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CEREALS MARKETING REFORM
PROJECT
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**THE SUBCTOR APPROACH TO AGRIBUSINESS
PROJECTS**

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The 1990s are witnessing a boom in agribusiness projects funded by bilateral donors, particularly U.S. and West European aid agencies. This trend is now strongest in North Africa, the Middle East, and South Asia, but follows a pattern first seen in Latin America beginning in the 1970s. The impetus for these projects comes from a combination of factors:

- Disappointment in many countries with the results of traditional development projects that funded agricultural research, extension, and marketing, largely implemented through state agencies;
- Strong political motivation to engage in private sector development projects in order to encourage private growth and take advantage of liberalized economic environments stemming from the structural and sectoral adjustment programs of the 1980s; and
- Increased opportunities for bilateral donors to promote agribusiness partnerships between host country firms and those in the donor country. Several European countries, and the European Community itself, have set up special promotional and guarantee funds to foster the development of bilateral private partnerships.

Many in this new generation of agribusiness projects are similar in that they:

- Promote high-value agricultural products for export, particularly horticultural products;
- Focus on increasing penetration of the same markets, such as the European Community, the high-income areas of the Pacific Rim, or North America; and

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- Face implementation pitfalls that come from ignoring the lessons of the last generation of agribusiness promotional efforts (in the 1950s and 1960s) or from general weaknesses in project design and implementation.

The thesis of this article—based on several years of involvement by the author in the design, implementation, and evaluation of agribusiness projects in Africa and Asia—is that the use of a systematic descriptive and diagnostic method—the commodity subsector approach—can increase the chances for success in the current generation of agribusiness projects. As a project design tool, the commodity subsector approach helps reveal the constraints, as well as the potential, of a particular subsector. The approach isolates options for cost-effective changes in the subsector that can be introduced through the vehicle of a development project. It also helps avoid common weaknesses in agribusiness projects, including confused objectives, imprecise implementation methods, ignorance of socioeconomic consequences, and failure to look at the project performance record.

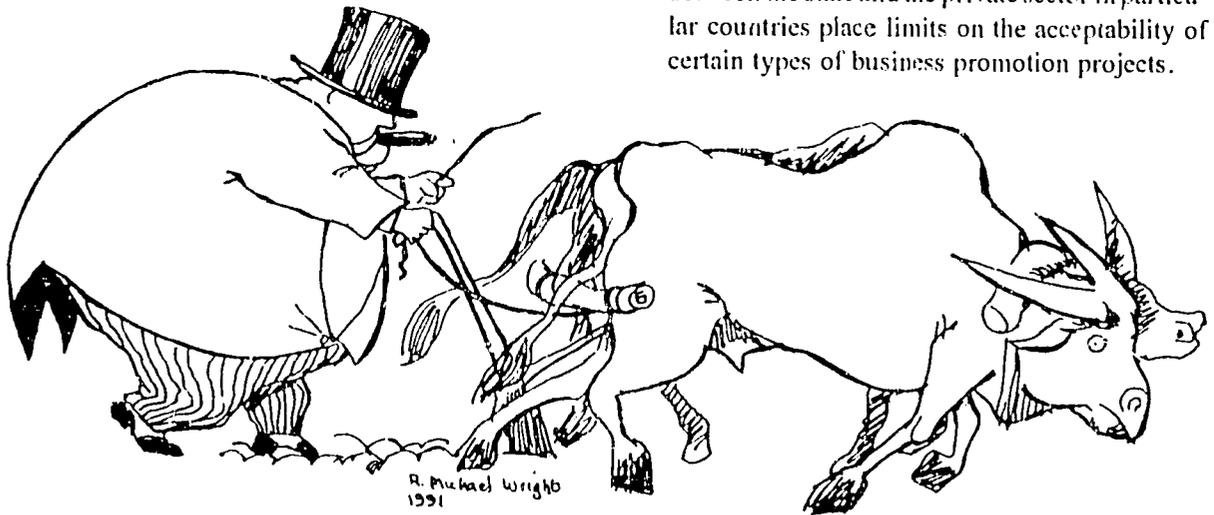
Common Weaknesses in Agribusiness Projects

The objectives of agribusiness projects are often not as clearly defined as those of projects in more familiar sectors, such as infrastructure, social services, or transportation, because agribusiness projects are relative newcomers to the project portfolios of most donors. Even where objectives are well defined at the macro level (for example, increasing rural incomes or increasing nontraditional agricultural exports), project designers often are confused about the way the application of project resources at the micro and field level will bring about progress toward more macro-level objectives, even if all design assumptions hold.

