of the consumer bread wheat flour subsidy has not been achieved. Ten million quintals of subsidized bread wheat flour are still produced annually by Morocco's bread wheat flour mills, regulated by quotas that are distributed according to regional need. This has justified the persistence of a range of government interventions in the bread wheat sector. The nature and extent of this subsidy is explored in Chapter Three, section 3.1.2.

## CHAPTER THREE

### KEY ISSUES IN CEREALS SUBSECTOR LIBERALIZATION

#### 3.1 PRICE, TRADE, AND MARKETING POLICY

##### 3.1.1 The Driving Force: Agricultural Trade Policy

One of the most critical unresolved issues at the end of the CMR project remains that of cereals trade policy. As a net importer of cereals, Morocco's domestic price for grains is determined by world prices.<sup>1</sup> Thus, whatever policy Morocco introduces at the border affects the prices at which the grains trade on the domestic market. The government has practiced a combination of fixed producer pricing, public procurement of domestically produced grains, public distribution of imported and domestically produced grain, and fairly restrictive trade policies to maintain a stable domestic price for cereals, both over time and over space, to producers and consumers alike.

As a result of agricultural sector reforms carried out between 1985 and 1992 under MTASAP, Morocco terminated public intervention in domestic durum, barley, and maize markets, and no longer sets procurement prices for these cereals. It has maintained a posture of public intervention, however, in the case of soft wheat, arguing that since the commodity is subject to public intervention on the consumer side, public supervision of domestic procurement is required.

Since the end of MTASAP, trade policies have been the primary mechanism by which domestic prices are set. Over the years, Morocco's trade policy for soft wheat has evolved from one of strict restriction to one of modified quantitative restriction. For maize imports, trade policy has evolved from strict quantitative restriction to a variable levy with authorization by ONICL. For durum and barley, quantitative restrictions have been replaced by variable fixed levies, again with ONICL authorization. Each of these is described in greater detail below.

##### 3.1.1.1 Evolution of Moroccan Cereals Trade Policy

In 1988, Morocco conformed to the letter of the ASAL-2 conditions by establishing a formula for the definition of the domestic procurement price for soft wheat, other grains, and oilseeds. However, it was agreed that implementation of the reference price formula would be subject to a *safeguard clause*. This clause states that, pending stabilization of international grain markets, Morocco is not obliged to

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<sup>1</sup> Morocco imports 55 percent of its bread wheat and 33 percent of its maize needs, on average (1983 to 1993). Durum and barley are not usually traded. However, their substitutability with the other two cereals for human and animal consumption makes their prices linked, albeit indirectly, to international market prices as well.

decrease in real terms its domestic producer price for cereals or oilseeds.<sup>2</sup> In other words, if the theoretical official price<sup>3</sup> is less than the 1986 domestic price (adjusted for inflation and a "domestic preference premium"<sup>4</sup>), then the latter, not the five-year moving average of the international price, will be the operative reference price ceiling. This formalized a considerable reversal in government producer pricing policy and, in retrospect, created significant new distortions in the agricultural pricing policy framework, at least when considering short- to medium-run international commodity prices.

Moroccan policy makers have not exploited the safeguard clause fully. The domestic price has not consistently maintained its real 1986 value. *Nominal* prices, however, have never fallen. By virtue of this safeguard clause, Morocco has gone from being a net taxpayer to a net protector of cereals, relative to actual world prices. These have been falling as a result of an ongoing trade war between the United States and the European Community, a war that GATT's Uruguay Round does little to resolve.

The formulas for non-soft wheat grains and oilseeds were never more than indicative. The government subsequently introduced measures other than the agreed-upon moving reference price formulas to regulate border prices for durum, barley, and maize. When the government liberalized the domestic marketing regime for durum, barley, and maize, it ceased fixing producer prices, and therefore argued that it was no longer obliged to adhere to the formulas. ASAL-2's moving reference price formula was also never applied to oilseeds; a new formula was negotiated under the Bank's second structural adjustment loan (SAL-2).

For maize, an entry price of 188 Dh per quintal is set by government and achieved by levying the difference between the actual CIF price and 188. For durum and barley, reference prices, and thus fixed levy amounts, are established on a periodic basis. In both cases, ONICL must still give final approval (*ajudication*) to importers' requests to import. The end goal of both mechanisms is to maintain constant nominal, if not real, domestic prices for these grains, which is the stated objective of the safeguard clause. However, neither mechanism was admitted under ASAL-2.<sup>5</sup>

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<sup>2</sup> An important result of the economics training received by DPAE under the U.S. Department of Agriculture's Planning, Statistics, and Economics Project (funded by USAID) was an appreciation for the depth of price distortions in international markets. In 1987, the Kingdom of Morocco joined the GATT and became an active participant in the developing countries group at the Uruguay Round negotiations. At that time, it was agreed that the World Bank would respect the multilaterally negotiated GATT outcomes on agricultural tariff reform as binding for Morocco. If the Uruguay Round was able to negotiate reductions in levels of support to U.S. and European grain producers/exporters, then Morocco would be bound by that agreement. If, on the other hand, GATT did not succeed in reducing distortions, then Morocco would not be forced to unilaterally lower its rates of protection.

<sup>3</sup> For example, in the case of bread wheat, the reference price is equal to a five-year moving average of the (nominal) FOB price, U.S. Gulf, of hard red winter wheat #2 plus freight to Casablanca, converted into Dirhams at the official exchange rate at the time of the calculation. To this price, a 25 percent protection factor is added as well as the costs of moving the wheat from port to the mill, and from this the official storage margin is subtracted. This results in a "theoretical official price" (Moroccan parlance). The difference between the actual CIF price and the domestic price thereby calculated is then levied at the border.

<sup>4</sup> The consumer price index is used for adjustment. The domestic preference premium is an additional protection factor of 10 percent.

<sup>5</sup> A customs duty (*droits de douane*) and a stamp tax (*prélèvement fiscal à l'importation*, or PFI) are applied to the CIF price of an imported cereal. The difference between this grossed-up value and the target domestic price are then charged in a separate levy.

In challenging conventional wisdom regarding international reference prices with its safeguard clause, Morocco has, in effect, pointed out the irony of pretending as if "an" international price exists for a commodity. When exporting countries compete among each other for shares of strategic foreign markets, offering discounts of \$40-\$60 per ton against an average quoted FOB Gulf price for soft wheat of \$120-150 per ton, this undermines the direct application of an international reference price.<sup>6</sup>

What is the relationship between the FOB price as quoted by USDA and the actual FOB price at which other countries buy their grain?<sup>7</sup> How distorted are FOB prices — which have fallen by 4.9 percent per year over the last 15 years in real terms largely because of competitive export subsidies — compared with actual costs of production in the most productive economies? Morocco has argued successfully that until satisfactory answers to these questions are found, it reserves the right to have the public sector monitor cereals trade in the public interest.

Whatever the outcome of the cereals protection debate in Morocco, and it still continues, Moroccan policy makers clearly *do* now refer to the evolution of international prices as they define domestic producer prices. And like policy makers in many other parts of the world, they have instituted sometimes hefty rates of protection for the benefit of domestic producers in defense against what they perceive to be abnormally low international prices caused by subsidy policies in exporting countries and excessively variable prices on international markets. Policy makers in Morocco are aware of the short-

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<sup>6</sup> Morocco's domestic market has been hotly contested by U.S. and French wheat exporters since the mid-1980s. As a result, the USDA has offered the following export enhancement prices or bonuses to U.S. exporters selling wheat to Morocco over the last few years. World prices are for hard red winter #2, ordinary protein, FOB U.S. Gulf (USDA):

	EEP* Bonus \$/ton	Quantity under EEP '000 tons	EEP as % of Moroccan Imports**	World Price \$/ton
1985	20.57	300	83	138
1986	35.37	1090	85	115
1987	38.25	1730	73	114
1988	26.30	1050	34	146
1989	8.92	340	25	171
1990	39.30	498	17	137
1991	51.87	160	60	129
1992	40.62	1069	47	152
1993	41.01	1379	NA	141
1994	61.27	40	NA	146

(through July 11, 1994)

Source: U.S. Department of Agriculture, Foreign Agricultural Service bulletins

\* Export Enhancement Program

\*\* The remainder of Moroccan wheat imports are either food aid or subsidized exports from France. Virtually no wheat is imported into Morocco on a strictly commercial basis. The United States lost significant market share to France in 1989 (because of credit difficulties), from which it is just now recovering.

<sup>7</sup> To date, 35 countries plus Sub-Saharan Africa have received EEP bonuses from the United States. Of the 143 million metric tons sold under EEP since 1985, the three largest recipients have been the former Soviet Union (24.9 percent), China (18.7 percent), and Egypt (12.2 percent). Morocco has received 5.4 percent of total EEP allocations since 1985.

run economic opportunity costs of maintaining higher domestic prices, but cite concerns about longer-run implications for rural-urban migration and domestic political stability if domestic agricultural prices become unstable or agricultural incentives are allowed to deteriorate. They also have argued that until the Uruguay Round was over, it was premature to reform Morocco's own agricultural trade policies. Policy makers are also aware that the necessity of minimizing the governmental budget impact of such protectionism means higher consumer prices for basic foodstuffs.<sup>8</sup> Clearly, GOM values stability over economic efficiency, and who can blame it? Plenty of other governments have fallen because they upset the economic status quos in their countries.

### 3.1.1.2 Living with GATT

Morocco's intentions for its cereals tariffication strategy have evolved over time. For example, the agricultural import liberalization plan crystallized under ASAL-2 and SAL-2 called for the use of a variable levy to tax strategic agricultural commodities (cereals, sugar, edible oils, milk, meat, and their derivatives). Yet Moroccan trade laws did not permit the use of such a tool. (Nonetheless, Morocco de facto had been applying a variable levy for some time.) A Law on External Trade was enacted in 1992. Since then, serious drought in Morocco and protracted Uruguay Round haggling in the international arena afforded the Moroccan government ample excuse for not going ahead with implementation of trade reform for certain key commodities, including cereals.

Today, in September 1994, GATT's Uruguay Round is over, its Final Act having been signed in Marrakech in April 1994. Morocco is now bound by this agreement to begin the process of reducing levels of protection of its agricultural commodities.

The first stage in this exercise is for Morocco to convert its border policies into ad valorem tariff equivalents. To this end, Morocco has submitted to the GATT a schedule of protection ceilings.<sup>9</sup> Table 3.1 presents these protection "bindings" (declarations of numbers to which the country is legally committed) for cereals. This schedule of protection ceilings does not, however, indicate what the actual tariffs in Morocco are to be, nor how they will be reduced over time. Actual tariffs must be announced as of January 1, 1995.

According to the Final Act, developing countries have 10 years in which to reduce their average levels of protection by 24 percent. This refers to a 24 percent decrease from the Uruguay Round bindings, not from the actual levels. The fixing of these protection ceilings does not oblige Morocco to impose them. Instead, it gives policy makers continued room for manoeuvre to develop a new border protection mechanism that will satisfy their need for stable domestic prices.

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<sup>8</sup> For a presentation of single market welfare analyses of these policies, see B. Lynn Salinger and Jeffrey C. Metzler, *L'évolution de la politique commerciale agricole au Maroc: Examen de l'impact des prix de référence*, Cambridge, MA: Associates for International Resources and Development, February 1993.

<sup>9</sup> These rates include the PFI for "strategic commodities" (cereals, sugar, oilseeds, meat, and milk).

TABLE 3.1  
 PROTECTION CEILINGS SUBMITTED TO GATT FOR CEREALS  
 IMPORTS INTO MOROCCO (PERCENTAGES)

	Protection Ceiling	Protection Target in 2005
Soft wheat	190.0	144.0
Durum	NA	NA
Barley	148.5	112.9
Maize	160.5	122.0
Rice	233.5	177.5
Sorghum	217.0	164.9
Millet	60.0	45.6

Source: MAMVA/DPAE

In assurances obtained during ASIL-2 negotiations, the government agreed to introduce ad valorem tariffs for cereals by April 1, 1995 (or after the GATT deadline).<sup>10</sup> These tariffs are not to exceed Morocco's GATT bindings in 1995, and are not to exceed 90 percent of the GATT bindings in 1996 and subsequent years. In addition, ASIL-2 specifies that tariffs are to remain at fixed levels during any given marketing year.<sup>11</sup> Exceptions are admitted to this last clause in three specific cases: dumping, excessive exchange rate fluctuations, or substantial reductions in world prices. Neither "dumping" nor "excessive" nor "substantial" has been defined.

The proposed protection ceilings contain some inconsistencies. For instance, the submission made to GATT binds Morocco to a lower rate of protection (60 percent) for blended feeds than for individual feed ingredients.<sup>12</sup> This could encourage importation of blended feeds instead of feed ingredients (which are already priced significantly above international parity). Although poultry and ruminant producers may be satisfied, this protection bias may reduce demand for domestic feed ingredients and domestically mixed feeds, thereby hurting domestic barley and maize production as well as the domestic feed mill industry. Moreover, the quality of imported feeds is preferable to that of domestic feeds, which have a higher fibre content, further exacerbating the preference in favor of imported feeds. Millet and sorghum are also in at separate rates, although they are fairly substitutable.

Thus, Moroccan trade policy with regard to cereals is currently in flux. The government is preoccupied with maintaining a stable domestic price and therefore seeks a mechanism that will at least

<sup>10</sup> Assurances obtained at negotiation are entered into the loan agreement with the World Bank and have some legal binding, but are not as binding as an actual condition of the loan.

<sup>11</sup> ASIL-2 refers to "tariffs," or *droits de douane*. It contains no language precluding changes in levels of the other trade taxes that constitute other components of overall trade protection in Morocco.

<sup>12</sup> Wallace E. Tyner, et al., "Analysis of the Impacts of Reducing Maize Protection Levels on the Moroccan Poultry Sector," report prepared for the Livestock Direction of the Moroccan Ministry of Agriculture, under contract to the U.S. Feed Grains Council (Cambridge, MA: Associates for International Resources and Development, August 1994).

minimize the transmission of international price variability. An ad valorem tariff, especially at Moroccan levels, merely serves to amplify the variability of international prices, converted into domestic prices.<sup>13</sup> Currently under consideration is a marginal tariff scheme that combines base and marginal ad valorem tariffs at different international price levels. The higher the international price, the lower the tariff rates — a mechanism that helps to limit the transmission of international price variability. It presents several advantages. First, it is ad valorem in nature and thus satisfies the requirements of both GATT and ASIL-2. Second, it minimizes both the transmission of international price variability and the incentives that distort importer behavior at the frontiers. It remains to be seen whether these latest efforts will result in a transparent, automatic mechanism that will encourage efficient importing or whether this will merely continue the tradition of arbitrary intervention in cereals protection levels.

### 3.1.1.3 CMR Work on Trade

CMR was involved in several activities in support of Moroccan cereals trade policy reform. These have included an issues survey conducted by CMR's trade team during the first phase of the project,<sup>14</sup> rapid tariff options simulations,<sup>15</sup> development of a series of price and trade policy research tools to help policy makers simulate the effects of alternative trade policy scenarios,<sup>16</sup> and preparation on behalf of MAMVA of a draft trade manual (*Guide d'Opérateurs*) to publicize cereals trade policy reforms for all interested individuals.<sup>17</sup>

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<sup>13</sup> To achieve a stable domestic price, Morocco had considered many variations on variable levy themes earlier. One early proposal was to adopt a variation on a price band scheme; similar schemes characterize many Latin American country trade policies. In a price band scheme, a given ad valorem tariff is applied to CIF prices within a certain range; below the band, a variable levy applies to bring the CIF to some floor price, and, above the band, the government may or may not subsidize the CIF cost to protect a ceiling price. One objection to price bands is that behavior is distorted at the borders, or at the band's cut-off points. Another proposal considered was to establish an ad valorem rate for each cereal, but to revise it sufficiently frequently such that it would operate essentially like a variable levy. This is now precluded by ASIL-2.

<sup>14</sup> B. Lynn Salinger et al., Groupe C: Commerce Extérieur, *Rapport de la Première Phase*, CMR Report No. 6, April 1992.

<sup>15</sup> B. Lynn Salinger and Wallace E. Tyner, "La Loi sur le Commerce Extérieur et ses mesures d'applications: Options de tarification des céréales," CMR Working Paper No. 15, June 1993. Also, more recent work carried out by Tyner and Abbott in January and June 1994.

<sup>16</sup> Individual studies include Philip Abbott, "Harmonization of Domestic Agricultural and Trade Policies in LDCs: The Liberalization Dilemma in Morocco," Purdue Agricultural Economics Staff Paper #93-8, July 1993; Mammas Salim, "Effet du Tarif Fixe et de Celui Variable sur la Variabilité de Prix Entre les Régions," Purdue Agricultural Economics Working Paper, December 1993; Channing Arndt, "Analysis of Spatial and Temporal Wheat Price Variation in Morocco," CMR Working Paper No. 14, January 1994; Hamid Imrani, "Cereals Adjustment Policy Alternatives and Food Security in Morocco," Master's thesis, Purdue University, May 1994. These are summarized in Wallace E. Tyner, *Studies on Wheat Trade Liberalization and Domestic Policy Reform in Morocco*, CMR Report No. 19, January 1994. Details regarding the structure and function of the computer simulation model are presented in Philip Abbott, "A Cereals Trade Policy Model for Morocco: Marocmod User's Guide," CMR Working Paper No. 18, June 1994 (draft).

<sup>17</sup> MARA/DPAE and ONICL, "Quoi de Neuf? La Réorganisation du Commerce Extérieur de Céréales et de Leurs Dérivés au Maroc," Draft manual prepared by CMR, December 1993.

Exploratory research was also undertaken on:

- Potential effects of liberalization on cereals price levels;
- Cereals price variability over time and space;
- Cereals production, consumption, and storage;
- Government revenue; and
- Relationship among demand for foreign exchange of alternative trade policy measures (variable levy, ad valorem tariff, and quota), rates of protection, and elimination of the 10 million quintal FNBT subsidy.

This research was done in Morocco and at Purdue University in concert with staff of DPAE, some of whom were students at Purdue during the project (see footnotes 15 and 16).

The researchers built several computer-based models to examine different angles of the trade policy issue, including simulations of alternative reference prices and specific levies, updated at alternative time intervals; spreadsheet simulation models of the Moroccan grain economy at national and regional levels, in static, dynamic, and stochastic versions; and a mathematical programming model, accommodating 12 regions, 4 ports, and 12 two-month time periods.

Under the rapid tariff options simulations conducted in Rabat in June 1993, CMR examined alternative combinations of reference prices and update periods for their effect on domestic price stability. A method of border protection was explored, whereby a domestic reference price was to be defined annually and a theoretical import price estimated (daily, monthly, or quarterly), the difference being a fixed levy amount (in Dh/ql) to be applied to the CIF price of imports. Simulating different definitions of the theoretical import price and different periodicities for its update, CMR demonstrated to policy makers that domestic price stability is most assured by the most frequent revisions of the levy.

Both sets of analyses conducted at Purdue over the duration of the project show that price and consumption variability are not entirely eliminated with a variable levy protection system. However, a variable levy maintains domestic price stability more effectively than other forms of protection. The simulation model yields predictable conclusions regarding welfare losses for producers and consumers under alternative scenarios. The programming model supports the setting of one reference price throughout a marketing year, rather than allowing it to rise to accommodate increased storage costs over time. It also highlights the fact that for years in which a particular grain is not traded, the variable levy approach accentuates domestic price instability because excess supply cannot be mopped up via exports, and prices plummet. Price variability among regions turns out to be rather small, while interannual variations can be significant. Port capacity constraints also turn out to be significant.

Policy makers have used these insights to narrow in on an acceptable proposal for cereals trade policy reform. The proposed regime must be both GATT-consistent (and thus acceptable under ASIL-2) as well as least-destabilizing for domestic prices. DPAE staff have now become fully functional with these models, and have already pursued their adaptation to other trade topics of interest in Morocco, such as projecting the effect of future world wheat price patterns post-GATT on Morocco's market, applying the trade model to an export commodity (prototype being developed for tomatoes), and applying the model to a commodity with multiple processed derivatives and consumers (prototype being developed for oilseeds, oils, and oilseed cakes).

Although most of CMR's trade-related effort was oriented toward applied research, in several instances direct contact was made with cereals importers associations to solicit their opinions on evolving policy positions. The summary work carried out under the first phase of the project was the first time grain traders had ever gotten involved in sector reform discussions; up to that time they had been treated as appendages of ONICL and never taken seriously as independent economic agents. Yet, though they were brought into the discussions at least peripherally, they never benefitted from the same kind of industrial and institutional analysis that the flour millers received. Before responsibility for assuring the supply of something as sensitive as wheat is left to "the private sector," the government should understand more about who makes up that private sector and how the sector behaves.

A final contribution made by CMR in the trade area was the drafting a cereals importers' manual. Once the parameters of its new cereals trade policy are decided, GOM intends to publish a *Guide d'Opérateurs* to inform all interested persons in the new cereals trade orientation. This manual will allow for transparent and automatic implementation of the new rules, and is intended to interest as many individuals as possible in gearing up for this activity. The manual is expected to be published in advance of the trade policy's implementation, and should be accompanied by publicity and training workshops to acquaint international and domestic traders, storage agents, bankers, shippers, and port officials with government positions.

### 3.1.2 Domestic Consequences of Current Price Policy

#### 3.1.2.1 Evolution of Moroccan Cereals Protection

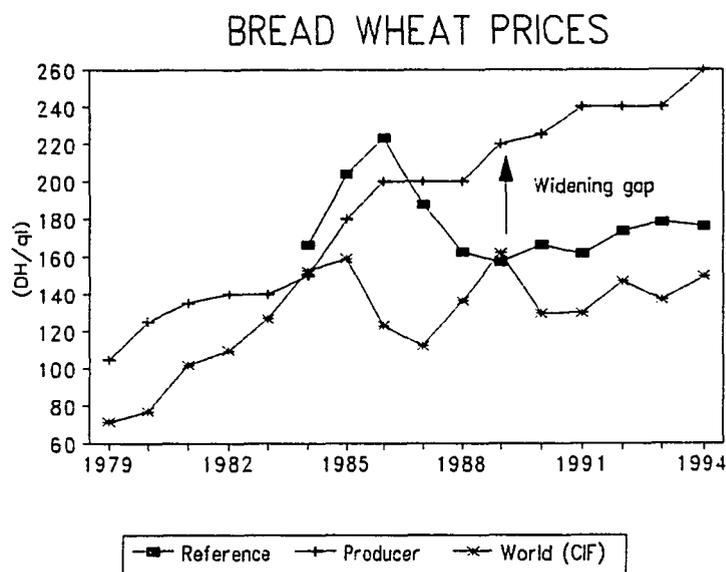
Protection of cereals commodities has increased, according to the government's own prices and incentives studies that monitor these trends.<sup>18</sup> During the ASAL-2 period, nominal protection coefficients for cereals (the ratio between domestic and international prices, brought to the same point of comparison, such as the mill gate) averaged about 0.9 in 1984, 1.00 in 1988, and 1.10 in 1989. In 1989, the domestic soft wheat price was 200 DH per quintal and the international price used in the analysis was \$170 per ton (FOB U.S. Gulf). Today, the relative domestic and international prices for soft wheat are 260 DH per quintal (producer price) and about \$146 per ton (hard red winter wheat n° 2, ordinary protein, FOB U.S. Gulf). The latter is the relevant international reference price, or the price measured *before* exports are subsidized. These latest prices clearly imply that the rate of nominal protection is significantly higher today (70 percent higher) than it was in 1988.

