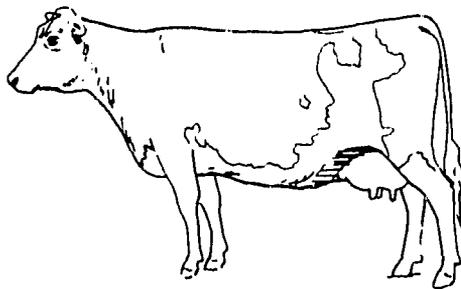
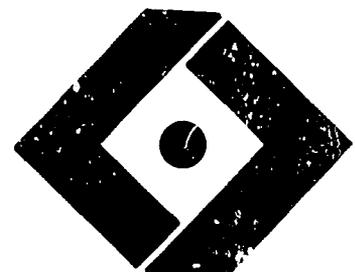


IMPROVING THE MARKETING OF CATTLE
FROM SMALL FARMS IN
BEIRA LITORAL AND ENTRE DOURO E MINHO
VOLUME I



March 1984



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IMPROVING THE MARKETING
OF CATTLE FROM SMALL
FARMS IN BEIRA LITORAL
AND ENTRE DOURO E MINHO
Volume I

A Report to

Ministry of Agriculture, Forestry and Nutrition
Republic of Portugal
and
United States Department of Agriculture
Office of International Cooperation and Development
Lisbon, Portugal

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This report is the result of the work developed in these interviews, discussions and analyses made during the project.

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IMPROVING THE MARKETING OF CATTLE FROM SMALL FARMS IN BEIRA LITORAL AND ENTRE DOURO E MINHO

SUMMARY

I. INTRODUCTION

Observation of cattle marketing systems in Portugal led to the conclusion that present cattle marketing practices, at the local level, are inefficient and lack effective competition. As a result, the small farmer is at a competitive disadvantage in selling his cattle and is further penalized by the inefficiencies of the marketing system. The result is lower prices for the cattle he sells.

Improvement in local cattle markets in Portugal must be concerned with three separate, but related aspects of the marketing system:

- (1) market efficiency
- (2) market competition, and
- (3) market organization and structure.

This project, sponsored under the PROCALFER Program, had four major objectives:

- (1) To review, describe and evaluate existing systems of marketing cattle in the Beira Litoral and Entre Douro e Minho regions.
- (2) To investigate the feasibility and merits of alternative local livestock marketing systems, or improvements to existing systems, and the role of cooperatives in marketing livestock.
- (3) To recommend specific changes to establish the alternative systems or improvements or both identified in Objective 2.
- (4) To develop an implementation plan, schedule and requirements for proposed changes in the marketing of cattle.

The project was conducted during July to November, 1983 by a research team of marketing specialists from the Division of Marketing, Planning Cabinet, Ministry of Agriculture, Forestry and Nutrition and PROCALFER U.S. consultants working under contract for the Organization for International Cooperation and Development, U.S. Department of Agriculture.

Since no recent data or other information existed on the livestock marketing practices of small farmers or of marketing agents, a major part of the work of this project was concerned with the development of data from field surveys of these participants in the livestock marketing system.

In total, usable responses were obtained from 100 farmers, 15 butchers (plus a consolidated reply from the Association of Butchers), 21 municipal cattle fairs, 30 cooperatives and four merchants. It is believed that,

with the exception of merchants, respondents to the survey are representative of those in the survey area. Although the number of merchants interviewed was smaller than planned, cattle-buying practices of merchants were also included in questionnaires directed toward farmers, butchers and cooperatives.

II. TRENDS IN LIVESTOCK NUMBERS AND PRICES

A. Livestock Numbers

Livestock are important in the agricultural economy of all regions of Portugal and the production of meat, milk and wool contribute substantially to the incomes of both small and large farmers.

Numbers of cattle, sheep and goats in Portugal have been relatively stable since 1974, but the number of hogs increased 90 percent during this period. In 1982, there were an estimated 1,070,000 cattle, 3,750,000 hogs, 3,840,000 sheep and 745,000 goats on Portuguese farms.

This project was concerned with markets for cattle produced on small farms in the Beira Litoral and Entre Douro e Minho regions of the north. The cattle industry of these regions is characterized by a preponderance of dairy cattle and small farms. Farms of less than 5 hectares comprised 85 percent of the total number of farms and 76 percent of the cattle. The average farm is about 2 hectares and has 3 to 4 milk cows. In the two regions, 95.6 percent of the farms had 5 cows or less. Most farmers market only 2 to 3 cattle per year.

B. Cattle Prices

Since there are no organized markets for cattle in Portugal, no specific price reports for cattle at a given market exist. However, the Servicio de Comercio de Gados, Junta Nacional dos Produtos Pecuários (JNPP) collects prices from certain fairs and "other markets" and estimates prices on a monthly basis.