Part of this fogginess in objectives and how they may be accomplished may be due simply to not looking at the record of past projects. That record would reveal that production increases in a particular

industry are usually promoted through one or more of the following actions, most of which are heavily subsidized during the life of the project:

- General or sectoral policy reform that will create an environment where the pent-up forces of private business will blossom;
- Introduction of (or research on) new production or processing technologies;
- Special credit programs;
- Specialized training programs in production, processing, or marketing;
- Market prospecting and advertising; and
- "Incubating" of new local firms or promoting partnerships between outside and local firms (so the private sector itself will undertake many of the above functions).



When any of these areas of potential project action is examined in a country context, it is evident that there are often only a small number of practical pathways that can be followed in implementing these actions. Most of these have been tried and tested in

the past generation of agribusiness promotion projects, and the results, both positive and negative, are generally well known.

Both the historical record and current experience in project evaluation and design lead to several additional observations:

- There are limits to what a public sector project to promote private agribusiness can do. For example, the regulations of the U.S. Agency for International Development make it virtually impossible for that agency to make business-development grants "with no strings attached" to individual private companies. Although other bilateral donors are more flexible than A.I.D., most do have rules that restrict the nature of business development actions they can undertake.
- Significant differences in ideological or political orientation between some donors and recipient countries as well as the nature of the relationship between the state and the private sector in particular countries place limits on the acceptability of certain types of business promotion projects.

- Some lessons of past agribusiness promotion projects have not been widely documented and disseminated. As a result, there are few how-to-do-it business promotion recipes available for study and experimentation.

Business development practitioners at DAI and elsewhere have found a partial solution to the last problem by using the commodity subsector approach for project design and implementation.

Commodity Subsector Approach

The commodity subsector approach is a methodology that has been employed successfully in recent years to improve the performance of marketing and information systems for agricultural commodities in the United States. More recently, the approach has been used in working with small-scale enterprises in developing countries. It draws on applied industrial organization work with large-scale, nonagricultural industries that first began in the United States in the 1930s. The application of the approach to agribusiness draws on the more recent, overlapping contributions made in agricultural marketing and small and medium enterprise development projects.¹

The commodity subsector approach provides a simple, action-oriented framework for meeting information needs on the structure and functions of industries (subsectors) that transform raw materials into finished products. The subsector approach provides guidance for the effective use of project resources, first, by providing a simple method for describing the subsector and, second, by identifying optimal points for leveraged intervention.

¹Two papers that detail the subsector method applied to agricultural marketing and small and medium enterprise development efforts are: John Holtzman, "Rapid Reconnaissance Guidelines for Agricultural Marketing and Food System Research in Developing Countries," Working Paper No. 30, *MSU International Development Papers*, East Lansing, Michigan, 1986; and James Boomgard et al., "A Subsector Approach to Small Enterprise Development and Research," Working Paper No. 10, *GEMINI Project Papers*, DAI, Bethesda, Maryland, 1991.

The approach does not rely on a single investigative or analytic method. Rather, experience in the use of the approach has resulted in the accumulation of a variable set of flexible tools that have proved their descriptive and analytic worth and their cost-effectiveness.

Definitions and Basic Principles

A subsector is a vertical grouping of enterprises involved in the production and marketing of one well-defined product or several closely related products. Commodity subsectors disaggregate and cut across the large divisions of an economy. These are commonly referred to as sectors (such as agriculture and industry).²

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The core activity of the commodity subsector approach is a diagnostic study of a particular subsector.³ The study aims at producing a thorough

²Technically, the use of the term "subsector" can be confusing because the vertical flow of a product from producer to consumer crosses the boundaries of "sectors," as defined in national income accounting.² For example, processed *cornichon* pickles involve industries in agriculture (production), transportation (marketing), industry (processing), and retailing (wholesale and retail trade in the finished product).