The Moroccan price paid to soft wheat producers exceeds the reference price that would obtain using the agreed-upon moving average reference price formula, because the safeguard clause was invoked (Figure 1).

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<sup>18</sup> See MARA/AIRD/Agro Concept, *Étude de la politique de prix et d'incitations dans le secteur agricole, phase II, Rapport Principal*, January 1990, for protection coefficients based on 1988 prices, with reference to the original estimates, which were based on 1984 prices. See MARA/DPAE, Service des Études Économiques Marchés et Prix, Bureau d'Analyse des Politiques Agricoles, *Étude de la politique de prix et d'incitations dans le secteur agricole, phase III, Céréales*, June 1990, for coefficients based on 1989 prices.

FIGURE 1



Other domestic prices are similarly high (Table 3.2). Durum wheat prices are more than 300 Dh/ql, while the international price since June 1993 has averaged \$210 per ton (hard amber durum #1, Minneapolis) or 200 Dh/ql CIF Morocco. Maize, with a reference price of 188 Dh/ql, sells for more than 200 Dh/ql, compared with an international price (landed in Morocco) of about 115 Dh/ql (Tyner et al., 1994). Only domestic barley prices, currently about 125 Dh/ql, are close to their international parity (based on an international price of \$94 per ton [#2 feed barley, Duluth] or 101 Dh/ql).

With the exception of barley, therefore, all cereals protection levels — comparing domestic prices with pre-export subsidized international prices — are significantly above the target 25 percent protection levels set by the government during structural adjustment discussions with donors. Policy makers should continue to monitor protection level trends, in an absolute sense, relative to other agricultural prices and relative to average levels of protection in the industrial sector. This is important to guard against intersectoral protection biases and excessive protection that may act as a disincentive to exports.

In addition to customs duties and the stamp tax, Morocco also applies a value-added tax (VAT) to the grossed-up CIF price [  $CIF \times 1 + (\text{ad valorem duty} + \text{PFI})$  ] of certain goods — on, for example, imported maize but not domestic maize — which further increases the level of protection afforded to domestic maize producers. The VAT is also applied on domestically blended feeds but not on many domestically produced feed ingredients, which encourages small, artisanal feed mills to spring up to avoid the 7 percent tax on industrial feed mill output. Such biases should also be eliminated.

TABLE 3.2  
COMPARATIVE DOMESTIC AND INTERNATIONAL PRICES FOR CEREALS

	Bread Wheat	Durum	Barley	Maize
Domestic price (Dh/ql)	260	> 300	125	188
Domestic margins (Dh/ql)	6	6	6	6
Domestic price, mill/market (Dh/ql)	266	306	131	194
International price (\$/ton FOB)	146	210	94	115
International price (Dh/ql CIF)	141	200	101	115
Import margins	15	15	15	15
Parity price (Dh/ql, CIF)	156	215	116	130
Nominal protection coefficient (Domestic price/Parity price)	1.71	1.42	1.13	1.49
Rate of nominal protection	71%	42%	13%	49%

Consumers are told that some portion of their soft wheat flour is bought at "subsidized" prices. In fact, 10 million quintals of ordinary flour (FNBT) are officially sold at 200 Dh/ql. This price represents a financial transfer, compensating for the high cost of producing flour with domestically grown wheat. With soft wheat priced domestically at the safeguard clause price of 260 Dh/ql, this yields a cost price of FNBT of 346 Dh/ql (see Table 3.3). At official prices, the subsidy amounts to 146 Dh/ql. However, on the free market in Morocco, consumers do not pay 200 Dh/ql for their FNBT, but rather pay prices ranging from 240 to 280 Dh/ql, depending on local supply and demand conditions, given rent-seeking margins between the mill and the consumer.<sup>19</sup> This reduces the unit subsidy to consumers.

From an economic point of view, the official FNBT price at best approximates today's cost-price of milling imported hard red winter wheat (in the absence of export subsidies). At an international FOB price of \$146 per ton and an exchange rate of 8.5 Dh/\$, the CIF price per ton is 1411 Dh. Adding 165 Dh per ton for milling (the official margin paid by ONICL) and dividing by 80 percent (the FNBT reduction ratio) results in a cost-price of 197 Dh/ql, which is approximately equal to the official FNBT price. Alternatively, the financial cost to Morocco of imported wheat is not \$146 per ton but \$85 per ton given the current EEP bonus available to Morocco. At this much-reduced FOB price, the cost-price of FNBT estimated according to the above-cited formula is 132 Dh/ql. Morocco's policy is to fully protect Moroccan producers against competitive export subsidies by the United States, France, and others. In so doing, however, it is the government, and not the Moroccan consumer, which benefits from the likes of the U.S. Export Enhancement Program and other export subsidies.

<sup>19</sup> Source is CMR observations in the field.

TABLE 3.3  
MOROCCAN FNBT "SUBSIDY"

	<u>Financial Analysis</u>		<u>Economic Analysis</u>	
	Cost of Domestic Wheat		Cost of Imported Wheat (at FOB)	Cost of Imported Wheat (at FOB minus EEP)
FOB + freight (\$/ton wheat)			(146 + 20)	((146-60) + 20)
* Exchange rate (Dh/\$)			8.5	8.5
= Parity at mill gate (Dh/ton wheat)	2600		1411	901
+ Milling cost (Dh/ton wheat)	165		165	165
= Cost-price, flour (Dh/ton wheat)	2765		1576	1066
/ Reduction ratio (% flour/wheat)	80%		80%	80%
= Cost-price, flour (Dh/ton flour)	3456		1970	1333
Compared with official FNBT price	2000		2000	2000
Result:	1456			667
	subsidy		wash	tax
Compared with parallel FNBT price	2600		2600	2600
Result:	856		630	1267
	subsidy		tax	tax

### 3.1.2.2 Evolution of Moroccan Trade Intervention

Separate from the issue of the level of cereals protection via import duties and other forms of taxation is the equally important issue of government intervention in the importing process. According to Abbott, because there is no explicit cereal import quota at present and existing cereal import tariffs cannot explain these price differentials, "(q)uantitative cereals market regulation by ONICL must therefore operate as border protection to explain these observed price wedges."<sup>20</sup> Indeed, GOM continues to be involved in cereals trade, approving every request for cereals imports and actually determining for itself the amount of soft wheat to be imported.

Thus, cereals trade liberalization involves a good bit more than simply revising formulas for tariff definitions and bringing down rates of nominal protection. If liberalization is really on the policy agenda, it will require a change in government mentality, which currently holds that the market cannot be relied on to import grain in quantities sufficient to maintain market stability. The challenge to be met for liberalization of the trade mechanism to occur is to begin the process of weaning GOM from its role of cereals trade overseer, and allow private importers to take over increasingly broader trade functions.

<sup>20</sup> Philip Abbott, "A Cereals Trade Policy Model for Morocco: Marocmod User's Guide," CMR Working Paper No. 18, June 1994 (draft), pp. 20-21.

### 3.1.2.3 Benefits and Costs to High Grain Price Policy

Whether ONICL or private importers are allowed to determine import volumes, the Government is still the final arbiter of cereals price levels. Presently, GOM seems committed to maintaining high nominal, if not real, price levels for soft wheat, maize, durum, and barley.<sup>21</sup>

The most immediate *benefit* in the case of high cereals prices is clearly to the *cereals producer*. This is particularly true of the large, surplus farmers who can sell their grain at collection points (ONICL *centres de collecte* or, as of recently, directly to flour mills or their agents), for which they are paid the official price. Smaller producers, too, probably get a higher price for their marketings than they otherwise would, although their farm gate price is probably below the official price. *Consumers* benefit only to the extent that they value price stability. Another clear winner is the *government*, which amasses important *revenue* by taxing the difference between the domestic and international prices. In the case of trade revenue generated on a commodity subject to the safeguard clause, these accrue directly to the Ministry of Agriculture's Agricultural Development Fund (FDA).<sup>22</sup> FDA provides capital grants to stimulate selected private investments, under supervision from the national agricultural credit bank. The government also benefits from increased *political capital*, which it generates by claiming to subsidize wheat flour to domestic consumers. The subsidy is also a successful tactic for delaying domestic soft wheat market deregulation. To some extent, *private importers* are also spared the risk of having to plan imports themselves, and so they can be said to benefit from the status quo. Finally, *Moroccan society* is said to benefit from less rural-to-urban migration than would supposedly occur in the absence of positive cereals producer incentives and also reduced dependence on supposedly insecure international markets for a basic consumer good.

On the other hand, there are always *costs* to such interventions, and the Moroccan cereals case is no exception. The most obvious cost is to *consumers*, of whom there are three important categories. Urban consumers pay more for their grain and grain derivatives (flour, couscous, and so on) than they otherwise would, even those buying FNBT. Many rural producers are actually net consumers of grain, and they, too, bear the burden of the higher domestic price. Indirect consumers of grain as a feed component in livestock production also are penalized by high cereals prices, especially for maize (Tyner et al., 1994). This in turn results in higher poultry and red meat prices, which reduces protein consumption, particularly among the poorest consumers.

Other indirect costs may include environmental costs and foregone export revenues. To the extent that high wheat prices have encouraged farmers to expand production onto marginal lands (southern drylands, traditional rangelands), to shorten crop rotations, or to reduce fallows, the heavy incentive in favor of wheat production may have detrimental effects on *Morocco's environment*.<sup>23</sup> Accurate estimates

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<sup>21</sup> In the case of the latter two, this may be hard to sustain in years of exceedingly large harvests, unless the government is willing to absorb high storage or export subsidy costs.

<sup>22</sup> Created in 1986 under ASAL-1, the FDA is funded by the Ministry of Agriculture budget, the special trade-specific treasury account, and foreign donors. The trade-specific treasury account will be eliminated as a source of FDA funding in 1995 upon elimination of the safeguard clause.

<sup>23</sup> In Abderrahim Houmy et al., *Tendances de la Production des Céréales: Rapport Principal*, CMR-4, Rabat, October 1992, the rapid expansion of bread wheat area overall and in the *zone défavorable orientale* are highlighted, pp. 11-16.

of the environmental cost would require greater study by a multidisciplinary team of social and physical scientists.

Also, to the extent that farmers allocate greater resources to wheat, a relatively low value commodity, than they otherwise would to higher-value commodities, Morocco may be incurring an implicit economic loss. This might be measured both in *domestic resource cost* (DRC or loss of foreign exchange saving or earning potential), and *employment loss*, to the extent that higher-value commodities tend to be more labor-intensive in their cultivation. The DRC methodology already used by several ministries in Morocco, including Agriculture, to evaluate protection rates and comparative advantage indicators should be updated and analyzed by agro-ecological zone to better quantify these parameters.

#### 3.1.2.4 A MAMVA Policy Dilemma: Tradeoffs between Protection of Maize Production and Stimulation of the Growth of the Poultry Industry

The case of maize production and protection in Morocco illustrates the complex tradeoffs among beneficiaries that can result from policy options. Maize is an interesting case, for the primary product in question is not the focus of direct, but rather indirect, human consumption. This changes the political dynamics of the protection issue. Whereas equity issues regarding the high cost of wheat consumption are claimed to be outside the purview of the Ministry of Agriculture, the high cost of maize consumption affects directly an important constituency within the Ministry of Agriculture, namely livestock producers.

As with the other cereals, the level of maize protection was relatively modest (7 percent, 1984-1986) prior to the introduction of a reference price system of protection in 1987. At the same time that the safeguard clause of the reference price system de facto prevented any *nominal* drop in domestic cereals prices, international grain prices were falling. Figure 2 indicates domestic and international maize price trends.<sup>24</sup>

During the period 1984 to 1986, domestic reference prices tracked international prices (CIF) reasonably well and the average nominal protection level was 23 percent. In 1987, with the institution of a domestic reference price of 187 Dh/ql, based on observations at the time of wholesale maize prices in Casablanca, the nominal protection rate shot up to 147 percent.<sup>25</sup> Since then, international prices have risen somewhat while domestic reference prices have been held fixed, bringing the average rate of nominal protection from 1988 to 1994 (through April) to 79 percent (54 percent thus far in 1994).

According to a recent study conducted for the Livestock Directorate of MAMVA under funding received from the U.S. Feed Grains Council, the effects of this near doubling of the maize price, relative to international parity, are several. The growth rates of both white meat (poultry) and egg production have dropped significantly since 1987. Real prices of both poultry and eggs reversed their downward trend from that date on (Figure 3). Because they both normally constitute inexpensive sources of protein relative to red meat, the high protection of maize has had an adverse impact on Moroccan consumers as

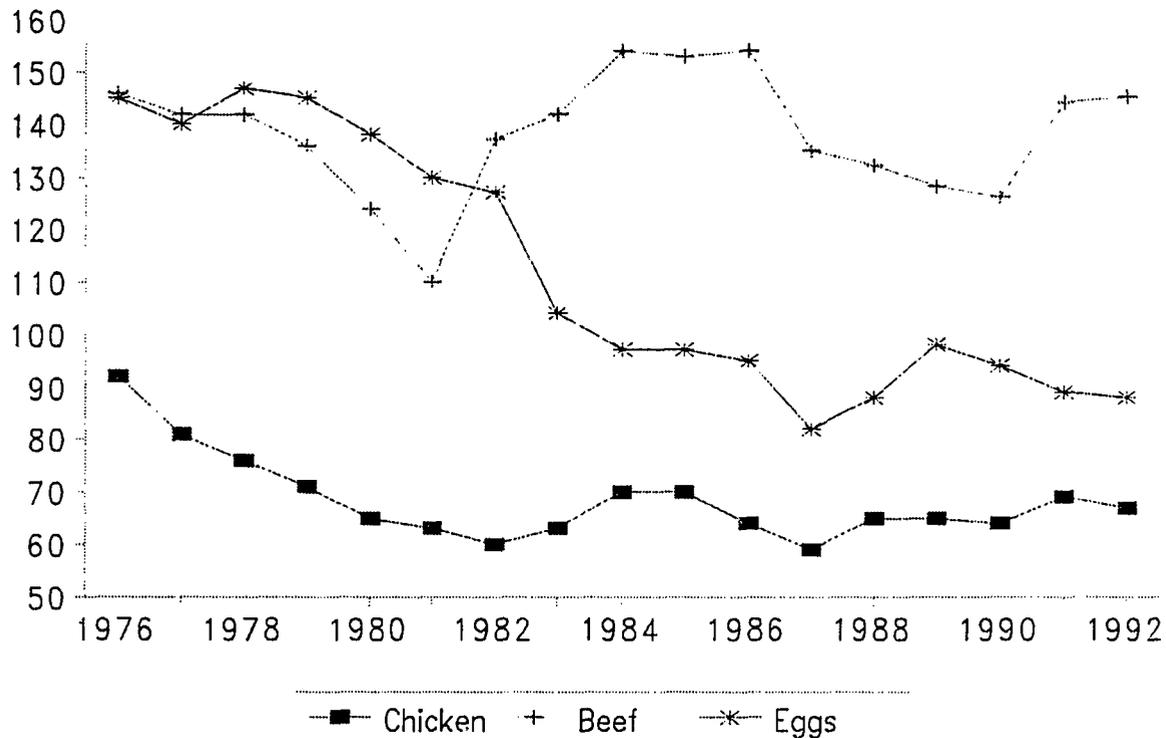
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<sup>24</sup> Adapted from Wallace E. Tyner et al., *Analysis of the Impacts of Reducing Maize Protection Levels on the Moroccan Poultry Sector*, Cambridge, MA: Associates for International Resources and Development, August 1994. Prices, and thus protection rates, differ slightly from the original because of different base data assumptions.

<sup>25</sup> The fact that domestic prices were so much higher than CIF prices at the time, or even than CIF grossed up by 23 percent, suggests that quantitative restrictions imposed by ONICL kept domestic supplies tight and prices high.

FIGURE 2

## Meat and Egg Price Indices (1970=100)

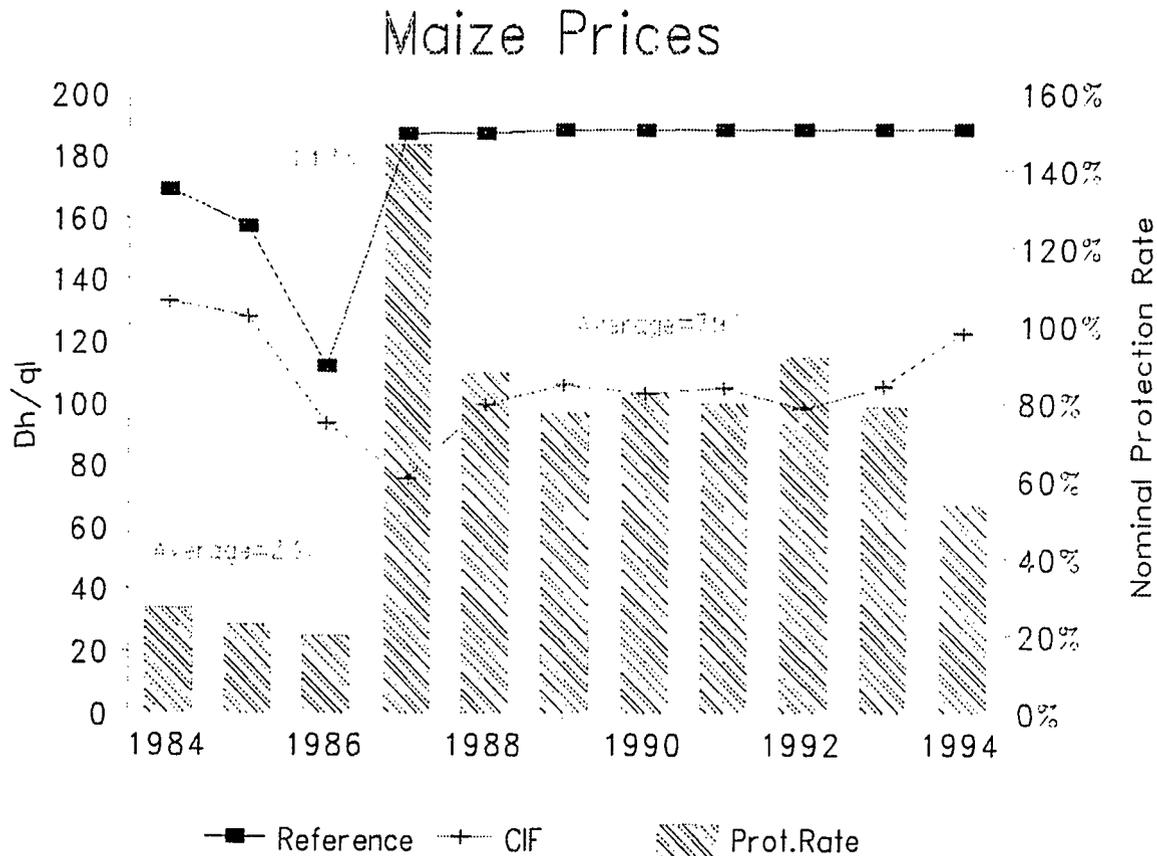


well as on poultry producers. Reduction of maize protection would induce several benefits. It would reduce the costs of poultry and egg production, and thus their prices, thereby increasing their consumption.<sup>26</sup> Some shift from red to white meat consumption would probably occur. The potential negative effect on ruminant production might be offset by increased feed imports. For example, a reduction in maize protection would facilitate maize imports for more intensive ruminant livestock production in the urban corridor around Casablanca, which would lower costs and improve consumption.

Moroccan maize producers, admittedly, would be hurt. However, maize production constitutes only 5 percent of total cereals production in Morocco, so the impact would not be large. Also, given that domestic resource cost estimates for what production there is indicate that the value of resources expended in production is greater than those saved by not importing, the net benefit to the economy of reduced maize production would actually be positive.

<sup>26</sup> For parameter estimates, see Tyner et al., 1994.

FIGURE 3



### 3.1.3 Price Variability and the Development of Modern Markets for Cereals and Cereals Products

In the first half of 1995, Morocco is scheduled to finally put into action the heart of the cereals reform program agreed to seven years ago, a program that was to have been in place by the end of 1990. It is important to review here the characteristics of a modern, efficient cereals subsector and what this implies for the role of the state. In Chapter Two we defined the hallmarks of the institutional structure of a liberalized Moroccan cereals subsector and appropriate roles for the Moroccan private and public sectors. Implications of accepting this vision of the future structure and functioning of markets for cereals and cereals products will be explored in much of the rest of this report. In this section on price, trade, and marketing policies, we focus on one characteristic inherent in efficient agricultural markets, price variability, and implications this has for appropriate government agricultural policies.

#### 3.1.3.1 Agricultural Price Variability, Business Risk, and Policy Options

To set the stage of this examination of price variability and policy options for dealing with it, we must first restate a few basic principles that govern agricultural markets:

- **Agricultural marketing systems always involve a partnership between government** (setting rules on how markets will function) **and private actors** (motivated primarily by making profits) who take advantage of transaction opportunities defined by the interplay of supply and demand in markets and the rules governing market function. It is not a question of either/or, state or private; it is a question of what degree market mechanisms are allowed to function without direct state action in controlling supply, price, or ownership of the commodity. Even if the state is not intervening in these ways, it is there maintaining public order, providing communications infrastructure, enforcing contracts, supervising banks, making sure the monetary system is functioning well, and so on;
- **Most agricultural markets involve much greater price variability than nonagricultural markets.** This is due primarily to the variability of production (often under rain-fed conditions) but can also reflect large shifts in demand. There are often large seasonal or cyclical movements in prices because of these abrupt shifts in supply and demand;
- **A large portion of national government agricultural policies have to do with dealing with this price variability:** its causes or the consequences that variability has on producer income and production decisions, on supply availability (food security or export earning concerns), and on consumers;
- In practical terms for businessmen (farmers, traders, millers, or bakers, for example) **the greater the price variability, the greater the risk to their continued participation in those markets.** With minimum state intervention, some will profit greatly (by luck or cleverness) and some will lose to the extent that they are forced out of business.

