

PN-ABO-342
8/2/92

Kingdom of Morocco

USAID/Morocco

**Ministry of Agriculture
and Agrarian Reform**

**Agriculture and Natural
Resources Office**

CEREALS MARKETING REFORM PROJECT

CMR PHASE II RESEARCH IN CEREALS MILLING

by:

David C. Wilcock

October, 1992

Report CMR-WP9

Morocco Cereals Marketing Reform Project

Summary Description of CMR Phase II Applied Research in Cereals Milling

A large part of the work program defined for Phase II of the Cereals Marketing Reform Project involves the potential impact of policy changes on the country's cereals milling industries (soft wheat, hard wheat, and artisanal) and future competition among the products of these groups of firms. This short working paper summarizes background to and components of this research program. ¹

Background

In CMR Phase I, it was confirmed that Morocco's privately-owned but state-controlled industrial flour mills constitute a serious barrier to the final liberalization of the country's cereals subsector. Normally the country's milling industries (soft wheat industrial mills, hard wheat and barley industrial mills, and the 10,000 small-scale or "artisanal" mills) should play dominant roles in coordinating the operation of the vertical marketing channels. However, one of these three competing channels is completely controlled by the state. The production of the other two, while showing clear signs of entrepreneurial dynamism and innovation, are constrained and distorted since they are competing with the subsidized FNBT produced by the state-controlled channel. ²

Two major changes must occur before the critical soft wheat flour industry can begin to modernize and restructure itself to operate in a free market:

- (1) decontrol of bread wheat supply to the mills (now all soft wheat going to the industrial mills, whether domestic or foreign, does so under ONICL orders and at state-fixed prices); and
- (2) elimination of subsidies to and controlled prices for Farine Nationale de Blé Tendre (FNBT), approximately 60% of the output of the industry, or changing GOM FNBT subsidy policy to one involving market competition.

In sum, a central CMR Phase II objective is to highlight the pro's and con's of policy changes that would transform an industry that is 100% state-run on the input side and 60% on the output side, to one in which there is total price competition on both the input and output sides. It is clear that these policy changes would take a sleepy, totally-sheltered industry (where many operators are simply collecting allocated "rents" as they quietly and inefficiently produce their FNBT quota and do not reinvest in plant

1. The CMR Phase II work plan was initially presented in Report CMR-QR2/3, April, 1992.

2. The rationale for using the "subsector approach" to study and promote reforms to Moroccan cereals was described in Report CMR-2, "Agribusiness in the 1990's: The Commodity Subsector Approach", Rabat, June 1991.

modernization) and plunge it into competition both for supplies of raw materials (mostly wheat) and for control of Morocco's very substantial industrial and retail wheat flour markets.

The industry itself is ambivalent about the prospect of free market competition. The industry trade association has generally been negative toward reform since some of its members clearly will be hurt by fuller competition. Individual mills that anticipate doing well under competition are eager to see the reforms instituted. What must begin to enter the public debate at this point is, given the magnitude of the changes likely to occur, it is most likely that some form of partial compensation will be necessary to help mills that will be disadvantaged by anticipated policy changes.

This is a very important potential change for Morocco due to the high per capita consumption of cereals, the primordial nature of cereals and bread to cultural identity and national "food politics" (eg., over half of the country's arable land is planted to cereals), and finally due to the size of cereals milling among Moroccan industries, as shown by the figures below. The value of grain milling is equal to 6 percent of all industrial output and 19 percent of all agro-industrial output. Milling also makes up 9 percent of agro-industrial employment but only 4 percent of estimated value-added.

Relative Importance of Cereals Milling in Moroccan Agro-Industry, 1990

<u>Industry Category</u>	<u>Value of Production (\$ mill)</u>	<u>Value Added (\$ mill)</u>	<u>Employment ('000)</u>
All Industry	12,948	3,645	414
All Agro-Industry	4,021	1,275	99
Grain Milling	784	51	9
Sugar Processing	592	154	10
Edible Oils	492	62	8
Fruit/Veg. Process*	396	127	4 (Exports:\$312)
Dairy Manufacturing	272	57	4
Fish Processing	246	75	18 (Exports:\$237)
Baking	85	24	7

Source: GOM/MCI

* Does not include fresh fruit and vegetable packing.

Among the likely consequences of the decontrol of the soft wheat flour industry are the following:

- (1) A substantial number of the country's 80-plus industrial flour mills will close due to poor location, out-dated equipment and poor management;
- (2) Larger, stronger mills or milling groups will purchase other companies as they begin to seriously compete for market share. Milling will tend to be even more concentrated in the agro-industrial "T" (Kenitra-Casa, Rabat-Meknes-Fez), as it was in the past;

(3) Competition will increase among the products of the three competing market channels. Soft wheat mills will diversify their product lines to gain market share from both the rapidly-expanding hard-wheat industrial mills and the large number of small, artisanal mills;

(4) Industrial flour mills in competition will begin to diversify their products to better respond to both industrial and direct consumer demand. For example, even without subsidies, certain mills may find it advantageous to continue to produce higher extraction, cheaper flours (similar to the current FNBT). In the industrial flour market, bread and cookie bakers, pasta-makers and other flour users will be able to demand and receive a wider variety of flours, at differing prices, for their specialized needs;

(5) This greater diversity of products from the milling industry is going to require change and modernization of "facilitating regulations", particularly in flour classification (on the output side) and cereals grading (on the input side). More useful cereals grades give marketers and millers an opportunity to provide price incentives for the quality they need; and

(6) Moroccan policy makers, armed with better information on these industries, need to make decisions on the nature and speed of the policy change to advocate. For example, is it better to adopt the reforms at one time or phase them in over several years? The answer may depend on the availability of compensation for the "losing mills". The process of rationally defining policy options for modernizing and improving economic efficiency of an important agro-industrial subsector is one of the main outputs of the CMR project.