³The diagnostic study is normally carried out using rapid reconnaissance survey methods similar to those used in the initial stages of farming systems research and extension work in developing countries.

description of the structures and functions of vertical production and marketing systems in the subsector. The study is then used to locate those places in the subsector where change (in rules, technology, pricing, information, vertical integration, and the like) can increase output, improve performance, or lower costs.

In most commodity subsectors, there are several competing vertical marketing channels for the product in question, with each channel usually representing a different set of production or processing technologies. In developing countries, one marketing channel may center on small-scale or traditional processing technologies, whereas another may involve large-scale, industrial technologies. Selection of one marketing channel over another requires an understanding of the trade-offs between potential benefits and costs. Examples of these trade-offs include employment generation, foreign exchange used for acquiring inputs, and foreign exchange earnings from exports.

Normally a vertical subsector is composed of recognizable "industries" at different horizontal or functional levels, often involving a change in ownership as products pass from one functional level to the next. For example, the wheat subsector can be seen as comprising linked horizontal layers: a wheat production industry (farms), a marketing and storage industry, a milling industry, a baking industry, a pasta industry, and a retail store industry. When there are few competing channels in a subsector or when there is substantial vertical integration, the predominant industry or company may overlap with the boundaries of the subsector.

Elements of the Approach

The subsector approach is concerned with the analysis of structural and functional relationships in the vertical flow of well-defined products in a particular industry and with the information needed to improve the coordination of that flow, particu-

larly as products change ownership. The approach aims at organizing information in the same manner as do private sector companies in the business of selling well-defined products in specific markets within the vertical channels that define the subsector.

In agribusiness subsectors, it is critical to understand how agricultural products move from the farm through transformation and packaging to the consumer. In established markets, mechanisms by which products move from producer on up the chain include, for example, contracting, market exchanges, or auction systems. Manufacturers of new products may use the channels and exchange mechanisms already established for similar products, or they may develop new channels and exchange mechanisms. The identification of appropriate exchange mechanisms often helps locate the places where changes in procedures or standards can have substantial impact on large numbers of firms.

Once alternative production and marketing channels for the same product are identified (in Madagascar, for example, artisanal clove-leaf essence from small-scale producers competing with oil produced in larger factories), it is important to evaluate the evolution and dynamics of competition among the vertical channels. (In a sense, this brings a horizontal dimension into the diagnosis.) It is here that development projects often must make choices about where to direct their resources. A.I.D. projects frequently channel assistance to small and medium enterprises because it is believed that this approach may maximize desirable distribution or employment effects.

In using the commodity subsector approach, one must understand the dynamics of change in the subsector. What channels are growing most rapidly? What are the forces and constraints responsible for this differential growth or stagnation? What are the niche markets that constitute promising outlets for the agricultural production of a country?

The principal outcome of the commodity subsector approach is the identification of those places in the subsector where project-related leverage and opportunities for change converge. Possible changes that might be identified through the use of the commodity subsector approach include those that affect product grading and standards, pricing, timing of deliveries, processing technology, and buying practices. Introducing these changes may require a policy study, training in a new technology, negotiating with different parties on a legally binding contracting mechanism, or design of a new advertising strategy or a direct marketing campaign—any or all of which may be undertaken through the vehicle of a development project or other types of third-party services.

The Subsector Map

A handy device that can be used to facilitate understanding of the outcome of a diagnostic study is a subsector map. This type of map summarizes the diagnostic team's understanding of the structure and functions of the subsector. The map identifies the subsector's competing channels and traces the transformations a product undergoes as it moves upward through the competing channels. Although the subsector map is a simple idea, it can be a powerful pedagogic and analytic tool, particularly if key decision makers agree to the schematic presentation of its key features.