Governments can take two approaches to dealing with this risk:

- Intervene directly to stabilize supply and demand and thus prices, at the cost of loss of market efficiency, investment, and the natural development of private risk-management innovation; or
- Allow markets to function as freely as possible to obtain maximum resource efficiency benefits, but intervene indirectly (through training and information) to assist market participants to develop mechanisms for managing and reducing the impacts on their businesses of risk introduced by price instability. They also intervene indirectly to organize additional compensatory programs to assist groups of citizens injured by the results of market-driven reallocation of resources. When a country chooses the liberal economic road, they choose to use the second approach.

What does this mean for Moroccan cereals policy? It means that for a variety of political and economics reasons, GOM, beginning in the protectorate period, has chosen to intervene directly in controlling cereals price instability primarily in the soft wheat market, through ONICL's *circuit officielle* (the ONICL-controlled soft wheat marketing channel), centered on industrial wheat flour mills.

There is no doubt that these policies succeeded in stabilizing soft wheat and durum prices, partly by direct control of the soft wheat price applied to between 30 percent (in a bumper harvest year) and 80 percent (following a drought reduced harvest with substantial imports such as 1993-94 marketing year) of total soft wheat supply. The substitution relations among industrial soft wheat flour, artisanal soft

wheat flour, and artisanal durum wheat flour have served to dampen price variability in the noncontrolled bread and durum wheat markets as well.<sup>27</sup>

When Morocco was a surplus wheat producer with significant exports (into the 1960s), rainfall-induced aggregate domestic supply variation could be reduced through reduction or elimination of exports following bad harvests. Once Morocco could no longer meet its own needs in total wheat supply, even in good years, aggregate supply was stabilized through variable levels of soft wheat imports. As the discussion above has shown, through the mid-1980s, low producer prices (essentially a tax on producers) contributed to a trend in sharply declining wheat self-sufficiency, a policy that was reversed under ASAL I. That structural adjustment loan encouraged the raising of official producer prices and was complemented by other GOM campaigns promoting increased cereals production.

Now, with Moroccan prices at well above world price levels, stabilization of domestic prices has become even easier for GOM because world wheat prices show much smaller variability than aggregate levels of Moroccan wheat production. This is the main reason why Morocco is categorized by the Food and Agriculture Organization (FAO) as being among the developing countries that have a "high" level of "aggregate household food security."

The direct regulation of the soft wheat official circuit may have made political and economic sense for a couple of decades immediately after Moroccan independence in 1956, when a primary objective was to Moroccanize the ownership and management of important business components of the economy while maintaining social and political stability. It no longer does. The major problems with the continued maintenance of the ONICL-run price-controlled soft wheat market management and subsidy system (in addition to GOM having signed several international agreements pledging its elimination) can be grouped into four broad categories:

- **Economic inefficiency** in the use of Moroccan resources in the production and distribution of wheat flour products, which constitute the most important part of the national diet (confirmed by detailed CMR studies of the industrial milling industries). This means that the elimination of the official circuit — with no other policy changes — would result, within two to three years, in all Moroccan consumers having a wider choice of flour products, of better quality, and at lower prices;
- **Systematic discouragement of the development of market-based risk reduction mechanisms.** The state control system has systematically discouraged investment in and development of the four private, market-oriented mechanisms that would help manage price risk in the Moroccan wheat subsector: (1) modern grain storage; (2) standardized contracting for future delivery of wheat and flour; (3) marketing of domestic wheat and flour based on detailed, quality-based grades and standards; and (4) development of private importers and specialized domestic grain traders with the infrastructure and commercial experience required to operate effectively, on behalf of their clientele, in complex international and domestic wheat markets;
- **Maintenance of the flawed FNBT subsidy program and lack of action on more sustainable public programs of food or income assistance.** There is widespread agreement, in GOM circles and throughout the wheat flour subsector (producers, grain

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<sup>27</sup> Available data on parallel market price variability were analyzed in detail by the MARA/PRCC marketing working group in late 1991 and results presented in Aloui et al., CMR Report No. 5, January 1992.

traders, millers, flour merchants, and certainly consumers) that the current FNBT subsidy program has to be eliminated because of the negative impacts the program's structure and operation have on flour quality, the levels of corruption, and the amount of the subsidy that actually reaches consumers;<sup>28</sup> and

- **Lack of coherence in the direction of overall GOM economic policy.** The past few years have seen a consistent set of Royal and government statements that have emphasized that the government policy is to put the entire economy into a liberal (market-oriented) mode of operations. The soft wheat official circuit is clearly an anachronism that is not consistent with overall government policy.

Here we focus on just the second group of problems, whose solution implies the need for GOM policy to promote market-based risk reduction mechanisms.

### 3.1.3.2 Concurrent Need for Price Variability and Promotion of Market-Based Measures to Manage Increased Risk<sup>29</sup>

It is critical to understand that the program of cereals marketing reforms implies the creation of integrated national cereals markets for the four major cereals that will have a certain amount of price variability. This price variability is good in terms of maintaining efficient, competitive production, marketing, and processing industries within the subsector. The biggest changes will come to:

- Industrial millers who are not used to price variation;
- Large-scale soft wheat producers who were usually able to receive the full official support price in selling their soft wheat directly to the cooperatives; and
- The Sociétés Coopérative Agricoles Marocaine (SCAM) themselves have also operated for years (with a few exceptions such as the well-run SCAM in Meknes) as very inefficient, government-regulated regional utilities.

It is not clear what will happen to *souk*-level price variability but it should be somewhat lower on average when freely imported cereals can be sold in the souks. Helping private businessmen in the subsector to manage these increased market risks effectively could provide the underpinnings of an action program in market development. Components of such a program might include the following four activities:

**1. Promoting modern, efficient grain storage.** One of the odd aspects of traveling through Morocco's major soft wheat production areas is the visible absence of modern grain storage infrastructure at the farm, village, or small town levels. For a production system that, on its larger farms, uses the most

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<sup>28</sup> One of the earliest CMR activities was the organization of an interministerial task force (personnel came from MAMVA/DPAE, ONICL, and Interior/DAR) that used rapid reconnaissance techniques to investigate FNBT quality, prices, and administration in four provinces. This was the first time that the widely discussed abuses of the FNBT system had been documented in a government report.

<sup>29</sup> Most of the measures described in this section were scheduled for preliminary studies under CMR funding but had to be canceled when USAID withdrew its funding of the third year of the project.

modern production and harvesting techniques and can achieve yields at world-record levels, this absence of modern storage infrastructure is a clear sign of the distortions introduced by the controlled prices and storage subsidies of the current wheat marketing system. This is further confirmed when looking at the behavior of the current private commercants agréés. Given the low levels of per quintal storage subsidy and the uncertainty of its future, and the impossibility to fully engage in temporal and spatial arbitrage, few of these companies have become specialized in marketing wheat on quality grounds (impossible with the current system of supply management) or in building specialized infrastructure that would allow them to capture the benefits of the enormous economies of scale that are possible with modern bulk handling and storage.

Sabourin conducted an early preliminary study on the state of grain storage in Morocco (CMR Working Paper No. 5, May 1992) and Bartali and Achy conducted an analysis of the physical condition and a preliminary diagnosis of the level use and other operational parameters of all of Morocco's large-scale bulk silo installations (CMR Working Paper No. 17, February 1994). In addition CMRP helped to arrange (with Canadian funding) for Mr. Sabourin to assist the SCAM of Meknes in technically downsizing plans for the renovation and repair of its Meknes silo facilities at a much lower overall cost to the cooperative.

The more cereals prices fluctuate, the more farmers, traders, and other market participants will have incentives to store cereals for future sale. This is the most direct way that businessmen can deal with the added risk associated with market price variation. During a 10-year transition period (after which the private sector will need no further assistance), GOM (and foreign partners) could assist in this process through:

- **Technical assistance on options in bulk handling and storage systems for on-farm or douar-level, private company use.** This could be initiated through demonstration sites that could be subsidized by countries that are major equipment producers. Morocco is in the favorable position of being able to draw on much appropriate technology from other cereals-producing regions of the world (particularly North America, Europe, and Australia) and having very competent technical capabilities in the country, particularly at the IAV Hassan II Department of Agricultural Engineering. This is a small/medium business opportunity just waiting for the right policy environment;
- **Loan assistance.** Current CNCA and FDR policies provide for some limited assistance in the construction of modern storage facilities. If government wished to accelerate the widespread acquisition of this technology, it could do so through the use of targeted credit programs. In this way it could enable individual producers or small, local cooperatives or producer associations to deal more directly with the increased risks that come through fluctuating market prices. This type of scheme needs to be analyzed technically, financially, and institutionally. This was one of the original CMR project components when the project was first designed in 1987.<sup>30</sup>

**2. Promoting the development of Casablanca cereals reference markets.** In the structure and functioning of Moroccan cereals markets, Casablanca, particularly the wholesale district that surrounds the Municipal Hall aux Grains, is the closest thing Morocco has to a functioning commodities market.

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<sup>30</sup> Just this kind of study had been tentatively approved for implementation by a IAV/INSEA/DAI team during the third year of CMR operations. It had to be canceled when USAID withdrew the funding it had promised in the midst of the third year.

This is evident for corn marketing, because virtually all of the marketed portion of national production is sold in this market and then used in the feed milling industry located in greater Casablanca.<sup>31</sup> This is generally a cash or "spot" market but some buyers and sellers have experience in at least oral contracting for future delivery. The development of future contracting for corn, soft wheat, and durum holds a great deal of potential in the development of modern cereals markets in Morocco.

In a recent, excellent publication by the World Bank, Debatisse et al. describe an evolutionary process by which cash markets evolve into ones featuring standardized contracting for future delivery, and then, in some cases, into full-fledged futures markets.<sup>32</sup> This third and highest "evolutionary stage" still involves trading standardized contracts for future delivery but also involves the injection of additional capital through speculative transactions and, usually, the addition of clearinghouse mechanisms that allow contract holders to sell (or "offset") their contract if it is no longer useful to them. Extensive use of contracting for future delivery may allow some market participants to reduce some of their price risk and certainly most of the uncertainty of what prices they will face in the future. Creation of a true commodity futures exchange allows participants to take offsetting positions in the market that can substantially reduce their price risk. However, there are many preconditions to the successful operation of a futures market and many developing countries cannot meet all of them.

To establish reference markets in Morocco, the following factors should be taken into account:

- Casablanca is the logical place for the establishment of national reference markets for cereals. This is because it is already well established as a national cereals marketing center. It is in the middle of the country, is the largest population center, its port has the largest, most heavily used port silo for imports, and it is the financial and communications hub of the country. Having Casablanca as the reference market does not change the economics of cereals marketing in other parts of the country. When you have a reference market, other parts of the country are linked to that market through the establishment of "basis" relationships. These are simply statistical averages of the differences in price by season between the reference market and the local spot market. These basis relationships, as they become known, help operators to interpret the difference between local prices and the price being quoted in the reference market — this is another reason for continuing to put emphasis on the creation and maintenance of a high-quality market information system (MIS);
- Trading standardized contracts requires precise specification of quality standards, which is facilitated by a system of adequate grades and standards. It is clear that Morocco's standards for domestic cereals trading are not adequate for the needs of modern milling and industrial flour use. These poor domestic grading standards systematically favor the use of imported

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<sup>31</sup> Described in an interesting article by Mohamed Belfqih, "La Hall aux Grains de la Route de Médiouna" in *ONICL Marché des Céréales et des Légumineuses*, No. 3, June 1992. Other details are given by Metzler in CMR Working Paper No. 8, October 1992, and further by Ronald Anderson in "Risk Management in Morocco's Cereals Subsector" in Discussion Paper No. 9214, Institut de Recherches Economiques et Sociales (IRES), Catholic University of Louvain, Belgium, June 1992.

<sup>32</sup> Michel Debatisse et al., "Risk Management in Liberalizing Economies: Issues of Access to Food and Agricultural Futures and Options Markets," World Bank Technical Report No. 12220 ECA, November 1993 (available in English and French).

cereals, which are of more uniform quality. This fact is recognized in MAMVA circles, but no work has been done on this important topic;<sup>33</sup>

- Apparently the Casablanca wholesale cereals market is soon to move into new quarters. This would provide an ideal time for a coordinated program of assistance in creating a system of national reference prices and a system of model contracts for the trading of standard lots of cereals;
- For a system of model contracts to be useful to different private sector groups, it should be developed primarily by interested representatives from those groups, assisted by appropriate government services. Whether the contracts themselves could ever be bought or sold (thus creating a futures market) is an evolutionary step that will depend on the nature and size of the Casablanca markets. A topic that is equally important is the ability of Moroccan commercial groups to take hedging positions on foreign commodity markets. Currently they are not allowed access to foreign exchange for this purpose, a regulation that the GOM should change as soon as possible; and
- One of the main requirements for contracting for future delivery is the confidence of the contracting parties that the contract will be respected or that there will be adequate judicial remedies in the case of contracting problems. This is generally felt not to be the situation in Morocco. This has been recognized by GOM and the World Bank and major efforts are currently under way to strengthen the country's commercial court system so that businessmen will have more confidence in written contracts.

### **3. Promoting the development of grades and standards for Moroccan cereals and flours.**

It is recognized fairly widely in Morocco that its official grain grading system provides much less information to buyers and sellers than those used in other parts of the world. For example, in place of Morocco's *blé tendre*, the United States has five different varietal classes, each of which has quality grades within it. It is clear that the bases of a more elaborate grading system already exist in Moroccan markets and could be scientifically confirmed. For example, there are two major varietal classes of barleys sold in Moroccan markets (at substantially different prices) without these being officially recognized. The argument for greater grade specification is to help promote their use in contracts for sale of specified quality standards. This helps to promote market specialization along lines of practical use to the buying firms.

Although a similar problem exists in standards for flour quality, a further difference impedes commercial development and diversification of products. That is that Moroccan standards (following the French tradition) are based on predefined "normalized products" that have defined characteristics rather than general standards for product safety and cleanliness. The alternative would be to use spot testing to see if producers' label descriptions match what is in the package. These are important topics that an independent panel of technical and industry specialists should address.

### **4. Promoting the development of first class importers and specialized domestic marketers.**

Finally, the control of cereals importing and domestic pricing and marketing has retarded the development of the kinds of highly specialized import and marketing firms that the country should have to assure efficiency in the cereals subsector. It is debatable that the government really needs to do anything to

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<sup>33</sup> Terms of reference had been prepared for an initial survey and the development of a strategy for improving Moroccan grading and flour standards but this, too, had to be canceled.

promote the development of these firms, besides changing the rules and getting out of the way. However, as GOM shifts from a control mentality to a promotional mentality, an effort should be made to work with these commercial groups to explore problems and ways of making those parts of the subsector work as best they can.

### 3.2 FOOD SECURITY

In any country, one of the most important topics dealt with by the national political system (as well as national agricultural policy) is food security. Because this an important political topic, it is also subject to purely political reasoning (sound or not), supplanting attempts at objective analytical reasoning. With this pitfall in mind we will, nonetheless, push ahead with a summary discussion of this topic, focusing on three dimensions:

- CMRP analysis of food security issues;
- Recent debate on the need for and options on how to constitute a national security stock of soft wheat during the pending transition to total market liberalization; and
- Consequences of eliminating (or drastically cutting back) the FNBT subsidy.

#### 3.2.1 CMRP Analysis of Food Security

Reflecting GOM concerns, food security has been a recurring theme in the CMR project. The subject was first covered in the Phase I synthesis report (CMR Report No. 8) where it was emphasized that there are two main dimensions to the problem: security of the aggregate supply of food (production and distribution) and security of access of the total population, at all times, to a share of the total supply that is adequate to maintain minimum nutritional needs. In Morocco, as in most middle- or high-income countries, most of the food security problem tends to involve the access side of the equation; in other words, do all groups in society have enough purchasing power to consistently acquire the type and amounts of food necessary for an adequate diet.

Food security in Morocco was explored in detail in May-June 1992 (CMR Report No. 11) by Steedman and Benabderrazik, who divided the subject into three parts: the adequacy of aggregate food supply, the adequacy of internal distribution within the country, and the question of the distribution of consumer purchasing power. They further looked specifically at how cereals marketing reforms might change the status of Moroccan food security in the short to medium run. The conclusions of this paper were subject to extensive review and debate, and accepted as correct subject to some minor modifications, at a day-long CMR seminar organized by Professor Barrada of the IAV Hassan II Department of Nutrition in February 1993.

After extensive consultation with Moroccan experts and reviewing previous studies, the authors concluded in regard to supply security that:

The recent evolution of the national economy translates into a notable improvement of food security, either through growth in domestic production or through growth of importing or (financial) borrowing capacity. One can say . . . that the "supply" part of food security is assured. (CMR 11, p.7)

The internal distribution system was examined in three critical dimensions and found to be quite adequate for reasonable security of distribution, if not optimal in terms of subsector economic performance:

- **Transport, port, and storage infrastructure.** Morocco's road and rail network are excellent and allow food to be distributed rapidly to all parts of the country. There was some concern expressed as to the capacity of the country's port silo facilities, but those facilities were put to a severe challenge during two back-to-back droughts (after the 1992 and 1993 harvests) and no significant difficulties were encountered, even when more than 4 million tons of cereals were imported in the 1993-1994 import year.<sup>34</sup> The bulk cereals storage infrastructure, although adequate to handle annual distributional requirements, is not optimal in assuring the lowest possible costs in the distribution system under free market conditions;
- **Ability of the private sector to assure an adequate distribution of cereals and flour.** Very few Moroccans doubt the ability of the country's traders to assure adequate cereals and flour distribution. It is ironic that the flexibility and ability of this commercial network is well illustrated by the fact that the private sector developed a sophisticated, national secondary market for FNBT in the six years since the new subsidy and quota system was put into place. It is also illustrated by the rapid changes that have occurred in the industrial durum flour market once the Minoteries Industriels à Céréales Secondaires (MICS) were allowed to operate freely;<sup>35</sup> and
- **System of market information.** Information on prices has to be available for markets to work well; the information has to be available to all market participants for markets to function equitably. Again, few doubt the ability of Moroccan trader networks to collect and use supply/demand (price) information in the operation of their businesses. There are substantial doubts that consumers and producers have equal access to reliable price information to use in basing their marketing decisions. For the latter reason (and to continue to have a reliable database for GOM market surveillance), the CMR project invested in the creation of a Market Information System (MIS) for Moroccan cereals.

As the authors note, "if markets work and the means to import cereals are available, food security is reduced to the access the poorest parts of the population have to food products available in the market" (CMR 11, p.14). They go on to report on two further questions: What is the population at risk? and What is the nature and efficiency of programs to improve the nutritional health of these population groups?

The identification of food-insecure or -vulnerable groups seems to be a problem in Morocco because of the inadequacy of the publically available statistical databases and because this a politically

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<sup>34</sup> According to the knowledgeable director of the port silo company (SOSIPO), its infrastructure could handle even greater quantities by accelerating evacuation from the ports through emergency administration of rail and truck capacity and by making greater use of direct unloading onto the docks controlled by the national port authority (ODEP). In addition, the new port silo in Agadir will make an important contribution to increasing aggregate capacity to import. It is important to add that the current infrastructure may not be optimal for ensuring lowest cost in cereals importing under all conditions. This topic and the location of future port facilities should be explored in more detail using the national cereals linear programming model developed by the CMR project.

<sup>35</sup> MICS are small industrial mills that produce and sell durum wheat and barley flours. This is the official terminology for these mills. Some of them were former *semouleries* or *orgeries*.

sensitive issue that many in GOM do not want to deal with in an official manner.<sup>36</sup> Thus the best information on poverty is found in recent World Bank reports that have analyzed data from the national LSMS (Living Standards Measurement Survey), financed partially by the Bank and executed by the Directorate of Statistics in the Ministry of Plan. Who is poor and potentially food insecure remains a controversial topic.

Equally controversial is how to do something for these groups without introducing new layers of bureaucracy and delivery systems that will be subject to "capture" by involved private parties and administrators. The authors present some summary conclusions on efforts to target food aid in the past five or six years:

- The Programme Alimentaire Compensatoire (PAC) and regular GOM food aid programs are estimated to reach only a small percentage of those in need.<sup>37</sup> It was very unfortunate that PAC was allowed to simply end without replacement programs being put into place. To our knowledge no new GOM food aid programs have been initiated in the past eight years despite strong conclusions in virtually all studies that they were needed;
- The Bank placed some emphasis in a recent report that only 16 percent of FNBT was bought by the target population. The authors felt that it was more important to look at the proportion of the FNBT subsidy that was actually reaching the consumer — in real terms perhaps less than a quarter of the value of the subsidy, once the low quality of most FNBT was taken into account; and
- Their general conclusion was that GOM needed to do more to tackle the food access problem. They correctly point out that this can be done through the use of two complementary policies. First, the percentages of the population who are food insecure could be reduced simply by reducing the high levels of tariff protection on Moroccan cereals. Second, the needs of a subgroup of the food insecure can be met only through improved, targeted food aid programs.

These and other issues were also explored by McDermott in her paper comparing different methods for targeting cereals subsidies in Morocco, Algeria, Egypt and Tunisia (CMR Working Paper No. 7, December 1992). Although there are some attractive aspects of the FMBT system (use of the market for secondary distribution and the self-targeting nature of the subsidy), the fact that it involves the use of two quotas (one for millers to produce it, and the second for wholesalers to receive and distribute it) produces a classical situation where substantial fraud is inevitable. The systems being used in the three other North African countries (including direct income transfers in Algeria, which is intellectually popular with many Moroccans) all have pros and cons in cost, equity, and ease of administration (while minimizing the incentives for fraud). However, it is clear that any new compensatory food aid programs will have to be custom-designed for Moroccan conditions. Finally, it is surprising that, given the emphasis of the World Bank over the past three years on creating a new social lending program and designing improved social safety nets to go with market liberalization, nothing has been done in this important area.

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<sup>36</sup> Apparently data on poverty exist that have been collected by the Ministry of the Interior; however, they have not generally been made available to donor-funded researchers.

<sup>37</sup> This program is described in Chapter One, footnote 1.