Phase II Applied Research Activities

There are seven applied research tasks, largely focused on milling industries, that were identified in CMR Phase I. These are summarized below along with information on what has been accomplished so far in Phase II on that topic, and responsibilities for tasks assigned to different CMR subcontractors and "partner organizations" in the GOM: ³

1. Consumer and Industrial Demand for the Output of Moroccan Flour Mills

Responsibility: ICEA-Entreprise with DAI, CPM and ONICL

Timing: September-November 1992

This activity involves interviewing groups of consumers (and separately industrial users) about their quality/price preferences and substitutions among the milled products (flour, semolina) of the three industrial channels, concentrating on the output of the

3. A general description of the current state of Moroccan milling and a description of the types of information needed for this subsector research program were given by Claude Falgon in CMR Report No. 16, *La Minoterie en Concurrence*, June 1992.

industrial mills. ICEA and collaborators will apply consumer panel techniques to Moroccan consumers in different urban/rural, region and income classes. Industrial interviews will be conducted with "flour-using industries" (bakeries, cookies, pasta, etc.).⁴

2. Business Health and Planning in Soft Wheat Mills

Responsibility: ICEA with Agro-Concept

Timing: October-December 1992

The intention is to interview a large sample of owner/managers of soft wheat mills. Sample will concentrate on those for which detailed input/output data already available. A major objective of this work will be to assess the preparedness of the mills for free market competition and their plans for the future.

3. Basic Data and Growth Plans of Hard Wheat Mills

Responsibility: ONICL with DAI

Timing: October-December, 1992

Very little reliable information is available about the new "Minoteries Industriels à Céréales Secondaires" or Semouleries that are primarily now producing hard wheat flour and semolinas on an industrial scale. While their overall output is still very small compared to the soft wheat mills, their rate of growth and innovation in the past five years has been very high. Statistical information on these mills will be collected by ONICL staff and this will be supplemented by business interviews with selected owners or managers.

4. Artisanal Mills: Serious Future Competitor?

Responsibility: INSEA with ONICL and DAI

Timing: July, 1992 - January, 1993

INSEA, with support from ONICL and CMR, have replicated the, the 1988-89 artisanal milling study of the approximately 9,100 rural and urban artisanal cereals mills. This effort intends to: examine evolution of small-scale milling over the past three years, examine consumer strategies in a year of domestic production shortage, identify those urban mills that may be most capable of direct product competition with the output of

4. Complementary analysis of grain, flour and flour product purchases, recorded in the 1990-91 ENNV survey will be undertaken by AIRD, partially funded by CMR.

industrial mills, and assess other aspects of competition among the three vertical channels. It may be advisable to do more in-depth follow-up interviewing with the more sophisticated urban artisanal mills, e.g., those larger-scale mills that can mechanically sift flour.

5. Linear Programming Model of Transportation, Storage and other Economic Costs for Soft Wheat Mills

Responsibility: Agro-Concept with ONICL and Purdue

Timing: June, 1992 - January, 1993

The initial objective of this activity will be to construct an LP model that contains the geographical location all the industrial soft wheat mills, to assess the likely first steps in decontrol of the industry: impacts of elimination or cut-back of transportation and/or storage subsidies on the financial position of mills in different parts of Morocco. Later, this model may be used to assess other dimensions of competition among mills, particularly those involving different costs of production. Initial model development was done in June and July by Agro-Concept.

6. Aggregate Costs and Benefits to Completing Reform of Cereals and Flour Marketing

Responsibility: AIRD with DPAE/SEEPM

One of the most important tasks in the Phase II program is to estimate the aggregate costs and benefits of completing the ASAL II reforms agreed to in principle for the cereals subsector. At the moment the soft wheat system is in a suboptimal, but fairly stable equilibrium. To move the system off its current axes and subject the politically influential millers to reforms, hurting some and helping others, has substantial political and economic costs. It is essential to also lay out the "benefit stream" so that sound economic arguments can be offered for the proposed changes. Also it may be necessary to compensate certain millers for their losses that can be attributed solely to the GOM changing the "rules of the game". Industrial restructuring funds may readily be available from donors such as the IBRD if compelling arguments for their use can be made.

7. Information Programs for Millers on Likely Impacts of Reform Program

Responsibility: ICEA, Agro-Concept, and CPM

Once the majority of the above tasks have been completed by the end of December, 1992, a strategic analysis of the soft wheat industry will be prepared. This will serve as the basis for preparing an information campaign for the industry that would be presented to mill owner/operators in two or three day-long regional seminars.