The figure on the next page presents a generic subsector map as it might apply to an export-oriented horticultural commodity in Morocco. Seven general functions are identified along the vertical axis. Three different marketing channels lie along the horizontal axis. In this particular case, the destination markets are presented as a relatively homogeneous "European retail" market; in reality, most products would be more likely to have different ultimate markets depending on the marketing channel used. In addition, the Moroccan market for this particular generic product is shown as secondary in nature.

The figure also illustrates the map's use of several symbols that represent functions, types of sales, and so forth. One symbol depicts competition between vertically integrated firms and firms that rely on market exchanges for the transfer of products. The idea is to capture key relationships and points of exchange as understanding of the structure and functions of the subsector evolves.

Initially, the map may be confusing with a criss-crossing tangle of lines. Later, with greater knowledge, it should be possible to prune out the less important relationships and focus on the main market channels. As knowledge grows, it should also be possible to add overlays of additional information to the subsector map. For example, common overlays may include the number of firms of each type in the map and employment figures that correspond to the various boxes.

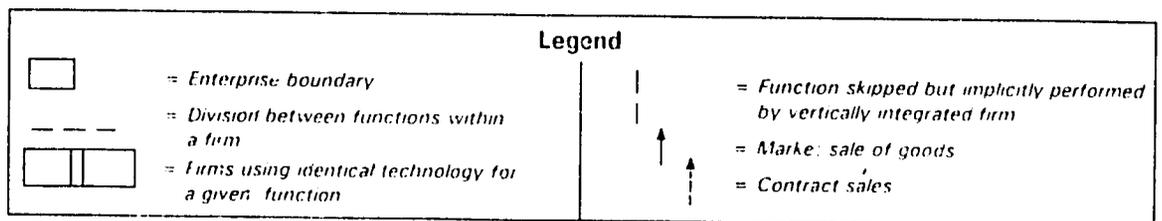
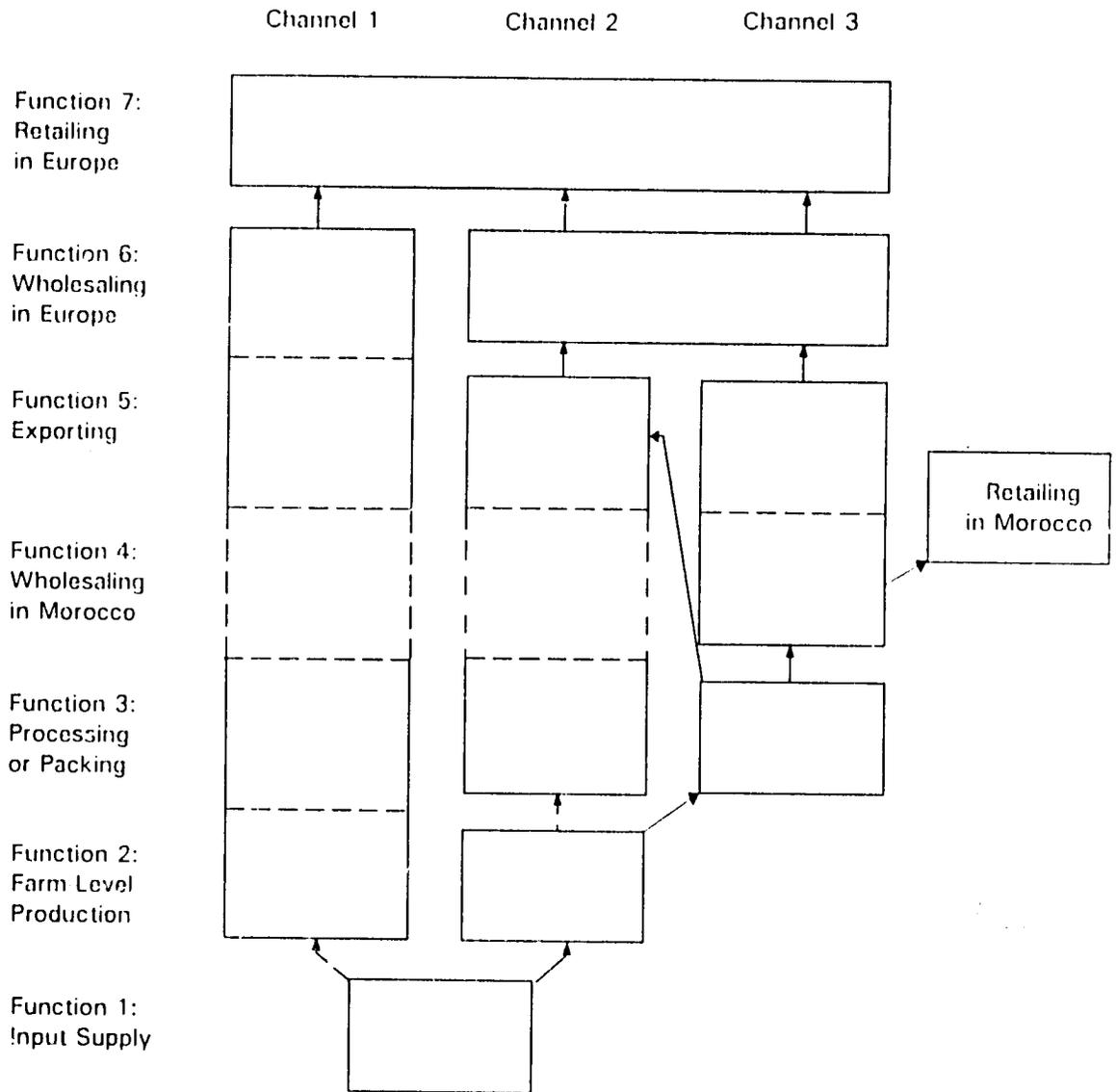
A Useful Framework