### 3.2.2 Soft Wheat Security Stock<sup>38</sup>

Regardless of how small the chances of a substantial soft wheat supply disruption in Morocco seem to most analysts, some GOM officials have insisted that the chances would be greater during the first year or two of transition to liberalized markets (because of inexperienced private importers, lack of appropriate storage infrastructure, possible attempts at "cornering the market," and withdrawal of the ONICL control and subsidy system). These possibilities were also confirmed by Steedman and Benabderrazik. Officials also insist that, because of the extreme political importance of flour and bread, the government has to adopt policies that are close to "zero risk-tolerance."

In November-December 1993, a CMRP consultant team, in collaboration with many of CMR's GOM and private sector collaborators, investigated the need for, cost, and operating procedures that should guide the formation of such a stock. Kent et al. (CMR Report No. 18) made a series of recommendations for a relatively small security stock of 75,000 tons of soft wheat. The CMR team estimated that this size stock would cost GOM between \$4 million and \$5.7 million per year to maintain, depending on whether the wheat was obtained abroad or locally. This amount of wheat, strategically located, would give the industrial milling sector the ability to make flour for approximately 10 days to two weeks once some type of supply crisis had begun. This would give GOM and the private trade time to begin to take emergency measures such as diverting wheat ships at sea into Moroccan ports or simply importing readymade flour from France or other European countries that usually have large surplus stocks available and destined for export.

At approximately the same time period, an ONICL working group recommended that the security stock during an undefined transitional phase be approximately equal to the stocks that have been held, on average, in the official circuit over the past five years. This would be equal to 600,000 tons of soft wheat, which represents the needs of the industrial milling sector for approximately three months. This document then estimated the annual cost of operations at approximately \$35 million (the CMR group basically concurred on the cost of the same size stock, estimating the cost at between \$32 and \$46 million per year).<sup>39</sup>

It seems clear that the initial ONICL position on soft wheat security stocks represents the "wolf" of the administered supply channel reappearing under the "sheepskin" of food security. Although ONICL indicated that the security stock should be run through a competitive bidding process open to "all legal entities recognized by article 11 of the proposed revisions" to the "ONICL Dahir," which has available to them "the material and financial means to permit them to store, handle, condition and deliver the cereals in good condition," it is clear that they assume this would most likely be their traditional clients, the previously regulated *organismes stockeurs* — the SCAM cooperatives and the *commerçants agréés*. In addition, no effort was made to estimate the risks of supply rupture that would require such a large

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<sup>38</sup> It should be noted that what GOM has called a "security stock" is normally called a "buffer stock" (or in French a *stock tampon*) by food security and grain storage specialists. This is because the basic objective as defined by GOM officials is to prevent a rapid explosion in market price. In most countries using the concept of "security stock," the keeping of stocks is accompanied by provision for special procedures for distributing the stock (for free or at low cost) to target groups of vulnerable consumers. This distribution feature has not been a feature of Moroccan thinking on bread wheat stock holding.

<sup>39</sup> ONICL, "Note sur le Stock de Sécurité de Blé Tendre," no date given, but early 1994.

government-supervised stock, nor was effort made to critique the risk analysis conducted in the CMR report (CMR 18, pp. 7-14).<sup>40</sup>

GOM should consider carefully the disincentive effects for a newly liberalized private sector of having a huge security stock mountain ready to avalanche down onto the new wheat importing and marketing businesses they are trying to promote. Even a small stock may have disincentive effects. However, these can be minimized by ensuring transparency in the stock's management (logical operating rules well known to the interested public), and guaranteeing that the stocks will not be sold on the local market below a predetermined trigger price (set at a sufficiently high level that corresponds to a consensus opinion of what would constitute a supply emergency). Disincentive effects can also be minimized by limiting the size of the stock to avoid displacing private traders from local markets during its required technical rotation.

Finally, we cannot be strong enough in our recommendations that the security stock be considered a transitional measure, not likely to survive for more than three or four years, and one whose necessity and size should be reevaluated formally each year. Adequate data must be collected to fully monitor and evaluate the costs and benefits of holding the stock. In addition, GOM should take other measures that can increase supply security, such as:

- Providing full market information to all traders (as a normal government service, perhaps with a user-fee structure);
- Increasing the port silo fee structure to encourage importers to rapidly remove cereals from those structures and increase the volume that can be handled; and
- Allowing traders and others (such as millers) to have access to foreign exchange to take hedging positions on foreign commodities futures markets for their wheat purchases. Currently this is not allowed since all futures transactions are felt to be speculative rather than a normal, modern business tool.

### 3.2.3 Likely Impacts of Elimination of FNBT

As the discussion above indicated, there are signs that GOM has not dealt extensively (and certainly not publically) with the consequences of the elimination or drastic cutback and modification to the current FNBT system. Some deny that there would be a problem at all. Other officials, though admitting that cutting back on this program may have negative income and nutritional impacts on some groups of poor consumers, deny that there are any reasonable potential solutions for getting food

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<sup>40</sup> All parties agree that under emergency conditions, Moroccan bread wheat "supply security" comes from its ability to import the shortfall in domestic supply. The CMR report separately discusses and evaluates the risks to Morocco's ability to import associated with eight possible causes of disruption: (1) war and embargo; (2) maritime disasters; (3) strikes in Moroccan ports; (4) problems in Morocco's traditional supplier countries; (5) private importer problems such as lack of knowledge, incompetence, high risk aversion, or problems in getting foreign exchange; (6) trader collusion to drive up prices; (7) poor scheduling that might cause port congestion problems; and (8) the potential for world wheat prices to skyrocket.

assistance to targeted groups of very poor people (and it certainly shouldn't have to be the responsibility of the Ministry of Agriculture!).<sup>41</sup>

Based on some rapid calculations on data from the 1990-1991 LSMS, Professor Stryker of AIRD was able to estimate that the average impact of the subsidy removal on the implicit revenue of the lowest decile of the Moroccan population would be relatively minor (CMR internal memo). This also corresponds to impressions from other information-gathering efforts. They indicate that, because of the small percentage of the subsidy that actually reaches the consumer who buys a bag or part of a bag of flour in a rural souk, and because much FNBT is of decidedly low quality (in most cases not even meeting ONICL's FNBT defined quality standards), the subsidy loss might not exceed 70 dh a quintal, or less than a dirham a kilo. However, although the average impact of such a reduction might be small, it may still represent a sizable loss of food purchasing power for the very poorest groups of consumers.

Most of the analysis of nutritional information concerning the Moroccan diet indicate that, for virtually the entire population, caloric intake is sufficient. The biggest nutritional problems seem to come from vitamin and mineral deficiencies. This is an area that definitely goes beyond the competency of the CMR project. It is, however, important that these variables be taken into consideration in the deliberations concerning the future of the FNBT subsidy and that a task force be charged with looking at how GOM could provide more targeted food or income assistance to the poorest groups, perhaps to go above the level of assistance that had been received from the corruption and inefficiency-plagued FNBT subsidy system. It is widely agreed that the economy-wide benefits of eliminating this subsidy (and the all the associated control and inefficiency problems with the official circuit) make it imperative that action on these matters be taken rapidly.

### 3.3 THE WHEAT MILLING INDUSTRIES

#### 3.3.1 An Introduction to Moroccan Wheat Milling

Moroccan wheat milling is made up of three industries: the 80-plus, large-scale industrial firms that mill soft wheat almost exclusively, the more than 9,000 smaller-scale artisanal wheat mills that handle equivalent amounts of durum and soft wheat, and the 56 firms that make up the "secondary cereals" industrial mills that process durum wheat and barley.

Because little wheat is still ground by hand at home in Morocco, virtually all soft or durum wheat must pass through one of these three industrial channels as it moves between producer or importer to household or industrial consumers. These milling industries are producing all of the population's most important staple food, wheat flour. Thus the structure and performance of the milling industries have a direct impact on the standard of living of the Moroccan population and the quality of the food it consumes.

Four figures on the next page explore the interrelationships between sources of wheat supply (Figure 4), how the wheat is milled (Figure 5), the types of flour produced by the industrial and artisanal mills (Figure 6), and the percentage importance of the different flour types (Figure 7) in an "average year" (average of 1988-1990), a year following a bumper harvest (1991), a first drought year (1992), and

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<sup>41</sup> This seems to be at odds with the existence and acceptance of traditional, religiously based systems for providing the poor with financial or food aid assistance.

a second drought year (1993). The source of wheat milled in Morocco represents a combination of data and assumptions: domestic production and imports are known, stock changes represent net releases from stocks assumed to have occurred to permit 218 kilograms of flour per capita to have been milled in the 1988-1990 base period (or 6.6 million tons of grain). More important than the actual numbers are the relationships that are believed to have occurred during the next three years. With the 1991 record harvest, imports stayed high so surplus wheat was able to move into stocks and the overall amounts milled are assumed to have risen slightly from 6.6 to 7 million tons (durum and soft wheat together).

In 1992, the first drought year, total grain milled stayed at 6.6 million tons with some of that year's production deficit made up by imports, and some by farmers and others taking larger quantities from stocks. In the second year of drought, we have assumed that total wheat milled dipped to 6.2 million tons with most of the production shortfall being made up from imports (4 million — almost three times the base figure of 1.4 million tons). In Figure 5, we see that when domestic wheat is most abundant (1991), the largest percentage will go through the artisanal mills (about 56 percent). However, by the second year of drought, industrial mills are milling 68 percent of the wheat.

In Figures 6 and 7 we look at millings in flour terms, with industrial flour assumed to be produced at an average 75 percent extraction rate, and artisanal flour at an average rate of 90 percent. In Figure 4, with Farine Nationale production capped at 1 million tons per year, the flour balance shifts between Farine Artisanale (60 percent of total in 1991) to Farine de Luxe playing an increasingly large role in the second drought year (22 percent in 1991 to 44 percent in 1993).

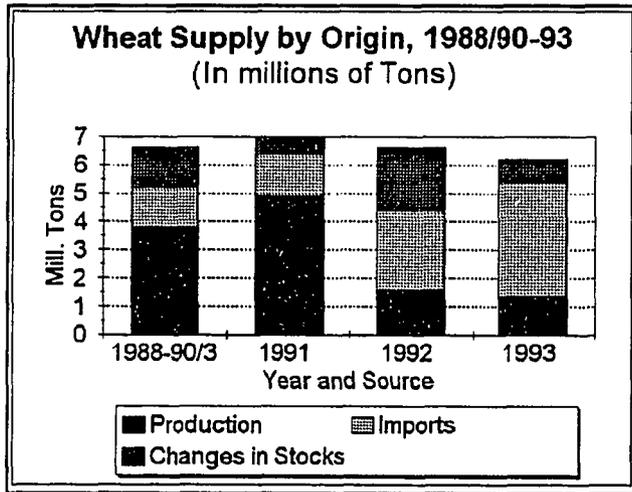
These figures only hint at the complexity of price/quality tradeoffs that motivate Moroccan consumers and the ability of the two main industry branches to expand and contract production in response to domestic supply and demand conditions. Not only does mill use vary by year, but there is also a distinct seasonal pattern, more pronounced in some regions than in others. Normally peak demand for artisanal milling services occurs in the months at and following harvest when domestic wheat (from stocks or production) is most abundant. This activity will taper off through the year with industrial millings taking up the slack in the overall supply of wheat flour in Moroccan markets.

From the beginning of the project, the importance of the industrial soft wheat millers to the eventual success or failure of the ASAL II reform program was clear. This is true because GOM marketing, price control, and subsidy programs for cereals apply primarily to the portion of soft wheat that passes through those mills. (Similar controls — to the minimal extent that they existed or were enforced — were eliminated for durum, barley, and corn in 1987.) The importance of soft wheat millers is illustrated by the following list of five core marketing and trade reforms agreed to by the government that, except for the first, apply only to soft wheat. The reforms would eliminate:

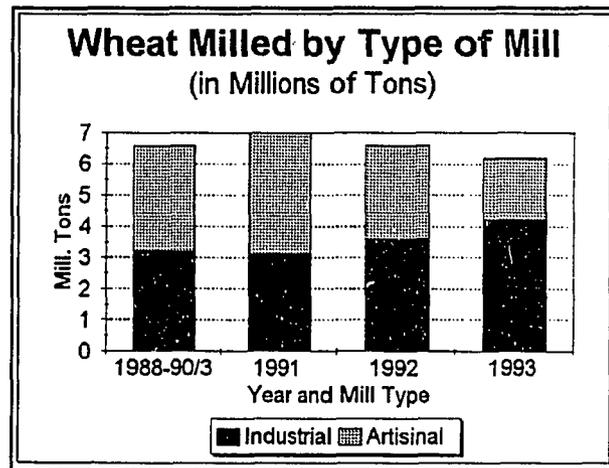
- ONICL planning and execution of all cereals imports;
- ONICL planning and movement authorization control over soft wheat (from port or storage organization) going to the mills (through the official channel);
- Price controls on unmilled soft wheat and milled flour in the official channel;
- Subsidies on the transportation and storage of soft wheat and on the transportation of soft wheat flour; and
- Heavy subsidies to 10 million quintals of a special, high extraction rate flour (FNBT).

**Four Figures Illustrating Complex Relationships Among Wheat and Wheat Flour Supply and Demand in Morocco, the Two Major Moroccan Milling Industries, and the Farine Nationale Subsidy (1990-1993)**

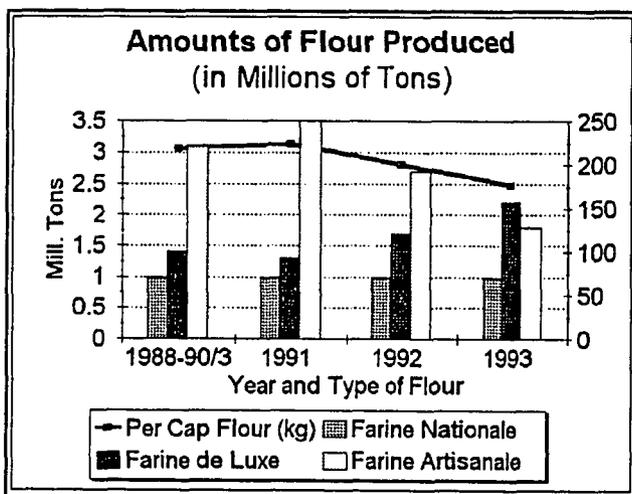
**Figure 4**



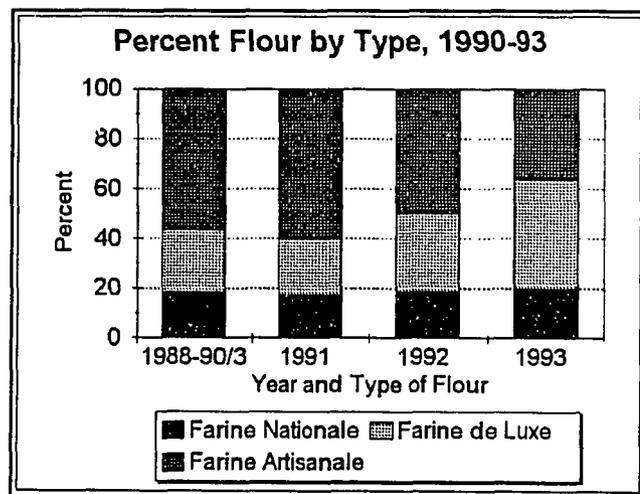
**Figure 5**



**Figure 6**



**Figure 7**



Thus, the reform program would affect the industrial soft wheat mills on both the input and output sides:

- On the input side: from completely controlled supply with no spatial or temporal price variation to completely free supply with constant price variation in time and space; and
- On the output side: from approximately 50 percent of flour in an average year sold at prices and in markets dictated by GOM, to complete freedom of output pricing and marketing.

For much of the past 60 years, this key Moroccan industry has operated much like a regulated monopoly (for example, like electric utility companies in the United States) with a number of important differences that reflect its Gaelic origins:

- There is no "natural monopoly" involved in wheat milling;
- There is no "public commission" with oversight powers over the industry; regulation is done in secret by ONICL; and
- Extensive subsidies and government intervention involved in *péréquation* eliminate much of the competition for inputs and output markets that could easily exist.<sup>42</sup>

In the first year of the project, as some of this complexity became known, it was realized that a more detailed approach to studying the industrial milling industry and its competitors was needed. This study framework was provided by Falgon in May 1992. This document spelled out a plan of work to be carried out over the following year. The recommended studies were to be conducted under the direction of Falgon of ICEA/Paris and in collaboration with Comité Professionnel de la Minoterie (CPM), ONICL, Agro-Concept, MAMVA/DPAE, and INSEA.<sup>43</sup> The studies or research projects were:

- Industrial and consumer demand for wheat flour;
- A representative sample survey of artisanal mills;
- A baseline study of all of the durum/barley mills (the MICS or *orgeries/semouleries*);
- A linear programming "transportation model" to examine potential changes in the future structure of the industry; and
- In-depth interviews of industrial millers and analysis of the likely structural and behavioral reactions of the industry to free competition.

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<sup>42</sup> *Péréquation* is a system of "price equalization" where subsidies permit all mills to receive bread wheat at one pan-seasonal and pan-territorial price and all FNBT quotas to be delivered to dispersed wholesalers at constant prices.

<sup>43</sup> CMR Report No. 10; see also Wilcock, CMR Working Paper No. 9, for another description of this seven-step applied research and industrial extension program.

### 3.3.2 Consumer and Industrial Demand for Wheat Flour

A team of ICEA and DAI consultants carried out the demand studies in the fall of 1992. The characteristics of consumer demand were explored in 18 urban and 9 rural focus group guided discussions. The results were reported in McDermott and Bouzri (CMR Working Paper No. 11). This demand study looked at consumer recognition of different cereals and flours; patterns of flour use in Moroccan cooking; buying patterns and perceptions of flour availability; how consumers judge the quality of flours and resulting products (bread, couscous, noodle products, and so on); and the role that price plays in buying behavior. Several summary points illustrate the richness of the results of this information collection effort:

- It confirmed that the practice of consumers having their own wheat ground into flour was very widespread. Artisanal flour is not an "inferior good"; many consumers prefer it;
- Moroccans often mix flours in the preparation of the large amounts of bread they consume. Interestingly, commercial mixtures of durum and soft wheat flours are not available in the national markets, which one would expect to see in a free market;
- Moroccan flour consumers are sophisticated in their ability to judge wheat flours and particularly to judge the results of using different flours in breads;
- There are two extremes in flours in terms of quality: FNBT, which is perceived to be of generally poor quality (the structure of incentives causes many millers to produce a truly inferior quality flour) with the only redeeming feature being its low price; and artisanal durum flour, which, when the wheat is well prepared and the flour well milled and cleaned, is the flour of choice and the standard for taste and quality. Barley flour, more important in the drier southern and eastern parts of the country is harder to use well in making bread of a quality preferred by consumers and is losing market share; and
- Regardless of taste preferences, many Moroccan consumers are obliged to make their consumption decisions on the basis of economics and will use a variety of tradeoffs among cost, quality, and taste preferences to stretch their food budget and take advantage of large seasonal differences in the availability of local cereals that can be ground artisanally.

Bread was traditionally made in the home. Although some commercial bread is made in traditional round loaves, much is produced in French-style baguettes. Virtually no industrial-scale bread-baking occurs in Morocco. For tax reasons, bakers buy most of their flour from wholesalers rather than directly from the industrial mill. Bouzri and Baudonnel (CMR Working Paper No. 12) point out that bakers want flours that permit a good bread yield (600 loaves of 200 grams from 100 kilograms of flour) and that do not vary in quality from one batch to another. However, this demand for uniform quality in flour is not met because millers have little control over the quality of grain they receive under the ONICL supply administration.

The ICEA/DAI studies concluded that Moroccan wheat flour demand is very sophisticated and price responsive. However, industrial millers, imprisoned in their regulated world, are meeting neither consumers or industrial demands for flour quality and a more diversified set of products. New product innovation has been stifled by the operation of the regulated, official marketing channel. Consumer interests are not well served. Food technology and new product development is woefully underdeveloped in the Moroccan wheat flour subsector because subsector controls and subsidies suppress most innovation, except in devising new ways to cheat the system and collect bigger rents.

### 3.3.3 Sample Survey of Artisanal Mills

During the harvest period in 1992, personnel from INSEA/Rabat (assisted by staff from the ONICL regional offices) conducted a sample survey of artisanal grain mills and their clientele. CMR funding covered all of the costs of the INSEA faculty and student interviewers. The interviewer team was able to interview 360 mill owner/operators (4 percent of the total) and 2,134 clients of those mills (approximately 6 clients per mill). This was the second national survey of the artisanal mills in a three-year period and there was substantial improvement in some aspects of the methodology used and the usefulness of the results.<sup>44</sup>

The report on this work authored by Belghazi et al. (CMR Report No. 13) contains a wealth of information and increased the understanding of the role of the artisanal mills in the subsector, particularly under drought conditions. Even though the data were collected slightly after the first drought harvest of 1992, the aggregate statistics already showed a drop of 27 percent in total national millings from the previous survey. The drop in artisanal millings is thought to have been much greater after the second consecutive drought harvest (1993).

Because almost all grain not milled by the industrial mills is transformed in the artisanal mills, the surveys enable the observer to better assess overall wheat flour production in the country — particularly because the output of the industrial mills has been known, and will continue to be known, with some precision because of ONICL control and data collection systems in place. As to the future competition between the two main milling branches, price competition depends on the import price of wheat, the relative scarcity of local wheat in a given "consumer year" (following a harvest), and preferences having to do with flour quality and convenience. Presumably some upper income and middle class consumers prefer a wider range of industrial flour products and all consumers would prefer flours with consistent price and quality.

One category of artisanal mill that would be worth further study is the larger urban mill with greater milling capacity and the ability to sift flours mechanically for the desired level of bran removal. Many of these mills now do a thriving business in the production of custom flours and custom flour mixtures for discriminating urban consumers. The more they are able to produce products that directly compete with the products of the industrial mills (but also allow the consumer to maintain his own quality control over the grain to be milled), the more these urban mills will siphon off part of the flour market that might otherwise go to the industrial mills. The ICEA report indicated, under reform scenarios that include suppression of the FNBT subsidy, that price competition should favor artisanal mill products over those of industrial mills, particularly in the consumption year following an average or very good local harvest. Moroccan preference for durum wheat (or a mixture containing durum) for bread will also favor the artisanal and MICS mills (discussed below). In the longer run one can anticipate that Moroccan tastes will evolve away from the current massive consumption of bread with other more refined wheat products (such as noodles), with other types of nonwheat dishes playing a bigger role in the diet. However, in the short run, it seems fairly certain that the smaller-scale artisanal mills will continue to play a big role in Moroccan flour production.

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<sup>44</sup> The first national survey was reported in the joint ONICL/INSEA publication, "La Minoterie Artisanale," ONICL, January 1990.

### 3.3.4 First Census of Industrial Durum and Barley Mills

The third channel in the Moroccan cereals milling subsector is the smallest and one of the most interesting. It consists of 50 to 60 smaller industrial mills that produce and sell durum wheat and barley flours. Many of these businesses have been set up since the liberalization of durum and barley marketing in 1987 and this industry is not supervised in the same intensive manner by ONICL as the larger industrial mills. In addition, since 1985, the mills have been formally authorized to mill durum wheat and the number of units has increased dramatically. Ten years ago there were a handful of old factories. There were 41 units in 1991, and 53 in 1993. The quantity of durum wheat milled tripled over the three-year period from 1988 to 1991. Forty-five of the 53 MICS are located in greater Casablanca (including Settat) and in the Fes/Meknes and Marrakech regions. The growth area for MICS has been durum processing with almost equal attention given to two groups of products, durum flours and semolinas.<sup>45</sup>

CMR financed this census/survey in 1993 and ONICL personnel did most of the data collection. Although production by the MICS represented only about 5 percent of the industrial or artisanal mills in 1992, the project was interested in them for many reasons:

- Their rapid growth in numbers and level of production;
- Their operation in an almost completely free market environment and what this might offer in the way of lessons for the larger industrial mills; and
- Their reputation for quality of product (in what was essentially a niche market) and for innovation in marketing (several of the larger MICS were the first mills in Morocco to offer their products in smaller, disposable paper bags — rather than in the returnable cotton bags used by the industrial mills — a practice that has since spread into the "stodgy" industrial mills).

The report on this survey by Achy (INSEA) and El Bouziri (ONICL) (CMR Report No. 17) provides much technical and marketing information on this industry segment that has emerged recently and will, in essence, probably merge with the top end of the artisanal mill category in the future.<sup>46</sup> As a first-ever census document, this report contains a great amount of technical information on the mills themselves, the types of machinery they contain, and also much useful economic information concerning:

- The structure and seasonality of cereals supply to the mills;
- Variation in prices paid for cereals and transport;

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<sup>45</sup> Semolinas (*semoule* in french) are wheat particles that are larger than flour particles. Semolina comes from the first passages of the wheat through the mill rollers and can be mechanically separated and sold as is or further ground into flour. Semolinas are sold in Morocco by particle size categories: fine, medium, and large. Semolina is the basis for making couscous. Semolinas are products of the normal milling of any wheat, and soft wheat semolinas are also sold.

<sup>46</sup> As the milling industry evolves in Morocco, it will probably be useful to drop the old mill category names (Minoteries Industrials [MI], Minoteries Artisanals [MA], MICS) and adopt ones based on a more useful set of functional distinctions, such as ability to mechanically sift flour, types of products produced, or size of operations. This is particularly true because large MAs will be able to buy wheat and produce flours for sale on their own account rather than just providing a milling service for hire.

- Levels of production and employment by mill size; and
- An estimate of the structure of costs of production and profitability.

The two recent years of drought (1992 and 1993 harvests) have put many of these new or newly reorganized MICS in a very difficult position and have slowed the rapid growth in that industry segment. Their biggest problem was lack of supply of durum for a period of about two years (summer of 1992 to summer of 1994). Domestic supplies became very scarce and ONICL was still maintaining tight control over imports. By the end of 1993, the two MICS professional associations had managed to get ONICL authorization to import substantial amounts of durum for the MICS, but much of this never reached the intended owners because importers found that they could do much better by selling to other buyers on the domestic market.

Another sign of the difficulties that this new industry group was having was its inability to meet the relatively modest needs of new industrial users of semolina such as the Tria durum noodle factory in Casablanca. It is also clear that had groups of MICS (or their designated importers) been able to import durum freely (even with relatively high tariff protection), they could have captured an even larger share of the Moroccan flour market. If, as is quite likely, some of the current industrial mills (MI), under liberalization, return to the production of durum products (flour and semolina), many of the smaller MICS will be doomed because they will not be able to take advantage of the economies of scale that drive innovation and profitability in all aspects of cereals milling: purchasing, flour production, and marketing (including packaging), relationships with wholesalers, or advertising to consumers.

### 3.3.5 Linear Programming (LP) Transportation Model

The CMR project provided support to its subcontractor, AgroConcept of Rabat, to develop a linear programming transportation model that could address one primary and several secondary questions. The primary question involved estimating the impact (at the level of Moroccan cities) of elimination of the policy of *péréquation* — or the transport and storage subsidies that have allowed ONICL to order wheat delivered to industrial mills at the same price throughout the country and throughout the year. In addition, subsidies on the transport of the FNBT allow that product to be available for sale at the wholesale level at a uniform price at designated locations throughout the country. The availability of the model (ideally at ONICL and DPAE) would have allowed secondary questions to be addressed, such as how the addition of new grain silos in different Moroccan ports would change the potential competitiveness for available markets of mills in different parts of the country.<sup>47</sup>

Personnel at AgroConcept first developed this model in the summer of 1992 and initial results of runs to estimate the elimination of the *péréquation* subsidies were published by Omar Aloui (CMR Working Paper No. 13). These initial LP results confirmed conclusions drawn by others using simpler methods:

- Three mill locations seem to be clear losers if subsidies are withdrawn: Midelt, Arrachidia, and Ouarzazate, because of their relatively small captive market sheds and the distance wheat (either from domestic sources or imports) must travel to get to them;

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<sup>47</sup> The transfer of the model through a training program was planned but cancelled when USAID eliminated third-year funding.

- Two other areas seem to be clear winners: mills located in Oujda in the far east and in the south (Agadir and Goulmine) have relatively good access to supply by sea and to large geographically isolated markets (the Algerian border area and the Saharan provinces);
- In other parts of the country, the location advantages and disadvantages are less clear. Currently Casablanca seems to be a very good location because of the port capacity there and the presence of a very large market in greater Casablanca, which also contains much of the country's flour wholesaling (*le Wall Street de Farine*). However, mills in Fes/Meknes are located in the midst of one of the top soft wheat producing areas and are close to large population centers.<sup>48</sup>

The Moroccan wheat milling subsector lends itself well to analysis using the LP model. The original model served as the basis for a much more complex mathematical programming model developed by Channing Arndt at Purdue University. This model has been used primarily to examine the potential effects of widely fluctuating domestic production and, under different trade regimes, the transmission of world price variation into the domestic economy and the geographical variation in those impacts across the major population centers of the country (CMR Working Paper No. 14).

### 3.3.6 In-Depth Interviews with Millers and Strategic Analysis of the Industry and Its Future

Concurrently with some of the work described above, a team composed of personnel from ICEA and Agro-Concept interviewed the owner and/or manager of more than 30 industrial mills across all the regions with mills in Morocco. The objective of these meetings, in addition to the collection of specific information, was to "take the measure" of these firms in terms of their current technical, managerial, and marketing expertise, and in terms of how they would likely respond to a true liberalization of the industry.

Again, the portrait of many of these firms confirmed the worst aspects of an industry operating as a regulated "utility" with little necessity to move beyond minimum levels of technical, managerial, and marketing competency. Because very few of the firms were keeping financial accounts according to established standards, it was impossible to conduct the type of firm-level financial analysis that is usually part of a strategic business analysis. The complete report of the findings of this and many of the other component studies done under the wheat milling subsector analysis program are contained in Falgon (CMR Report No. 14). The industry is diagnosed:

- In technical terms (age of machinery, technical milling competency, and hygienic conditions within the mills);
- In terms of miller mastery of the quality of inputs (almost no ability to specify the technical characteristics of the grain, until recently with the recent introduction by the millers'

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<sup>48</sup> After feedback from the milling industry concerning the initial LP modeling results and "cost of transport" figures judged not to reflect the true complexity of current cereal and flour transport, ICEA (with funding from the millers' association, the APM/CPM) is currently conducting another, more detailed study of actual transport costs. It is hoped that initial results from this study will be available at the CMR final seminar in September 1994. The fact that the millers themselves are funding this additional work represents a tribute to the quality and professionalism of the CMR/ICEA milling investigations and the degree to which the millers are taking the reform program seriously.

association of testing laboratories in the ports for imported wheat);<sup>49</sup> and their potential ability to procure supplies in the local market in an "average year" (averages 45 percent over the country, with high percentages in three provinces, and very low percentages in three others); and

- In commercial terms, the analysis focused on the role of FNBT. Overall FNBT is playing a smaller and more variable role in company revenues but, still, about 25 percent of mills produce virtually only FNBT and thus survive because of the subsidy payments and various forms of cheating. At the other end of the spectrum, 30 percent of mills have concentrated on the production of improved Farine de Luxe and this group contains most of the industry leaders. Very few firms are using modern techniques of business and market planning because the continuing regulation does not permit them to follow through economically.

One of the report's most controversial conclusion was the statistical evidence (CMR 14, pp. 59-62) of widespread disregard for the official norms concerning bran content (officially measured by the percentage by weight of mineral ash left after flour samples have been burned — this measure is called the "ash content") that must be associated with current patterns of declared flour production. In some cases this implies that FNBT is being produced with extraction rates of higher than the official 80 percent, implying a greater production of Farine de Luxe that can be sold at much higher prices.

The diagnostic work done with the millers is best summarized by the analysis that grouped them into four groups according to their attitudes about pending reform and their likelihood of survival in a free market:

- Twenty-five percent of existing mills that are currently "living off" the FNBT subsidy alone will probably not survive long in a free, competitive market. They are strongly opposed to the reform program;
- Twenty-five percent are real industry leaders, and have already started preparing for competitive life post-reform, and will likely survive. They favor the reform but are maneuvering to get their "best deal";
- Fifteen percent are in an intermediate state of readiness and are concerned and skeptical of the reform program. Their survival will depend on strategic decisions made by their management; and
- Thirty-five percent are also in this intermediate state but have begun to take positive actions and are likely to survive.

In addition to several firms that are likely to go out of business under the pressure of market competition, some are likely to be purchased by stronger mills as the industry will see the formation of national-level "milling groups" that will be able to take advantage of the economies of scale inherent in

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<sup>49</sup> Millers at least now can know what quality they are receiving with a neutral certification done by an internationally recognized testing company. This positive innovation has been resisted by the importers and, oddly, by ONICL, which is a clear sign of lack of neutrality in marketplace supervision.

industrial milling. There is some concern that more attention should then be given to the monitoring of structural concentration in milling and to responding to Morocco's lack of anti-trust legislation.<sup>50</sup>

After an analysis of some of the competitive factors that will govern future competition with MAs and MICs and other market factors that will influence future survival rates, the Falgon report analyzed briefly the need for a series of companion measures that could/should accompany the market liberalization program to reduce the negative consequences of the transition to freer markets. This has also proved to be a controversial area for policy analysts with opinion divided into two camps:

- The "ideological hardliners" who feel that the Moroccan milling industry has had decades of rent-filled existence, soaking up subsidies, and basically is not in need of any further help from the public sector; and
- The "pragmatists" who recognize some validity to the contention that GOM is massively changing the economic rules of the game for investors in wheat milling and therefore is obligated to help firms make the transition to free competition, including some possible financial compensation for the group of owners who are most negatively affected by the changes and are likely to go out of business with a large loss of capital.<sup>51</sup>

The types of companion measures mentioned by Falgon include those that might normally be considered to be legitimate functions of the state: industrial extension and training programs (particularly in technical and management areas) and elaboration of improved cereal grading and flour quality standards that will help the industry perform better in meeting consumer needs. Other suggestions include a possible role for the state in helping to promote improved private marketing and storage of Moroccan grain to make it more competitive with imports and provide more information and protection to Moroccan consumers, and working out with the milling profession a restructuring plan that would both promote private competition along quality and price lines but also give some weight to the interests of investors.

Moroccan millers have looked enviously at the example of the cohesive French milling industry, which is a rather extreme case of an industry group that has been able to work out compensatory systems (with political support and authorization from the French government) that have cushioned the transition of an industry in chronic overcapacity for 20 years. From several years of work with the Moroccan industry group, it is clear that Moroccan millers are not as cohesive a group and therefore can probably expect to put together a compensation package limited in amount and duration.

It has been the position of CMR project staff to encourage the government and CPM to look pragmatically at these issues and begin to find common ground that will help facilitate the implementation of reforms. The goal is to achieve market reforms so that the entire population can enjoy the efficiency

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<sup>50</sup> We should hasten to add that this potential threat of concentration in the milling industry falls far short of the situation in oilseed processing where the ONA Group totally monopolizes an entire subsector and is likely to increase its vertically integrated domination with its rumored interest in buying COMAPRA (seed production and distribution and farm-level collection of the crop) assets when those are privatized — a GOM program receiving USAID assistance!

<sup>51</sup> Most of these arguments center around the elimination of the *péréquation* subsidies that allowed mills in unfavorable geographical locations to stay in business because their input costs and effective output prices would be equal to those of mills in Fes or Casablanca. They also point out that their investment in more remote regional centers was encouraged by GOM as part of a *pole de développement* strategy that saw grain milling as forming the core of a decentralized agro-industrialization program (otherwise they might have invested in Casablanca).

gains — lower prices for a bigger range of higher-quality products — in ways that will not shift the burden entirely to consumers in the short run. Real world economic reform is neither neat nor pretty. The nature of the political-economy tradeoffs and "deals" must be judged in a broad cost-benefit calculus.

Finally, it is of interest to contrast GOM and World Bank attitudes toward the reform of the sugar and wheat milling industries and the types of companion measures that might be needed. To get reform in the sugar subsector, GOM and the Bank proposed a sizeable "industrial restructuring loan" when what was involved was the privatization of 12 of the 13 firms that make up the industry. The wheat milling industry, completely privately owned but facing structural change that will in all likelihood be much greater than that in sugar, has not yet enjoyed such consideration.

### 3.4 REFORMING PUBLIC INSTITUTIONS TO PROMOTE SUBSECTOR MODERNIZATION

As the Moroccan economy becomes larger, more sophisticated, and more tied into the fast-changing world economy, the level and types of services provided by GOM must evolve. The government has chosen to follow the path of liberal, market-based economic management. This choice requires that GOM abandon strong traditions of economic *dirigisme*, regardless of whether the origins of this policy style come from traditional Moroccan political-economic management, where the economic hilltops were controlled to benefit a small upper class, or whether this style was born during the protectorate period, or both.

Experience in many countries has shown, however, that making these kinds of fundamental economic reforms does not come quickly, particularly when the changes are not forced by absolute necessity. Similarly, changes in bureaucratic attitude do not occur overnight. If we want to see changes in bureaucratic behavior, it is important that clear policy shifts toward liberalization produce clear changes in the assigned functional responsibilities given to public institutions. Attitudinal change will come as experience with private sector management of the entire subsector shows that liberalization is not only a possible alternative, but also a preferable one. Administrators and staff must experience the gains that can come from greater system efficiency and more product choice and value to consumers.

In this section we look at four aspects of needed institutional change in MAMVA that have been part of CMR project work:

- How agricultural sector liberalization would affect the data collection and analysis responsibilities of MAMVA as a whole;
- Objectives for the institutional restructuring required at ONICL to convert the organization from a "control institution" to a supervisory and promotional institution;
- How the 20-year impasse on the future of the SCAM/CMA cooperatives can be resolved; and
- Listening to the consumer: the institutional future for Moroccan cereals and cereal product demand analysis.

### 3.4.1 Changing Informational Needs of MAMVA

As liberalization becomes more of a reality for all parts of the Moroccan agricultural sector, the structure and functioning of MAMVA should begin to change as well. Although many MAMVA structures will remain the same, those that have been devoted primarily to directing private sector production and marketing activities will presumably lose some importance, while those portions of the ministry that provide informational, promotional, and other supporting services will presumably grow in importance.

The first year of work in Morocco under the CMR project revealed some of the strengths and weaknesses of MAMVA's data collection and analysis capabilities. The CMR project, in cooperation with the USAID MAMVA/DPAE Institutional Strengthening Project (182) and the USAID Morocco Agribusiness Promotion Project (MAPP), collaborated in undertaking a systematic review of MAMVA's data needs and made a series of recommendations in Benatya et al. (CMR Report No. 12).

This is an important report that has not received the attention in MAMVA that it deserves. The team that did the work, coordinated by Dr. Wally Tyner of Purdue, was a strong one and it knew the subject matter, both from the point of view of the "production" of statistical information, and from the point of view of being sophisticated consumers or analysts of this information. Major data gaps or weaknesses were glaringly apparent. After first reviewing the general needs for information in a free market economy, the study describes and then assesses the adequacy of current MAMVA data collection systems. It then describes what an ideal MAMVA data collection system should include, and, finally, presents a set of specific (often technical) recommendations on how current MAMVA data collection can be improved. The following are some of the report's more important conclusions and recommendations with direct relevance to the cereals subsector:

- The strongest data collection in MAMVA is the production data collection system operated by the Division de la Statistique in MAMVA/DPAE (this unit has received significant assistance from the USAID 182 project for eight years). This data collection system is much stronger than systems to collect information on marketing, transformation, and consumption of agricultural products.<sup>52</sup> As the agricultural economy becomes increasingly market-driven, it is imperative to correct this imbalance in the quality and scope of the ministry's data collection. This was the top MAMVA information need identified by the team;

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<sup>52</sup> These weaknesses were revealed in the Phase I work done by the "marketing group" and reported in Aloui et al. (CMR No. 5, January 1992). They were also recognized by another large study of the cereals marketing system conducted under French funding, see Saad Belghazi, *Etude sur la Mise en Marché des Céréales au Maroc: Contribution à un Suivi du Marché Céréalière* (Final Report in three volumes, Rabat, 1992), and *Rapport de Synthèse* by Anne-Marie Jouve, I.A.M., Montpellier, France, 1992). This study included the first study of artisanal grain milling and did much interesting work looking at the role of marketing within the farm household in two study zones (Haute-Chaouïa and Zaer) but did not undertake data collection on the structure and functioning of cereals marketing channels. Thus, with CMR choosing to devote its resources to increasing understanding of key policy issues — in areas such as industrial milling, trade reform, improving price data collection at the souk level (see next point), and impact modeling — little work was done by either project in terms of devising improved methods of data collection in post farm-gate marketing, processing, and consumer behavior. This should be a priority for MAMVA, once subsector liberalization is fully under way.

- Although some good data sets now exist in Morocco, the analysis of this data and the dissemination of results lag far behind.<sup>53</sup> The highly trained and capable field information collection staff (at the *services extérieurs*) of the ministry are underutilized. Combining these factors, many small supplementary studies to better understand the economic behavior of entire subsectors, which could give the highly trained Rabat and field staff an opportunity to exercise their data collection and analytical talents, are simply not being done. This may be due partly to weaknesses in the management of the applied research and dissemination functions, and partly to the fact that too many resources are still being directed to "less-productive" parts of MAMVA (less-productive in terms of market orientation). Associating the technical specialists of DPV and the Direction d'Élevage (DE) more closely with the analysts in DPAE could help break this bottleneck;
- There have been substantial overlaps between DPAE and ONICL on the collection of market price data for cereals. These were highlighted in the report with recommendations that one of the two groups should take primary responsibility for market news data collection and dissemination. Subsequent to the report, it was decided that ONICL should be the primary cereals MIS data collector and producer of timely market news reports. ONICL would turn over this data to other groups like DPAE, which would be responsible for medium- and longer-term analyses. With CMR assistance, ONICL has been busily pursuing the improvement of its MIS capabilities, but almost no attempt has been made to increase coordination with DPAE. DPAE is still conducting its parallel collection of cereals price information, a clear waste of MAMVA resources; and
- There is a need for a census of agriculture in Morocco — the last one took place 20 years ago. Preliminary planning for this census has recently been done. Two of the most important missing sets of information are the demography of the agricultural work force and the structure of agricultural land ownership and utilization. Without this information (such as production of the four major cereals, by farm size, and by province), it is impossible to estimate accurately the distributional impacts of key agricultural policy options. That these data are not available is not surprising given their potential political sensitivity. Without clear data and analysis, however, certain agricultural interests will continue to hide behind the contention that policies (such as high support prices for soft wheat) cannot be changed because of the negative impacts this change will have "on our small farmers." More sophisticated and politically relevant analyses can be conducted on this and other policy issues by linking improved production and marketing data collection systems to the changing picture of the structure of land ownership and use in Morocco. This changing picture of land ownership structure will, in turn, come from the badly needed census of agriculture.

MAMVA can thus do its part to contribute to the development of more open and informed policy debate in Morocco. The question of who is getting the bulk of the subsidies for key crops like soft wheat and sunflowers is certainly relevant to the increasingly free public debates on GOM economic policy.

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<sup>53</sup> This is nowhere better illustrated than in the growth of MAMVA/DPAE, where more than 30 persons have been training with advanced degrees in agricultural economics and statistics (under funding by USAID) but where the published analytical output available to other parts of GOM or to the general public has increased little from the very low levels of the past.

Some of MAMVA's information needs, well described in the Benatya report, are also a reflection of the need to restructure MAMVA as a whole. This topic exceeds the mandate of the CMR project, but does reflect the frustration felt by many MAMVA cadres and foreign colleagues in trying to work within the existing system. The basic structure of the ministry reflects the past reality of a top-down command economy, where technical/engineering and planning concerns were more important than economic analysis and promotional concerns. This is not an institution well structured to face the realities of a market-driven economy. Despite the many years of donor assistance to MAMVA, this fundamental problem has not been addressed.

### 3.4.2 Identifying the Functions of a Reformed ONICL

ONICL is the most important GOM institution concerned with the cereals subsector, and particularly with soft wheat. ONICL was created during the protectorate period (1937) and, in the first two decades of its life, was part of its sister institution in France, ONIC (Office Nationale Interprofessionnel des Céréales). This Franco-Moroccan heritage created an institution with special strengths and weaknesses. Probably the biggest strength is its *interprofessional* nature. As an independent agency under MAMVA supervision, its mandate covers the entire vertical reach of the cereals subsector, from farm-gate to consumer. This allows ONICL to cross boundaries that would traditionally limit ministerial agencies. Also, mirroring the way the subsector is organized makes it more likely that ONICL will understand the inner workings and problems of the industries located at different levels of the subsector. However, this approach also reflects a state corporatism or *dirigisme* view of the world where government officials and directors of the large institutions in the subsector coordinate policies that regulate subsector management. This is often not a positive state of affairs — it can lead easily to officially sanctioned, noncompetitive "deals," "arrangements," and other forms of gross economic inefficiency. Thus, the line between the positive and negative aspects of this heritage is a fine one. This situation requires firm policy guidance during the reform period, if the interests of efficiency and subsector progress are going to be served.