The commodity subsector approach provides a useful framework for designing an agribusiness project. The approach generates a precise description of the structure and functions of a subsector and provides ideas on what might be done to improve subsector performance. The approach is partly descriptive (industry structure, types of production processes used, marketing channels) and partly analytical and prescriptive in indicating areas in which change can have maximum effect on subsector productivity.⁴

Yet the commodity subsector approach, like any other diagnostic or analytic tool, should be comple-

⁴ Readers who would like more detail on how to conduct subsector diagnostic studies are invited to consult *A Field Manual for Subsector Practitioners*, published by GEMINI project at DAI. The project also is developing a video training module

GENERIC SUBSECTOR MAP FOR EXPORT-ORIENTED MOROCCAN HORTICULTURAL COMMODITIES



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mented by the use of other tools and by contributions from appropriate specialists. One limit of the subsector approach is that it is directed toward improving the performance of existing industries but provides less guidance on the feasibility of developing industries from the ground up.⁵ The approach also does not provide specific guidance on exactly how to introduce changes in the subsector once the need and opportunities for change have been identified. These limitations underscore the need for close involvement of experienced technical specialists in all stages of subsector development work.

A final observation is that designers of the current generation of agribusiness projects often have not given adequate attention to the socioeconomic consequences of agribusiness growth. In many Third World economies, growth in export-oriented crop subsectors may have significant consequences such as:

- Changes in land settlement and land use patterns;
- Migration from areas of dry land subsistence farming to peri-urban areas for irrigated crop production;

⁵ This is also true of more traditional economic analyses of comparative advantage, such as domestic resource cost (DRC) analysis. DRC's calculated on the basis of trial plantings or test shipments are not likely to hold up under the conditions of a more mature industry.

- Decreases in the number of self-employed farmers and increases in the number of wage laborers; and
- Changes in the division of labor by sex. Some agribusinesses, for example, may increase opportunities for female employment, albeit at very low wage rates, in labor-intensive jobs such as grading, packing, and processing.

Examination of these issues reveals long-term socioeconomic costs and benefits that should be taken into account as part of any investment-planning process.

In this regard, it should be noted that the types of information revealed in the use of the commodity subsector approach are particularly helpful in highlighting the expected effect of proposed projects on different marketing channels that, in turn, often have sharply differing employment, income generation, and distribution consequences. Overlays on subsector maps may help policy makers visualize the consequences of alternative policy or regulatory measures and the potential socioeconomic benefits from business promotional efforts. Making the choices may not be any easier, but at least a clearer picture of the advantages and disadvantages of different options will be available to inform those decisions.