ONICL has been one of most important and active GOM partners in the CMR project. At the same time, ONICL has been in a difficult position during the course of the project because it has had to prepare for the transition to a liberalized market without receiving clear GOM instructions to do so. ONICL is still being required to implement the older *ancien régime* policies that are still on the books because the new *loi ONICL* has not been presented to the National Assembly. That, coupled with the fact that many experienced persons in the organization have known only the control system, has led to much ambiguity in staff behavior and attitude.

Some critics, looking at its performance to date, have asked whether ONICL can ever make the change from "manipulator" of the *soft wheat filière* to "neutral regulator" and "promotor" of subsector development. The critics suggested that the easiest route for the GOM, at least in functional bureaucratic efficiency, would be to abolish ONICL and assign its functions elsewhere in MAMVA. In many respects, pulling the plug on ONICL would be the easiest path to follow. There would be no problems with cadres reluctant to play new roles that go against work habits acquired earlier in their career. It would also avoid problems of private sector expectations that ONICL would never be able to give up its role as *gendarme*.

However, this does not seem to be the way GOM, like many governments around the world, deals with old institutions. Rather, they keep them alive, perhaps to provide continued employment to a certain number of cadres in case they might be needed in the future, or to avoid the possibility of political conflict. Whatever the reasons and however this happened, it seems that GOM would like to

maintain ONICL in the market-oriented future. From the beginning of the project, CMR accepted this "decision" and has attempted to promote the more difficult process of institutional reform at ONICL.

After two years of work together, the former ONICL director, Mohamed Guerraoui, and the project Technical Committee felt it was time to take a close look at what the objectives and functions of a restructured ONICL should be. DAI assigned an experienced institutional analyst, Dr. Max Goldensohn, to the task. He spent five weeks in Morocco working closely with an internal ONICL committee on "painting the picture" of what the "new ONICL" should look like. The resulting report (CMR No. 16) was presented to a large gathering of all upper- and middle-level personnel in the agency in May 1993.

The Goldensohn report, in its analysis of past ONICL functional responsibilities and tasks and the likely future tasks to be undertaken, indicates that the future role would be centered on four groups of activities:

- Information services;
- Subsector promotional services;
- Management of GOM food security operations in cereals; and
- Technical Support Services.

#### 3.4.2.1 Information Services

Information is at the heart of government support to and promotion of any commodity subsector in a free market environment. Other actions that might be taken by the state and subsector groups acting together — such as changing specific rules of the game (laws or policies, for example) to optimize system performance with respect to certain politically determined criteria — all require substantial amounts of information and certainly a detailed understanding of how the subsector functions. ONICL would provide three major categories of statistical information reports to private sector partners and to other interested parties (donor groups, government agencies, academic and analysts, for example):

- *The National Cereals Supply Utilization Report (Le Bilan Céréaliier)*: This report would focus on aggregate trends in supply (from national production and imports) and demand, stocks, and utilization. It would also report on relative supply/price of cereals and flours in national markets and in import channels. The report would be produced on a monthly basis and be available in either electronic or paper formats. Its value in the cereals trade would be that it would contain an aggregation of information that would be unavailable, at that level of precision, from any other source. The unique data sets provided by GOM would be those on national production forecasts (from MAMVA/DPAE), millings (from GOM surveillance of the all three categories of mills), actual and "declared" imports,<sup>54</sup> and

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<sup>54</sup> Annex II of CMR No. 16 contains a description of the European Union "import certification" system where by importers are required to declare their plans to import cereals and deposit in specified banks a guarantee that is forfeited if the imports are not executed, delayed with authorization, or canceled for acceptable reasons. While this might be seen as a restraint on the functioning of a free market, it does afford an opportunity for the GOM to exercise its responsibilities in terms of food security in a free market setting.

changes in commercial and on-farm stocks (a complex data collection task that will require some methodological experimentation and that should be a MAMVA/ONICL top priority).

- *The Market Information System:* Although ONICL and other GOM agencies collected information on market prices for many years, many of these series were not accurate or complete due to years of inattention.<sup>55</sup> With CMR placing great emphasis on future information roles for MAMVA, plans were launched in a report by Falouss et al. (CMR No. 9) for an expansion and revitalization of cereals price/quantity data collection in rural *souks* and urban *halles*. In 1993 CMR financed additional technical assistance and training in support of the MIS development plan. It is now felt that the MIS, while of interest to all market participants, may be of greatest use to smaller market participants who are interested more in what is occurring in specific markets or in opportunities for arbitrage. It also provides an opportunity to begin to construct the statistical database that must underlie the establishment of statistical "basis relationships" between a national reference market and local markets (see section 3.1.3 for more discussion of national reference markets);
- *The International Cereals Situation Report:* This report would cover major trends in international supply and demand factors, price trends, and other news that might affect future markets. As advised by Professor Abbott in the early days of the project (CMR Report No. 3), the major strategy is to obtain most of this information from the main international sources of cereals market news and analysis (USDA, OECD, World Wheat Board, commercial services such as Reuters, and so on) and repackage it in forms that would be most useful to the Moroccan reader. This is particularly true for basic international market data collection and the construction of sophisticated computer models for forecasting future prices. The key to this strategy of "intelligent borrowing" is to develop and maintain good professional relationships with personnel in the groups that are the major international producers of high-quality market intelligence.

The relationships between these three types of data in the decision making of Moroccan businessmen involved with the cereals subsector are represented in Figure 8. There we see that smaller businessmen may make extensive use of the MIS and price information from the national reference markets in Casablanca. In addition to this MIS information, smaller businessmen base their commercial decisions on other market intelligence from nongovernmental sources and on their own experience and knowledge of the markets. In the same manner, large businesses (millers and importers) may find that they use their own information in conjunction with the International Market and Supply Utilization Reports to make their buy/sell decisions.

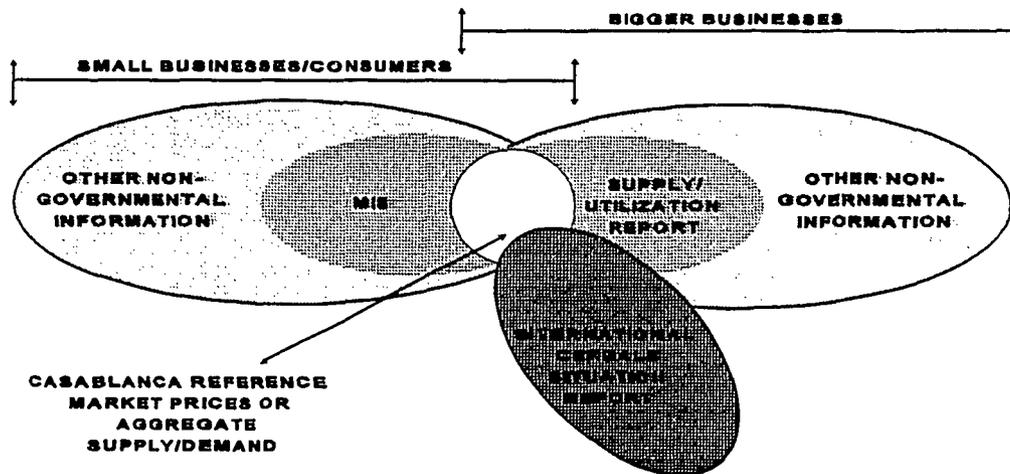
In addition to the above market information reports, ONICL would be called upon to provide other information services, which are described in the Goldensohn report. These include:

- Industry studies and documentation. Many of the studies conducted under the CMR project are the types of applied analytical work that should be undertaken. In addition, ONICL's documentation facilities should be expanded and made available to its partners in the subsector;

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<sup>55</sup> The ONICL souk price data were subject to extensive analysis in CMR Phase I, and the results of this effort were presented in Aloui et al. (CMR No. 5, January 1992).

FIGURE 8  
 BUSINESS OPERATORS' NEEDS FOR INFORMATION  
 ON CEREALS SUBSECTORS



- Informational products. ONICL's publication of the *Monthly Bulletin* has been a positive initiative that was undertaken during the period of the project. The APM/CPM has recently begun to publish its own newsletter, partly in response to ONICL's effort, and partly on the initiative of the new CPM President, Mr. Sebti. Another information service that was recommended was the establishment of a geographic information system (or GIS) that could use new computer technology to represent data in map form; and
- Computerized on-line information services. As ONICL's in-house computer facilities develop, it can begin to make information available for computerized on-line access through digital data transmission, using facilities such as the PTT's "Magripac." A good example is the *bilan céréalier*, which, if it is done correctly, will contain time-sensitive information that some users will want to have as soon as possible. (For other computer services, see below.)

#### 3.4.2.2 Subsector Promotional Services

One of the most important changes in attitude and approach is for ONICL to become client-oriented and to see its role as promoting the interests of the businesses that make up the subsector. ONICL has the opportunity, if it wants to accept the challenge, of becoming a pioneer in actively promoting business development. The Goldensohn report suggests five ways in which ONICL can begin to play this important new role, alone or in cooperation with professional associations of the private firms involved in different industries:

- Providing general promotional advice and services, including:
  - Representing subsector interests to other parts of GOM;

- Promoting subsector products in domestic and foreign markets;
- Providing advice to new investors. This also could involve changes in the GOM investment code to specifically favor investment in areas such as milling;
- Managing an investment promotion fund; and
- Helping to "broker" partnership arrangements between Moroccan and foreign firms;
- Maintaining a **subsector registry and database** on all new mills, storage facilities, and so forth. ONICL can then provide new investors advice on location, competitive conditions, levels of capital and personnel required, for example. This capacity can be reinforced by the GIS capacity;
- Contributing to the **maintenance of subsector ethical standards**: If GOM wants to promote subsector growth and increased investment, it can help to develop standard commodity contracts, working with professional associations on the respect of legal contracts. This is particularly important if GOM wants to encourage the participation of foreign capital, which is often frightened off by the Moroccan private sector's reputation for disregard of legal contracts;
- **Encouraging of competition among private firms**: Many things can be done to achieve this end, ranging from business-support actions to help new firms become more competitive, to contributing to the establishment of appropriate GOM anti-trust laws. The application of most anti-trust legislation requires a good statistical analysis capability to estimate measures of and changes in structural concentration and market share;
- **Strengthening professional associations**: APM/CPM and AMIPROS (cereals importers association) are among the few professional associations in the cereals subsector that are viable and can actively represent the interests of its members. APM/CPM has official status in the loi Onicl but is hampered by the fact that 13 of the 14 board members are appointed by the minister. This is an institution that should become more independent and democratic if it is going to continue to play an important role in the subsector. In general, membership in professional associations should not be obligatory.

#### 3.4.2.3 Management of GOM Food Security Operations in Cereals

ONICL should undertake several tasks in GOM food security operations. These operations should be handled to meet food emergency objectives and help targeted groups of consumers but, to the extent possible, not create permanent structures (such as those associated with the FNBT subsidy) that may harm the functioning and efficiency of the subsector. Among the tasks that ONICL can manage are:

- Coordinate GOM response to cereals emergencies;
- Undertake special projects, such as the receipt and coordination of food aid gifts (PL 480 — PAM, for example) involving cereals; and
- Operate the national soft wheat security stock program for the few years that are thought to be necessary during the transition to free market operations. It is absolutely essential that

this transitional measure contain a formal annual monitoring and evaluation system so that the costs and benefits of the stock can be carefully analyzed (Section 3.2).

#### 3.4.2.4 Technical Support Services

ONICL has had many of these functions in the past, but there would be a change in emphasis. For example, it would no longer play a role in the sanitary inspection of products; this would be left to the Division de la Répression des Fraudes. The Goldensohn report suggests that ONICL concentrate on technical services in the following five areas:

- **Training.** It was suggested that ONICL greatly expand the training it offers (either alone or in conjunction with institutions such as IAV or the milling school operated by CPM) for its own and other GOM personnel; technical training for business managers and technical personnel; and educational programs for the public at large on topics such as flour quality or nutrition;
- **Technical norms, product certification and labeling.** There are numerous possibilities here for ONICL to play a supporting role in programs of voluntary testing, certification that product "contents" listed on the label are accurate, and help in settling technical disputes through binding arbitration. The emphasis here would be on quality certification and not on inspection, which is left to other MAMVA or Ministry of Health technical services;
- **Laboratory analyses.** ONICL has a competent laboratory staff and well-maintained facilities. In conjunction with the certification and labeling services mentioned above, the laboratory could also perform analyses of grain and flour samples for business firms on a fee-for-service basis. The ONICL lab would gradually lose business to private laboratories but, in cooperation with Moroccan and foreign specialists, it will always have a role in the development of new test procedures and support to studies and arbitration; and
- **Technical analysis in support of loan applications.** As a supporting service, ONICL would be well placed to offer objective advisory services to both private clients and to banks that are evaluating loan applications from technical and financial soundness points of view.

The Goldensohn report paints an optimistic and enthusiastic picture of the role that a restructured ONICL can play in support of this vital portion of Morocco's agricultural and agroindustrial economy. For that vision to be achieved, two conditions must be met: ONICL must receive a clear legal mandate spelling out functions that support private sector development, and it must have a strong leader who believes in that supportive, promotional role and will act accordingly. ONICL restructuring is going to be a big job and may take 5 or 6 years to complete, if all the training and retraining tasks are counted. This presents a good opportunity for the selective use of donor assistance to increase the speed of the transformation and to assist in personnel training, either on-the-job or in national or foreign degree programs.

#### 3.4.3 The Future of the SCAM/CMA Cooperatives

The 13 grain marketing cooperatives are institutions also begun in the protectorate period where they had an active role in both input supply and domestic grain marketing. Although for many years there were legal differences between the more advanced Sociétés Cooperatives Agricoles Marocaines and

the Cooperatives Marocaines Agricoles, recent legal changes have rendered them equivalent.<sup>56</sup> In 1974 a national union of co-ops was formed (called USCAM) to conduct training programs and to import cereals in the name of the union as a commercial activity.<sup>57</sup> Regardless of legal statute, these institutions have functioned largely for the past 20 years as a state cereals storage organization, both buying cereals on the local market and storing and selling to the industrial mills (or occasionally to the general public, usually as a drought-relief measure). All of these operations were conducted under ONICL orders. GOM, until recently, provided the cooperatives with subsidized and guaranteed credit, called the *warrantage*. These institutional and credit arrangements were described in considerable detail in the Phase I marketing report by Aloui et al. (CMR Report No. 5).

The main problems encountered by most of the SCAM cooperatives have been poor financial management; direct GOM administration; lack of reinvestment and maintenance of marketing, storage, and cleaning infrastructure; interference in operations by local governors and other administrative personnel; and the fact that most simply have not been cooperatives for many years.

There have been three major GOM efforts to reform the co-op system over the past 20 years. The CMR project decided that it would be best not to devote project resources (in the first two years of the project at least) to a fourth attempt, because prospects for success did not seem bright. The major reason why the cereals reform process has to be concerned about the future of the co-ops is that they control more than 50 percent of the total bulk handling and storage capacity that should be used as the cereals subsector shifts to private management. These silos should be used either for the storage of the national security stock of soft wheat (section 3.2) or should be integrated into the pool of infrastructure used in the liberalized cereals trade. This silo infrastructure is the co-ops' only viable asset. Without it, they would have disappeared long ago.

#### 3.4.3.1 Bulk Grain Silo Study

If buffer stocks are going to be held, it is imperative that they be held in the most economically efficient manner possible. This demands that the storage rules be set correctly, but also implies that actual physical storage costs be minimized through the use of bulk storage and handling technologies. To look at the availability of this kind of storage in Morocco, CMR designed and implemented a bulk storage technical study, carried out by Moroccan consultants Bertali (IAV) and Achy (INSEA) in cooperation with ONICL personnel. Questionnaires were administered to operators of three groups of silo structures: port silo facilities; those owned by the SCAM, CMA, and USCAM cooperative organizations; and modern silos owned by private companies, including those in Morocco's industrial wheat mills. Data collection was completed in the fall of 1993, a database was constructed (available in SPSS format), and a preliminary report was completed (CMR Working Paper 17).

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<sup>56</sup> For more details see MAMVA/DEPAAP "Restructuration du Secteur des Cooperatives Céréalières: Note de Synthèse," Rabat, September 1993.

<sup>57</sup> The World Bank refers to this as a "state-managed" cooperative but affirms, in no uncertain terms, that these are "cooperatives" in name only. See The World Bank, "The Kingdom of Morocco, Agro-Industrial Development, Constraints and Opportunities," Report No. 11727-Mor, Volume II Technical Annexes, pp. 26-36, June 1994.

One of the consequences of ONICL's long management of cereals trade and internal marketing has been a lack of private investment in modern bulk handling and storage infrastructure. There was no private investment because ONICL paid the "storage bonus" to the official soft wheat storage agents, the cooperatives, or authorized private grain traders. Not only have the storage payments and fixed margins been too low to encourage private investment, but the potential was always high for government decisions to leave grain buyers with no way of making money after having invested in expensive storage infrastructure.

Overall, Morocco has about 600 thousand tons of silo storage capacity. The distribution of this capacity among the three major types is given in Table 3.4 below. Total silo capacity is made up of those in ports (27 percent), those owned and operated by the cooperatives (38 percent), and those in the private sector, mostly in the grain mills (35 percent). When considering the constitution of possible security stocks (in the range of 50 to 100 thousand metric tons), we see that GOM has few efficient alternatives. Port silos cannot be used since their function is rapid, temporary transit of imported grain. The private flour mill silos are probably not practical because of their relatively small size (the range is 100 to 9,500 metric tons in size with the average silo being about 2,300 metric tons), and the administrative complexity of using them. This leaves the one private grain marketing silo in the Tadla and the silo capacity of the co-ops. In the latter category, less than half of silo capacity is fully functional, with the rest of the capacity requiring some repairs — ranging from renovation of electrical and mechanical systems to major structural repairs and total replacement of all operating equipment.

Thus, it is clear that GOM does not have enough well-functioning silo capacity to house the more unrealistic security stock levels that have been suggested (for example, the ONICL and MAMVA/DEPAAP [Direction d'Entreprise Publique d'Assistance at les Associations Professionnel] proposal for a 600 thousand MT stock!). It is also clear that the aggregate capacity is not adequate for the needs of the future private sector trade where quality/price considerations would require even larger quantities to be held as efficiently as possible (and minimum use of bag storage and "Bardi bulk" storage techniques).

Another dimension of Morocco's bulk storage situation is that (with the exception of the private silo in the Tadla) no trader or importer currently has any modern grain storage facilities. For a country at Morocco's level of general and agricultural sector development, this is a very surprising situation, even given the negative incentive effects from official wheat marketing policy. It also represents a major opportunity for private sector investment and business development — once the private sector is convinced that GOM really will finally liberalize soft wheat marketing.<sup>58</sup> With a truly competitive market situation, there would be a substantial investment in storage and handling facilities in the marketing channels. This will be part of the intense competition among millers, traders, bigger farmers, and some of the restructured coops to get wheat from the farm to the industrial mills and make a profit.

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<sup>58</sup> As an indication of this possibility, one of the more important cereals importers was to begin construction on his own silo facility in early 1994.

TABLE 3.4  
DISTRIBUTION OF MOROCCAN BULK STORAGE CAPACITY  
BY TYPE, GENERAL CONDITION, AND OWNERSHIP

<u>Type, Location, and Condition of Silos</u>	<u>Capacity ( '000 MT)</u>	<u>Percent</u>
A.1. Port Silos (Casa, Safi, Nador):	110	
A.2. Kenitra (Unused):	12	
A.3. New Agadir Silo (To Open in '96):	40	
<b>Subtotal Ports:</b>	162	27%
B.1. Coops — Good condition:	100	
B.2. Coops — Some repairs needed:	88	
B.3. Coops — Major rehab's needed	41	
<b>Subtotal "Cooperatives":</b>	229	38%
C.1. Agri-Plus Company (Tadla):	24	
C.2. Mill Silos: Good Condition:	154	
C.3. Mill Silos: Fair Condition:	34	
C.4. Mill Silos: Unusable:	1	
<b>Subtotal Private Sector:</b>	213	35%
<b>TOTAL All TYPES:</b>	604	100%

Source: Derived from CMR Working Paper No. 17.

### 3.4.3.2 A Flexible Solution for Cooperative Restructuring

Several years ago, in the last effort at examining the future of the SCAM/CMA cooperatives, after looking at a wide number of options, a GOM committee decided that the "solution" was that these institutions, which had been operated as state companies under ONICL orders, should be converted into "true, multi-purpose cooperatives." This would imply that the cooperatives' assets would belong to the members, that new members would deposit some minimum amount of share capital, and so forth. However, this was so far from current reality that most co-op directors, when speaking candidly, felt that this was highly unlikely in most cases.

There are several problems with the "true-cooperative" approach:

- These "cooperatives" are large in assets owned and (in a good production year) volume of cereals handled. The problem in Morocco is that, in cereal producing regions, there is no set of local cooperatives that could unite to take over and manage these larger assets. With the CMA cooperatives, the situation was even more dramatic. The only legal "members" were the local SOCAP (Société de Crédit Agricole et de Prévoyance) cooperatives, which

had been so unsuccessful they ceased functioning by 1976, but were not legally abolished until 1992; and

- In a more general sense, cooperatives around the world that work are "bottom-up" types of organization. Only when the local base is solid is there some chance that they can take over larger-scale operations, such as those represented by the SCAMs. Thus, it is unlikely that dividing the assets into shares and giving them away (or trying to sell them) to farmers would result in a viable large-scale cooperative. This is why the original USAID project design anticipated a project activity that would promote the creation of local storage and marketing cooperatives on a pilot basis.

For these reasons, most of the participants in the CMR project favored one of two possible solutions that would meet the most important objective, keeping co-op storage infrastructure in use in the national marketing system, at least for 3 or 4 years:

- Sell at auction all the cooperative infrastructure, except a number of silo complexes that might be "nationalized" for use in transitional storage of the soft wheat security stock. It is anticipated that larger mills, some importers, or domestic cereals traders would be the buyers. The proceeds from the sale could be put into carefully established trust funds that could only be used for infrastructure needs (such as village or douar-level bulk silos or grain cleaning equipment) of the to-be-created local cooperatives or (more likely) farmers associations. This kind of sale would be difficult if the new rules of cereals marketing were still not clearly defined; or
- Allow interested parties in the different regions (local co-ops, other farmers groups, the GOM civil administration, millers, or traders) to find potentially different solutions to this problem. In a region where there was some co-op activity already or an active local farmer's union, the "true-cooperative" solution might actually work. In another, it may be decided that the best solution is to liquidate the assets in direct sale to any of selected categories of private sector buyers. In a third region, farmers might decide to form a private company to run the silos, where farmers and others could buy stock in the company and professional management would be given a free hand in management. The key is to allow interested groups in different regions to find solutions that fit that region's economic structures and political views. If there is the basis for a cooperative solution to the problem, fine. Otherwise, other solutions must be explored.

The CMR project was not able to carry out its planned year 3 technical assistance assignment in working with MAMVA on the co-op problem. The problem is still there as a potential barrier to market liberalization. GOM should thus assign this a high priority for resolution or begin to offer attractive incentives to investors to rapidly construct alternative facilities.

#### **3.4.4 Listening to the Consumer: Need for Improved Analysis of Demand**

Repeatedly during CMR studies the limited nature of data on Moroccan consumption patterns and the weakness of demand analysis, conducted either by the government or by the Moroccan private sector, became apparent. Efforts were made at meeting the consumption data gap through the budget and expenditure studies and the Living Standards Measurement Survey conducted by the Direction de la Statistique. Some older data were analyzed by Stryker et al. (CMR Working Paper No. 1, November

1993) and most of the relevant demand analysis that had been done was reported by Britel et al. (CMR Report No. 7, January 1992).

This lack of focus on demand reflects certain traditional attitudes about consumers that must begin to shift as economic policy becomes more market-oriented. For example, it is hard for private firms to think about market niches and product diversification when soft wheat flour is assumed to be a standard or "normalized" product — you produce to the norm or you do not. Moroccan flour mills have traditionally made very little systematic effort to find out what their customers wanted in terms of flour quality because they were restricted to producing standard products and they could not control the quality of their inputs (and so could not produce products of a consistent quality). The CMR rapid focus group studies of consumer and bakery demand for flour (CMR Working Papers No. 11 and 12) indicated the richness of the information that could be obtained by simply listening to the consumer.

The need for institutional change in this area can be met through both public and private actions. For example:

- Within MAMVA there is a clear need to establish a unit, probably within DPAE, that would focus on food consumption, nutrition, and demand analysis. This unit should have all of the available secondary information on consumer behavior and should use a variety of methodological approaches to expand the availability of primary data on the consumption patterns of targeted groups of consumers or targeted commodities and derived products. These methods can include interview surveys and a other more rapid techniques such as the focus group approach used by the CMR milling studies. This unit should also participate in the data collection activities of other GOM and university units that can significantly contribute to its stock of secondary data;
- The Direction de la Statistique (DS) has learned a great deal in the past few years in the conduct of the LSM Survey. There are some very good opportunities to build on this knowledge base and make the data, collected every couple of years, more useful. For example, many of the recent food security debates have focused on the likely impacts that policy changes would have on a subset of the lowest decile of the population, the ultra-poor. In the output that DS has made available to the public or other GOM agencies, it is hard to isolate this target group. DS could simply add an additional sample to its national random sample, so that data on the ultra-poor would be easily available. DS must also adjust its data access procedures so that the entire LSMS data set would be routinely available to all users willing to pay a reasonable fee (1000 DH, for example);<sup>59</sup>
- Many opportunities should be developed, with subsector liberalization, for public and private groups to advise private firm clients on consumer preferences and on the market opportunities for new products. In the area of soft wheat flour and derived products, it was suggested that ONICL could take the lead in demonstrating this "applied demand analysis" to industrial millers and other clients on a fee-for-service basis. However, given the unlikelihood of a Moroccan public agency being allowed to engage in this type of entrepreneurial activity, this would most likely develop in the Moroccan private sector (perhaps initially assisted by foreign consultants).

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<sup>59</sup> The only person (or organization) known to have had full access to the data from the 1985 "Budget and Consumption" study was the son of a certain ex-Prime Minister!

In this section of Chapter Three, we have discussed four areas in which institutional refocusing (in MAMVA primarily) could help make the transition to a free market in the cereals subsector become a reality, benefiting all Moroccan consumers and most current producers in the different groups that make up the subsector. These are changes that can be realized by the turn of the century if GOM leadership in MAMVA (and important units such as ONICL) and other key ministries has the vision and political will to make them happen. These and other suggestions for measures to accompany the transition to free market operations for Moroccan cereals will be summarized in Chapter Four.

## CHAPTER FOUR

### RECOMMENDATIONS FOR THE TRANSITION TO FREE CEREALS MARKETS

The purpose of this final chapter is two-fold. First, we offer short-term recommendations on steps that GOM should undertake to prepare itself and the Moroccan private sector for further cereals liberalization, now scheduled to go into effect in April 1995. This draft checklist can serve as a starting place for the work of a mixed public/private Transition Coordination Committee (TCC), which should be named by GOM to make sure the transition is as smooth as it can be. Second, we offer medium-term recommendations on measures that can be taken over the next five years to facilitate the optimal development of liberalized free cereals markets.

#### 4.1 PREPARING FOR CEREALS MARKET LIBERALIZATION: SHORT-TERM RECOMMENDATIONS

##### 4.1.1 Operating Principles to Guide the Transition Period

To have as smooth a transition as possible to a new set of operating rules for the private sector firms that make up the bread wheat flour subsector, all aspects of the transition must be planned as carefully as possible. We start by listing some basic principles that should underlie this preparation phase. These principles include:

- A government commitment to provide maximum information to the groups that will be most affected by the changes: farmers, traders, millers, importers, the flour trade, industrial flour users, the baking industry, and consumers. Information can be provided in special MAMVA/ONICL publications (such as the *Guide d'Operateurs* first drafted by a CMR/GOM committee in September 1993), and in press conferences, newspaper reports, television, and radio broadcasts;
- A similar GOM commitment to full and active participation in transition committees of representatives of the different stakeholder groups in the private sector; and
- The main transition coordinating committee should probably be chaired by an official from the Prime Minister's office, to ensure a quick settlement of any disagreements that might arise. Its members should be technical representatives of the key ministries (MAMVA, Interior, Finance, Social Affairs, and so on) as well as the representatives of the main private sector interest groups.

It is important that the TCC and other working groups begin their work in a timely manner. The TCC should take steps to ensure that:

- MAMVA working groups have produced a complete and clear listing of all the changes that will occur in the legal regulation of cereals marketing (see below for illustrative list);

- The appropriate legal advisors have determined the changes that must occur in all national laws, implementation decrees, or arrêtés in order for the liberalization program to go into effect smoothly; and
- If it is determined that reform changes should occur in sequence, then these should be represented graphically on a time-line such as the hypothetical one included in the CMR Phase I Synthesis Report (CMR No. 8). Those involved in the project found that this time-line was a good way to review the steps that needed to be taken in a graphical, summary form.

#### 4.1.2 Considerations in Setting Exact Implementation Date (ID)

One of the subjects that received some discussion during CMR Phase I and afterwards was the pros and cons of different dates for actually putting the main reforms (free importing, ending the official marketing circuit and its subsidies, ending the FNBT subsidy) into practice. Several argued that June is a good month because it is the time of the annual cereals harvest, and it would allow ONICL and the *stockeurs* to end a marketing year cycle as the subsidies are ended. This is when old stocks would normally be emptied in anticipation of new purchases. A June 1995 date would also allow the national soft wheat security stock to be set up (either with imported grain, or with local purchases in a good production year, or with cooperative stocks being carried over). This needs to be debated among logistical and planning experts in the subsector, within clear ministerial guidelines on stock objectives and operating principles. Many of these were suggested in Kent et al. (CMR No. 17, January 1994).

Using a June 1995 date would also give GOM two additional months for getting other systems in place such as the security stock and the certificate program for tracking import intentions. The date would also enable GOM to have key informational reports (such as the *Bilan Céréaliier*) available to importers and millers for several months in advance. Many also say that, in an average to good year, June is better since there will be more local grain in the marketplace; this will provide a cushion against possible supply delays in the first months — delays caused by trader or importer inexperience or lack of clear, functioning systems. After more than seven years of delay, no one will object to GOM taking an additional two or three months, *if necessary*, in order to be as prepared as possible for the transition.

#### 4.1.3 List of Major Policy Changes, Linked Secondary Changes, and "Conditions Precedent"

This is a draft checklist of actions to be taken to prepare for the ID. The list needs careful review and modification by joint GOM/private sector working groups. Many of the secondary changes are administrative actions that should be considered as "conditions precedent" to the main policy reform in that they will facilitate the transition in some manner.

##### 4.1.3.1 Lifting Restrictions on Cereals Importing

1. **Main action: tariff reform.** Establish and publish the new tariff schedule for all cereals and cereals products, including collection procedures. Devise and announce provisions for annual revision of tariff levels, if necessary (methods should be transparent);
2. **Secondary measures** that should be in place:

- The soft wheat security stock (for example, 75,000 metric tons at SCAM/CMA cooperatives) two months before ID (see below);
- A certificate system (with performance guarantee deposits) for declaration of cereals importing intentions, in operation 3 months before ID;
- The credit needs of the private sector for cereals importing should be carefully reviewed. It is strongly encouraged that all commercial importers and millers be allowed to take hedging positions on foreign commodity futures markets should they so desire;
- A Special Port Coordination Committee should have worked with importing groups and the national railroad (SNCF) to make sure all procedures for timely port evacuation and delivery to mills have been prepared. Any logistical problems should be quickly resolved by high-level intervention;
- All official roles (such as ONICL, customs, importers, SOSIPO, and SNCF) should be clarified, legislated, and publicized in open meetings;
- Publication and wide distribution of the *Businessman's Guide* (ID minus 3 months);
- ONICL: should prepare the *Bilan Céréalier* and the *International Cereals Stocks and Prices* for release several months before the ID.

#### 4.1.3.2 Elimination of the Soft Wheat Official Circuit; the Transport, Storage and FNB Subsidies; and all Flour and Bread Price Controls

There are 5 main and at least 11 secondary measures. These involve fixing dates for and preparing legal measures to:

1. **Eliminate soft wheat purchases by *stockeurs* at guaranteed official prices.** It must now be made clear to farmers that, as of the ID, anyone (cooperatives, traders, or mills) can buy cereals from them at market prices. The main protection GOM is offering farmers is that imported cereals will enter the country with high protective tariffs that will serve to stabilize Moroccan prices at target levels with some variation depending on local supply and demand conditions. Smaller farmers who previously sold their wheat to *collecteurs* may not notice much change in the prices they face.

The secondary measures that must be in place are:

- Preparation of an extensive information campaign for farmers on likely price variation, the fact that these prices will stay well above world price levels, and that there will be greater opportunities to make additional profit through storage and temporal arbitrage. GOM may also wish to announce other programs to help farmers deal with the transition to free soft wheat markets, such as technical and credit assistance in the construction of farm-level bulk storage facilities;

- The SCAM/CMA cooperatives must be ready to operate in a free market environment. They will be in open competition to purchase farmers' wheat but they will have to compete based on the price they pay and the timeliness of their payment. If cooperative directors are given a free hand in management (with full managerial freedom, such as the ability to fire excess labor), the fact that they have amortized storage and handling infrastructure should allow them to be competitive in the free cereals market. Another option they may wish to explore (which requires much less working capital) would be to offer the private sector access to their silos and other facilities (for wheat storage and cleaning) on a fee-for-service basis; and
  - ONICL must begin to aggressively distribute the MIS (by local market postings, newspaper delivery, radio broadcasts, and so forth) and should contribute personnel for interministerial mobile inspection teams to investigate complaints from citizens and local officials and report the results to the TCC.
2. **Eliminate ONICL controls of all soft wheat supply (domestic and imported) to the industrial mills.** The main measure will be for ONICL to inform its partners in the official circuit that it will cease issuing cereals movement orders as of the ID. Most of the secondary measures involve ONICL as well:
- The tripartite commission must be dismantled;
  - ONICL should offer to play an honest broker role in wheat supply (putting mills in touch with traders and importers — for those mills that need this assistance) during the first year of the transition; and
  - ONICL should study and revamp all its data collection procedures (on milling, flour volumes, and quality sampling, for example) that have to do with the milling industry. Mills can be encouraged to provide this data if ONICL shares its analyzed information widely with the mills.
3. **Eliminate the *Prime de Stockage* and the *Prime de Transport* (for grain and flour).** ONICL must inform its partners that, as of the ID, it will have no more obligation to make these subsidy payments. It will settle final bills for a period of three months after the ID. It may choose in the future to make transport and subsidy payments in the context of special GOM drought relief or consumer welfare programs, but these will be isolated in time and in the regions covered. In support of this action:
- It is important for ONICL to start as soon as possible (with help from IAV Hassan II personnel and others) to collect data on commercial and on-farm storage of cereals, because it will no longer have the same control system that produced information on soft wheat stocks in the past; and
  - GOM should move as quickly as possible to begin work with the industrial millers to define a program of accompanying measures to assist this important agro-industry make the transition. These are discussed at some length in the Falgon report (CMR No. 14, June 1993). They are also one of the subjects of ongoing work for CPM that is being conducted by ICEA-Entreprise.

4. **Eliminate the FNBT subsidy program.** ONICL needs to announce to industrial millers that it will cease to pay a subsidy to millers for the production of FNBT as of the ID. In addition, GOM needs to announce these changes to consumers. ONICL will pay the transportation subsidy on the last stocks of subsidized FNBT to be directed to wholesalers for a period of up to one month after the ID. Final subsidy payments will be made to millers within three months of the ID. There are two key secondary measures to be taken:
- A new system for the production and distribution of a greatly reduced quantity of FNBT-type flour (1 million quintals, for example) may need to be put into operation. If so, GOM needs to clarify its production and distribution strategy. Is this flour just for distribution in the Saharan Provinces or will there be some minor distribution in other regions? Should this reduced quantity of subsidized flour be distributed through market channels or distributed directly to target consumers? Should the Ouarzazate ticket system be used? Does that system increase or decrease corruption? and
  - It will be critical for GOM to conduct a careful public relations campaign to explain to consumers why these reform measures are being taken. The campaign may want to mention that there will be a residual program for the Sahara, that much of the subsidy in the FNBT program was not reaching consumers and was causing corruption, that the control system was adding cost to the production of all wheat flour, and that private markets will give consumers a wider range of products with consistent levels of quality. MAMVA, ONICL and the Ministry of Interior should be involved in this campaign, but GOM may wish to have some consulting assistance on actually producing the media products (like the assistance the Ministry of Economic Affairs and Privatization received from two advertising firms in providing publicity campaigns for its large privatization program).
5. **Eliminate or completely revise the *accords de moderation* restrictions on flour and bread prices.** These *accords* are not consistent with a liberalized market. They must be abolished or completely revised to allow for more significant and reasonable price variation. If prices for flour are going to be somewhat higher in remote areas because of the higher real costs of transportation (with the end of *péréquation*), this must be allowed to be reflected in the wholesale price of flour, and in the price of bread. This does not mean that bread prices will automatically increase rapidly. Given the high level of competition among bakers in most parts of Morocco, one would assume that this should eliminate excessive price increases. Some bakers may wish to produce a standard loaf of bread for sale as a loss-leader, as do many of the urban bakeries now that make most of their profits on the unregulated pastries, cakes, and specialty breads. We realize that this is a difficult policy issue considering the long history of controlled bread prices in Morocco and the political sensitivity of the subject. However, times change. Even the French government gave up controlling bread prices years ago. New price moderation efforts might be voluntary, but require a baker to justify, in a standard form, why his prices increased by more than an allowable range. The freeing up of prices could be supported by interministerial mobile teams to monitor impacts and problems of transition to a free market. The teams would report to the TCC.

#### 4.1.3.3 Food Security: The Transitional Soft Wheat Security Stock and Other Measures

1. Setting up of the security stock is a complex matter, particularly if it is not going to destabilize the efforts of private sector businessmen to modernize their operations. The rules for financing the stock, acquiring the wheat, and conducting the technical rotations (through market sales) must be established carefully. This effort should be undertaken as soon as GOM determines the size of the stock to hold. This should not be done by a process of haggling between those in MAMVA who favor a big or a small stock. Each side should justify their position through a detailed analysis of the risks of supply rupture and an explanation of why there is not a cheaper way to solve the problem than using stocks (GOM imports or direct imports of flour, for example). As noted above, the security stock should be in place physically at least a month before the ID.
2. The biggest food security problem in Morocco is not supply security but access security. Therefore, GOM should move to put into place new food aid programs that are specifically targeted to well-defined groups of poorer consumers. This was described in more detail in Section 3.2.

#### 4.2 FACILITATING OPTIMAL MARKET DEVELOPMENT: MEDIUM-TERM RECOMMENDATIONS

The main premise in the medium-term CMR strategy for subsector development is that the development of optimal agricultural markets, whether for domestic consumption or for export to other countries, requires an intelligent partnership between the state and the private sector. Both have a role to play. The private sector must be allowed to operate freely (but within well-defined parameters) to maximize efficiency in production and distribution. This has been the biggest problem with the operation of the soft wheat official circuit; operating efficiency has suffered, as has investment, because administrative control minimized opportunities to innovate in the search for profit.

The corollary to the CMR strategy is that much of the change to achieve the right type of public/private partnership has to occur within the public sector, which now is setting the rules for private sector activity in response to shifting patterns of economic and political influence. With liberalization, the private sector will react according to the new opportunities that open up. In addition, working either with the public sector or at the public/private interface is where publically sponsored technical assistance is often the most useful.<sup>1</sup>

To design a strategy to reach optimal market development, we have to first define "optimal." Optimal from whose point of view? Given the importance of cereals markets to the entire Moroccan population, it is clear that the definition of optimal must be from the point of view of the economy and society at large. This means that the interests of producers must be balanced with those of consumers. By allowing free markets to connect producers and consumers, benefits can be achieved for both groups (higher prices for farmers and lower for consumers). These benefits occur because the free market allows innovation and competitive efficiency to reduce the average gross marketing margin between farm gate

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<sup>1</sup> See Elliot Berg, *Rethinking Technical Cooperation: Reforms for Capacity Building in Africa*, UNDP and DAI, New York, 1993, for an in-depth analysis of recent thinking on the utility of continuing to use technical assistance in today's developing economies.

and consumer. Setting up a modeling framework to account for these aggregate benefits was the subject of Salinger's CMR paper, "Soft wheat Marketing Margins under Liberalization: A Cost-Benefit Analysis" (CMR Working Paper No. 10, December 1992).

The actions of the state can help by creating and maintaining a functioning and competitive set of markets for raw and transformed agricultural commodities and orderly market rules (and institutions that assure that *opérateurs* play by those rules). In addition, the state can participate actively to promote subsector growth and development — through help in the introduction of production, marketing, and processing technologies and working with private groups to help set up the framework within which private competition will occur. In Morocco this was demonstrated very nicely in the public/private partnership that helped to establish the Moroccan citrus industry.<sup>2</sup>

The role of GOM in facilitating cereals market development, after liberalization, has been a consistent theme in the CMR project. Much of the analysis of key issues in cereals subsector liberalization in Chapter Three lead directly to many of these medium-term recommendations. Here we group them together to form the core of a possible GOM action-plan for cereals subsector growth and modernization. The main lines of the medium-term strategy for making cereals markets work better can be summarized in three areas for change:

- **MAMVA institutional changes** that will allow the ministry and its different units to play an expanded role supporting private sector growth and modernization. This will be based on the enhanced provision of information, analysis, and agro-industry promotional services;
- **Anti-trust and risk reduction measures** to ensure that cereals markets function competitively while allowing private firms to manage the risk that is associated with fluctuating cereals prices; and
- **Special help to key stakeholder groups** in the transition to free markets and later on.

#### 4.2.1 MAMVA Institutional Change

One of the objectives of the CMR project was to promote institutional strengthening while informing the process of cereals subsector reform. We have talked about many dimensions of institutional reform in this report. We focus on two dimensions of that desired change here:

1. **Maximize information and analysis to inform the Moroccan political process on cereals policy options.** The ministry should greatly increase its public information role and put more relevant information into the hands of other GOM personnel and the people who make up the key stakeholder groups. As the national political process evolves, the number of information-users increases. These may be political parties, professional associations, consumer lobbying organizations, or foreign investors. This will first require a change in attitude on the part of some ministry personnel who need to be reoriented away from the *dirigisme* of the past. Much of this has occurred already in the past ten years and more will come with time.

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<sup>2</sup> That story was well told by Will Swearingen in *Moroccan Mirages: Agrarian Dreams and Deceptions, 1912-1986*, Princeton University Press, 1987.

To produce relevant information and analysis, ministry staff have to have a clear understanding of what the key constraints are holding back the development of a commodity subsector. One of our conclusions from this project is that there are practical advantages to organizing many agricultural policy investigations along commodity subsector lines (filières). This was proposed as an original organizing concept for the project in a paper by Wilcock in June 1991 (CMR Report No. 2). Our experience confirms the advantages of this approach, which are that:

- It reflects the way business is organized — with the vertical flow of raw to more finished products;
- It allows the analyst to have a clearer understanding of the whole subsector and to keep the problems and constraints experienced in industries at different levels in relative perspective (to see which constraint is most binding on subsector progress); and
- It enables recommendations for policy change to be made in terms of meeting priority problems to help get the subsector as a whole into the desired growth path.

We have also suggested that using the subsector approach may have implications for the organization of the work effort in MAMVA. The economic and policy analysts in DPAE currently are organizationally too isolated from the more technical specialists in other parts of the ministry (for example, crop specialists in DPV, marketing and processing specialists in ONICL, and livestock feeding specialists in DE). In order to have enough personnel of the right kinds to do subsector work, in the manner done by CMR, would require some regrouping of personnel either on a temporary or permanent basis.

The rapidly expanding analysis capabilities of MAMVA personnel should be channeled into helping answer some of the major policy issues (presented in detail in section 3.1.) that will face Morocco:

- How much should Moroccan cereals production be protected through high tariffs? We have seen that cereals have gone from a position of being relatively taxed in the mid-1980s to being subsidized today. If food subsidies for consumers (such as FNBT) are withdrawn, should Moroccan consumers be forced to continue to pay such high prices?
- Similarly, we highlighted another dimension of very high cereals protection: the tradeoffs between high protection of maize and the slowdown in growth of both egg and poultry sales in the past few years. Morocco could very easily have cheaper eggs and chicken for the consumer. Lower prices would harm a relatively small number of dryland maize producers and an even smaller group of producers growing maize under irrigation, particularly with pivots. The question is further complicated by the potential use of non-maize feed ingredients, but the basic policy choices here are fairly clear; and
- Finally the political process should have access to information on the incidence of subsidy benefits. Who is benefiting from the soft wheat support price? Many analysts, based on indirect evidence, have contended that a large share of the

benefits have gone to large landowners, but this cannot be proven directly with available data. This information is important for a full debate of subsidy issues and will increasingly be demanded by informed interested parties as Morocco's political process becomes more open and sophisticated.

2. **Restructure ONICL to play a support and promotional role.** In section 3.4 of this report we reviewed the vision of an restructured ONICL that was produced by a CMR project consultant who worked closely with ONICL personnel (CMR No. 16). The role that can be played by ONICL in the future is an important one. The dimensions of the restructuring needed to permit it to play the desired role are such that it is not realistic to expect the job to be done before the beginning of the next century, even if restructuring gets under way within the next year. This is because restructuring will undoubtedly require further advanced training of current or new ONICL personnel. It is critical that GOM use its own resources, perhaps supplemented with resources from sympathetic donors, to get the job underway as soon as possible.

ONICL already has the advantage, through its unique structure and history, of being consistent with the commodity subsector approach that we have recommended. Its principle future tasks will be in the provision of greatly enhanced information products; a series of promotional services that may be reduced over time as specialized private groups may be able to take them over; an advisory and managerial role in food security matters, including the management of the transitional soft wheat security stock; and specific technical support services. If this restructuring can be achieved it will contribute significantly to MAMVA meeting its new role in a liberalized Moroccan economy and allow ONICL to be a model for how a specialized GOM unit can promote subsector growth and modernization creatively.

#### 4.2.2 Keep Competition Working for the Benefit of the Subsector and the Economy

Converting the cereals subsector to fully liberalized market operations is the first step. In the medium-term plan, measures should be taken to keep those markets functioning well. In addition, we have seen (in section 3.1.3) that since free agricultural markets involve greater price variability, the state can assist private interests in establishing risk reduction mechanisms that allow individual firms to manage those price risks on a routine basis. Fostering this seeming contradiction is one of the secrets to being able to have the efficiency gains from competitive markets while allowing the average firm to survive price variability by using simple risk management techniques.

1. **Keep markets competitive.** Agricultural industries often tend toward structural concentration just as they do in other sectors. All of the key industry groups in the cereals subsector are currently unconcentrated, certainly in comparison with the oilseeds subsector, which is virtually monopolized by one large corporation. In a perverse way, the lack of concentration in cereals (particularly in milling) is a byproduct of GOM administration, which left each company in suspended animation largely protected from the winds of competition, each with its own minimum guaranteed market share. The sudden surge in competition that will come about due to market liberalization will lead almost inevitably to company mergers as the stronger, better-managed firms scramble for market share. No one foresees that this will lead to a noncompetitive situation in the near future but concentration certainly will increase.

Thus the first medium-term measure that will help keep all Moroccan markets competitive would be to institute meaningful anti-trust or monopoly-control laws. The implementation of those laws also implies that pertinent GOM ministries would develop the capacity to follow trends in industry structural concentration and offer that evidence in legal proceedings, which may be brought by the government or other private firms against a company that may cross concentration thresholds, often as a result of a corporate merger. Some part of MAMVA would be called upon to maintain the capacity to evaluate changes in agro-industrial concentration. Although there will probably not be much business initially from the cereals subsector, this unit could start to work straight away on the oilseeds subsector.

A second measure that will contribute substantially to both modernizing cereals markets and keeping them competitive would be the development, by mixed private sector and government working groups, of standardized contracts for future delivery of predetermined qualities of cereals (of a specified quality). This will allow business to control future price risk to some extent but it will also allow new entrants into established markets not to be cheated, even if they are not one of the biggest firms in the market. This requires two additional conditions: that there is an adequate system of grading and standards for cereals and cereals derivatives (which is not the case now in Morocco), and that it is easy and inexpensive for any firm to take a contract-violation problem to court for adjudication (this too has been recognized to be a problem but, according to reports in the economic press, major GOM efforts are under way to strengthen the system of commercial law courts).

2. **Create mechanisms to deal with price variability.** The other dimension of keeping competition working in the best interests of market participants is to promote the creation or expansion of risk reduction measures that are compatible with the functioning of a free markets. These measures were explored in the previous chapter in some detail, and are:
  - **Promote modern, efficient grain storage.** This is the oldest risk reduction method, simply holding physical stocks, but it is not the most efficient, in economic terms, for the economy as a whole. Although this is largely a private sector activity, GOM can be of substantial assistance in the first four or five years in providing technical advice to businesses of different size. It would also be possible to receive substantial assistance from foreign bilateral donors who might see this as a means of promoting the use of technology from their country. Using this for a program of competitive demonstration projects would be a good way for GOM to accelerate making up this clear infrastructural deficiency;
  - **Promote the development of Casablanca cereals reference markets.** The Casablanca market is the most important market for all heavily traded cereals in Morocco. For maize the Casa market has become a de facto national reference market. MAMVA could play a very constructive role by assisting private traders in taking the necessary organizational steps to convert these markets into true national reference markets and helping to establish the statistical basis relationships between Casa and other regional markets. This would contribute to market integration, improve operating efficiency, and reduce costs for all participants;
  - **Promote improved grades and standards and contracting for future delivery.** Both millers and traders agree that Moroccan cereals grading is not sufficient to meet the

demands of a competitive, quality-driven industry. This results in Moroccan domestic wheat selling at a discount to imported wheat. Flour standards are not detailed enough to meet the needs of commercial flour users. Both of these factors inhibit the development of contracting for forward delivery in Moroccan markets. This represents the greatest opportunity for GOM to assist the private sector in putting together market-based risk reduction mechanisms. This step must become before the development of a true commodity futures market, although there is no guarantee that Casablanca Standard Contracts would ever be speculatively traded; and

- **Encourage businesses to employ hedging on foreign commodity markets.** This final measure permits the greatest amount of private risk management. Since there is no guarantee that a Casablanca futures market will emerge in the near future, GOM should allow businesses that are large and sophisticated enough to take hedging positions on foreign commodity markets. This is a complex topic but the main impediment to this step is that foreign exchange is still not made available for this purpose.

#### **4.2.3 Specific Actions to Assist Key Groups of Subsector Stakeholders**

The final area of the CMR medium-term strategy is one in which GOM has much room for maneuver. This is in actions that it can take to provide specific assistance to stakeholder groups that allow them to adjust more rapidly to the realities of life in a market-driven economy. We will simply list a few of the ideas that have been advanced over the years of work on Morocco cereals. These are suggestions that would assist millers, farmers, and consumers.

##### **4.2.3.1 Measures to Accompany the Restructuring of the Industrial Wheat Milling Industry**

The liberalization program is going to unleash a massive restructuring of the industrial milling industry and, in consequence, change the parameters of competition between that industry and the durum/barley industrial mills and the thousands of smaller artisanal mills. In section 3.3 and in the Falgon report (CMR No. 14), some of these measures were suggested in a preliminary way. It is now up to the millers themselves to propose a transition and restructuring program to GOM. This can be debated in informal meetings with GOM committees and more formally in the Moroccan parliament. Regardless of the tortured past relationship between the millers and GOM, political pragmatism and some sense of equity for business people who have invested in the industry demand that their suggestions for assistance be treated with the same seriousness as plans put forward by the sugar and oilseeds industries, as long as the millers do not simply try to derail the entire cereals reform program.

##### **4.2.3.2 Measures to Help Farmers**

All of the modeling and statistical analyses done by the CMR project indicate that there should be no significant negative income impacts of the cereals marketing reform program. In addition, some farmers, through careful production, handling, and storage of their wheat, may be able to take advantage of greater differentiation of soft wheat markets by quality, and of greater market price variability, to make additional profits. As in most agricultural systems, these profit opportunities are more likely to be realized by well-managed and well-capitalized larger farms in the higher potential agricultural zones of the country (the *bour favorable* or some of the irrigated areas with cheap, reliable water). MAMVA programs can

accelerate access to these opportunities for profit in cereals production. To do so in general will demand activities that contribute to increased specialization of cereals production in the highest potential rainfed zones. Expansion of profit opportunities will also demand measures to increase the efficiency and ability of farmers to differentiate by quality in the production and marketing of Moroccan cereals.

To help all farmers who produce and market significant quantities of any cereal, MAMVA programs should be oriented toward making all Moroccan cereals equal in quality with imported cereals when they arrive at the mill gate. It is clear that now they are not. This is not because the varieties are inferior or that Moroccans are bad farmers — far from that. It is because inadequate grading and quality standards, inadequate investment in cleaning, handling, and storage infrastructure, and negative incentives from the current semi-liberalized marketing system, all make it difficult for traders to deliver to millers large lots of clean, homogeneous grain that would receive the same or higher prices as imported grain. MAMVA/DPV should make this the heart of its technical assistance and extension programs for cereals.

It is possible to organize technology demonstrations and pilot promotional programs to accelerate the rate of adoption of the farm-level infrastructure needed to help produce a better quality cereal for the liberalized market. This could involve above-ground bulk storage infrastructure, and installations for the cleaning, sorting, and bulk handling of identified varieties of grain. This also offers significant opportunities for private sector investment in the creation of specialized marketing firms to handle these functions.

Finally, we come to the issue of getting these technological advantages to medium-sized and small-scale farmers. This generally is more difficult because poorer farmers do not have the land base or capital required to make these investments to increase productivity in producing and marketing what the market wants. Most solutions require that smaller farmers be encouraged to group together, in structures that they themselves manage, to take advantage of these opportunities. This can be done through GOM assistance to small and medium-sized farmers to form locally managed "true cooperatives" or other forms of local business associations.<sup>3</sup>

Personnel who have been involved in the CMR project would be happy to work with MAMVA personnel to further elaborate practical steps that could be taken to create these farmer-support programs, if that is judged to be a MAMVA priority.

#### **4.2.3.3 Helping Consumers**

To date many of the policy debates that have taken place regarding cereals marketing reforms have proceeded as if consumers were not an equal party to the debate. Given their lack of organized voice in policy debates, this may not be too far from the truth.

The cereals marketing reform program should benefit most consumers by giving them a wider range of better-quality cereal products to choose from at lower prices. The big losers will be the small group of consumers that have to rely heavily on FNBT. It is clear that they will lose at least some of the subsidy they currently receive. The major recommendation is that GOM address its obligations to the very poorest citizens and devise a program for getting targeted food or income assistance to them. The

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<sup>3</sup> See the extensive discussion on how the local Moroccan cooperative movement might be revitalized in the World Bank Report "Agro-Industrial Development: Constraints and Opportunities," Volume II, pp. 22-47 (Report No. 11727-MOR), June 1994.

easiest policy solution to diminishing the negative impact of eliminating the FNBT subsidy would be a slight reduction in soft wheat tariff protection.

In addition, the biggest change that is needed is to begin to introduce a strong consumer focus to MAMVA and to other parts of GOM. The consumer is the government's most important client group. This reorientation can start by creating a division of consumption and demand analysis in MAMVA/DPAE. Other measures are obvious, including the promotion of groups composed of, and speaking for, consumer interests. This is totally consistent with the declared intentions of GOM to create a more open and democratic political process over time.

## REFERENCES

### SECTION 1: BIBLIOGRAPHY

- Abbott, Philip. "Harmonization of Domestic Agricultural and Trade Policies in LDCs: The Liberalization Dilemma in Morocco," Purdue Agricultural Economics Staff Paper #93-8, July 1993.
- Anderson, Ronald. "Risk Management in Morocco's Cereals Subsector," Discussion Paper No. 9214, Institut de Recherches Economiques et Sociales (IRES), Catholic University of Louvain, Belgium, June 1992.
- Berg, Elliot. "Rethinking Technical Cooperation: Reforms for Capacity Building in Africa," UNDP and DAI, New York, 1993.
- Belfqih, Mohamed. "La Halle aux Grains de la Route de Médiouna" in ONICL *Marché des Céréales et des Légumineuses*, No. 3, June 1992.
- Belghazi, Saad. "*Etude sur la Mise en Marché des Céréales au Maroc: Contribution à un Suivi du Marché Céréalière*" (Final Report in three volumes, Rabat, 1992, and "*Rapport de Synthèse*" by Anne-Marie Jouve, I.A.M., Montpellier, France, 1992).
- Debatisse, Michel et al. "Risk Management in Liberalizing Economies: Issues of Access to Food and Agricultural Futures and Options Markets," World Bank Technical Report No. 12220 ECA, November, 1993 (available in English and French).
- GATT. *Trade Policy Review: The Kingdom of Morocco 1989* (Geneva, 1990).
- Imrani, Hamid. "Cereals Adjustment Policy Alternatives and Food Security in Morocco," Master's thesis, Purdue University, May 1994.
- MAMVA/DEPAAP. "*Réstructuration du Secteur des Coopératives Céréalières: Note de Synthèse*," Rabat, September, 1993.
- MARA/AIRD/Agro Concept. *Étude de la politique de prix et d'incitations dans le secteur agricole, phase II, Rapport Principal* (January 1990).
- MARA/DPAE and ONICL. "Quoi de Neuf? La Réorganisation du Commerce Extérieur de Céréales et de Leurs Dérivés au Maroc," Draft manual prepared by CMR, December 1993.
- MARA/DPAE. Service des Études Économiques Marchés et Prix, Bureau d'Analyse des Politiques Agricoles, *Étude de la politique de prix et d'incitations dans le secteur agricole, phase III, Céréales* (June 1990).
- Ministry of Agriculture and Agrarian Reform and Associates for International Resources and Development. *La politique de prix et d'incitations dans le secteur agricole, Rapport final*, January 1986.

ONICIL/INSEA. "La Minoterie Artisanale," ONICL, January 1990.

ONICL. "Note sur le Stock de Sécurité de Blé Tendre," no date given, but early 1994.

Salim, Mammas. "Effet du Tarif Fixe et de Celui Variable sur la Variabilité de Prix Entre les Régions," Purdue Agricultural Economics Working Paper, December 1993.

Salinger, B. Lynn and Jeffrey C. Metzler. *L'évolution de la politique commerciale agricole au Maroc: Examen de l'impact des prix de référence* (Cambridge, MA: Associates for International Resources and Development, February 1993).

Swearingen, Will. *Moroccan Mirages: Agrarian Dreams and Deceptions, 1912-1986*, Princeton University Press, 1987.

The Government of Morocco. *Rapport d'exécution*, September 1990.

Tyner, Wallace E. et al. "Analysis of the Impacts of Reducing Maize Protection Levels on the Moroccan Poultry Sector," report prepared for the Livestock Direction of the Moroccan Ministry of Agriculture, under contract to the U.S. Feed Grains Council (Cambridge, MA: Associates for International Resources and Development, August 1994).

World Bank. *Staff Appraisal Report, Kingdom of Morocco: Second Agricultural Sector Investment Loan (ASIL II)*, Report No. 12392-MA, May 27, 1994.

\_\_\_\_\_. *Kingdom of Morocco: Agricultural Prices and Incentives Study*, Report No. 6045-MOR, May 1986.

\_\_\_\_\_. *Compensatory Programs for Reducing Food Subsidies*, Report No. 6172-MOR, April 1986.

\_\_\_\_\_. "The Kingdom of Morocco, Agro-Industrial Development, Constraints and Opportunities," Report No. 11727-Mor, Volume II Technical Annexes, pp. 26-36, June 1994.

**SECTION 2: CMR DOCUMENTS****Major CMR Reports**

- CMR-1 PRCC Comité Technique, "Projet RCC, Phase I: Programme de Travail," Rabat, 29 Juin 1991. (In French Only).
- CMR-2 David C. Wilcock, "Agribusiness in the 1990's: The Commodity Subsector Approach" Rabat, June 1991 (In English and French).
- CMR-3 Philip Abbot, "Trade Modeling in Support of Moroccan Cereals Market Reforms," West Lafayette, Indiana, December 1991 (In English and French).
- CMR-4 Abderrahim Houmy et al., "Tendances de la Production des Céréales au Maroc," Rabat, Final version: October 1992 (In French only).
- CMR-5 Omar Aloui et al., "Commerce, Stockage et Transformations des Céréales: Rapport Principal," Rabat, January 1992 (In French only).
- CMR-6 Lynn Salinger et al., "Commerce Extérieur. Rapport de la Première Phase," Rabat, Final Version: March 1992 (In French only).
- CMR-7 Amal Britel et al., "Consommation des Céréales au Maroc," Rabat, Final Version: October 1992 (In French only).
- CMR-8 David C. Wilcock, "Synthesis Report: CMR Phase I," Rabat, February 1992 (In English and French).
- CMR-9 M. Falouss, et al., "Système d'Information sur le Marché des Céréales: Plan d'Action Proposé," Rabat, May 1992 (In French only).
- CMR-10 Claude Falgon, "La Minoterie en Concurrence" (Plan d'Etudes Appliqués), Rabat, May 1992 (In French only).
- CMR-11 Charles Steedman et Hassan Benabderazzik, "Sécurité Alimentaire et Réforme des Marchés Céréaliers," Rabat, Juin 1992 (In French only).
- CMR-12 Benatya, Driss et al., "Agricultural Data Needs of the Moroccan Ministry of Agriculture," Rabat, July 1992 (In English and French). NB: This report was jointly sponsored by three USAID Agriculture Sector Projects: No. 182 (PESA), No. 191 (CMR), and No. 210 (MAP).
- CMR-13 Belghazi, Saad et al., "Deuxième Enquête National sur la Minoterie Artisanale," Rabat, January 1993 (In French Only).
- CMR-14 Claude Falgon, "La Minoterie Marocaine en Situation de Concurrence," Rabat, May 1993 (In French Only).

- CMR-15 Millie Gadbois, "Midterm Evaluation of the Cereals Marketing Reform Subproject," TR&D: Gainesville, Florida (USA), May 1993 (English and French).
- CMR-16 Max Goldensohn, "ONICL: Actualités et Avenir Institutionnel," June 1993 (French only).
- CMR-17 Lahcen ACHY and Mohamed El Bouziri, "Les Minoteries Industrielles à Céréales Secondaires: Rapport de Synthèse," January 1994 (In French Only).
- CMR-18 Lawrence Kent, Kenneth Neils, and David Wilcock, "Recommendations for a Food Security Stock in Morocco," January 1994 (In English and French).
- CMR-19 Wally Tyner, "Studies on Wheat Trade Liberalization and Domestic Policy Reform," West Lafayette, Indiana, January 1994 (In English and French).
- CMR-20 David Wilcock and Lynn Salinger, "Moroccan Cereals Policy Reform at the Crossroads: Final Report of the USAID CMR Project," Bethesda, Maryland, September 1994 (in English and French).

#### **CMR Quarterly Reports**

- CMR-QR1 David C. Wilcock, "The Cereals Marketing Reform Project: Quarterly Report 1," Rabat, October 1991. (In English and French).
- CMR-QR2/3 David C. Wilcock, "The Cereals Marketing Reform Project: Quarterly Reports 2 and 3," Rabat, April 1992 (English and French).
- CMR-QR4 David C. Wilcock, "The Cereals Marketing Reform Project: Quarterly Report 4," Rabat, July 1992 (English and French).
- CMR-QR5 David C. Wilcock, "The Cereals Marketing Reform Project: Quarterly Report 5," Rabat, October 1992 (English and French).
- CMR-QR6 David C. Wilcock, "The Cereals Marketing Reform Project: Quarterly Report 6," Rabat, January 1993 (English and French).
- CMR-QR7 David C. Wilcock, "The Cereals Marketing Reform Project: Quarterly Report 7," Rabat, April 1993 (English and French).
- CMR-QR8 David C. Wilcock, "The Cereals Marketing Reform Project: Quarterly Report 8," DAI: Bethesda, August 1993 (English and French).
- CMR-QR9-11 David C. Wilcock, "The Cereals Marketing Reform Project: Quarterly Reports 9 and 10," DAI: Bethesda, January 1994 (English and French).

**CMR Working Papers**

- CMR-WP1 J. Dirck Stryker, "Groupe Chargé de l'Aspect Consommation des Céréales au Maroc," Cambridge, December 1991 (In French only).
- CMR-WP2 Philip Boyle, "Situation et Perspectives de l'Aide Alimentaire au Maroc," Rabat, December 1991 (In French only).
- CMR-WP3 David S. Kingsbury, "Summary of Issues Related to the Use of Agricultural Commodity Price Risk Reduction Mechanisms with Special Reference to Morocco," Bethesda, Maryland, December 1991 (In English only).
- CMR-WP4 Bruce Schulte, "An Overview of Agricultural Market Information Systems," Rabat, May 1992 (In English and French).
- CMR-WP5 Henriot Sabourin, "Rapport Technique: Diagnostic du Volet Stockage," Québec, May 1992 (In French Only).
- CMR-WP6 Philip Abbott, "Agricultural Trade Modeling: Report on Training Course and Current Modeling Efforts," Rabat, June 1992 (In English only).
- CMR-WP7 Ann K. McDermott, "Targeting Cereals Subsidies: Case Studies of Morocco, Algeria, Egypt and Tunisia," Rabat, December 1992 (In English Only).
- CMR-WP8 Jeffrey Metzler, "The Impact of Cereals Marketing Reform on the Feed and Livestock Industries," Rabat, October 1992 (In English Only).
- CMR-WP9 David C. Wilcock, "Summary of CMR Phase II Applied Research in Cereals Milling," Rabat, October 1992 (In English Only).
- CMR-WP10 Lynn Salinger, "Bread Wheat Marketing Margins under Liberalization: A Cost-Benefit Analysis," Rabat, December 1992 (In English Only).
- CMR-WP11 Ann McDermott and Najat Bouzri, "Caractéristiques de la Demande des Ménages pour les Produits de Première Transformation du Blé," Rabat, December 1992 (In French Only).
- CMR-WP12 Najat Bouzri and Gregoire Baudonnel, "Caractéristiques de la Demande des Boulangers pour la Farine," Rabat, December 1992 (In French Only).
- CMR-WP13 Omar Aloui, "Transport du Blé Tendre: Réglementation et Réforme," Rabat: Agro-Concept, June 1993 (In French Only).
- CMR-WP14 Channing Arndt, "Analysis of Spatial and Temporal Wheat Price Variation in Morocco," West Lafayette, Indiana, USA, December 1993 (In English Only).
- CMR-WP15 B. Lynn Salinger and Wallace E. Tyner, "La Loi sur le Commerce Extérieur et ses Mesures d'Application: Options de Tarification des Céréales," Rabat, June 1993 (In French Only).

- CMR-WP16 Gregory Lassiter, "Database Consideration for Cereals Tariff Calculations and Recommendations for Cereals Stock Reporting," Bethesda, January 1994 (In English and French).
- CMR-WP17 El Houssine Bertali and Lahcen Achy, "Stockage des Céréales: Quels Enjeux à la Veille de la Liberalisation?", Rabat, February 1994 (In French Only).
- CMR-WP18 Phillip Abbott, "A Cereals Trade Policy Model for Morocco: MAROCMOD User's Guide," Purdue University, West Lafayette, Indiana, June 1994 (In English Only).