A review of JNPP prices during the period 1977-1981 shows that prices of adult cattle increased from 88\$5 (escudos) per kilo in 1977 to 203\$7 in July 1980 and then declined to 164\$0 by December, 1981. Prices of fed yearling bulls rose from 113\$2 per kilo in 1977 to 218\$7 in March, 1980 and equalled 210\$8 in December 1981. Price spreads between adult cattle (cows) and fed yearlings averages 15 to 20 percent in favor of yearlings.

III. EXISTING SYSTEMS OF MARKETING CATTLE IN PORTUGAL

A. Introduction

Farmers have six channels through which they market cattle. First, and most common, are the private cattle merchants, second are local cattle fairs, third is between farmers in a direct farm-to-farm channel, fourth

is butchers, fifth is sales through the intervention programs of the Junta Nacional de Productos Pecuários and sixth is sale through cooperatives.

B. The Position of the Farmer

One hundred farmers in the Entre Douro e Minho and Beira Litoral regions were interviewed about their methods of production and marketing practices.

About half the farmers in the survey own all the land they farm. Nearly all the farmers had dairy cows and many had fattening bulls also. Usually, farmers have fewer than five head of any type of cattle, such as dairy cows.

Cattle merchants are the most frequently used market channels for farmers in the study, with more than 90 percent of farmers saying they used them. The farmers are not always satisfied with their transactions with merchants. This dissatisfaction stems from farmers' dislike of the head basis for the sale and some dissatisfaction with the actual prices paid by merchants. Farmers liked the way merchants promptly pay for cattle purchases. Also, merchants are important sources of replacement cattle for farmers.

The second most popular market channel for farmers in the survey was butchers, used by more than half the farmers. Farmers appear to be more satisfied by their transactions with butchers than by their transactions with merchants. This is because most sales to butchers are on a carcass weight basis and 96 percent of farmers selling on that basis were satisfied. Conversely, more than 60 percent of farmers selling on a head basis were dissatisfied. Farmers say that butchers pay promptly and most of them say they negotiate with the butcher rather than accept the first price offer.

Thirty-five percent of the surveyed farmers sold cattle at the fairs. Almost all the farmers indicated they have sold at a particular fair all their lives. Fairs are important market channels for cull cows and veal calves. Not many slaughter cattle are sold at fairs. Eight-six percent of farmers in the survey say they purchase cattle at fairs, suggesting that fairs are important for farmer-to-farmer sales. The main reason farmers give for liking fairs is that they can negotiate with more than one buyer. Farmers disliked selling cattle at fairs mainly because they were uncertain what prices they would receive and because the fairs lack scales and sanitary controls. Perhaps the most vital function that fairs provide farmers is one of price intelligence. Eight-six percent of the survey farmers indicated they used fairs as a source of price information. Unfortunately, the fairs are markets for cull cows and veal calves and the prices do not reflect the slaughter cattle price situation.

The Junta Nacional dos Produtos Pecuários (JNPP) represents a minor market channel for farmers, used only when cattle prices are low and JNPP intervenes in the market to support prices. As a result, most farmers have never sold to JNPP and do not know the current intervention price.

Cooperatives represent a market channel that is not used traditionally by farmers, but which has potential for marketing significant numbers of cattle. Eighty-five percent of the farmers surveyed belonged to at least one cooperative. Despite such broad farmer support of cooperatives, only 14 percent of the farmers reported they had ever sold cattle through their cooperative. Some cooperatives already have programs to buy heifer calves from farmers, grow them on a cooperative farm using the cooperative's feeding program, and sell them back to farmers as replacements. Eight-four percent of farmers thought cooperatives would be a good way to sell their cattle because they thought it would be an honest sale and it would eliminate the middlemen.

Auctions are not a common method of livestock marketing in Portugal. Most of the surveyed farmers understand the auction concept and many have attended an auction of some sort. However, fewer than half the farmers say they are interested in the possibility of a livestock auction.

C. Fairs

Fairs have been important markets for livestock and other goods in Portugal for centuries. They are held periodically at a specified site in a town under the authority of the local municipality. During this project the livestock fairs were closed by the outbreak of peripneumonia. Fairs are held on a regular schedule, usually 24 to 26 times per year, and feature livestock, clothing, household goods and food.

The most important types of cattle sold at fairs are young calves and cull cows. Only three fairs in the survey exceeded 500 head in average daily sales with most ranging between 150 and 500 head. Only three fairs reported an increasing trend in size. However, most fair officials expect the size of their cattle fair will increase in the next five years.

The most common buyers at fairs are the merchants, followed by farmers. Farmers usually buy only dairy cows and calves, but merchants buy cull cows, young calves and yearling heifers. Few of the buyers at fairs are butchers. The most common sellers at fairs are farmers.

One important problem for fairs is the lack of animal health inspections at most fairs. Fairs are ideal conductors of communicable diseases because cattle from different farms are mingled in a single place.

The physical facilities of fairs are quite variable. Almost all fairs have loading docks to handle trucks. Nearly all fairs lack scales to weigh cattle so cattle cannot be sold on a live weight basis and must be sold on a head basis. Also, most fairs have no reserved spaces for buyers or

sellers and do not assign spaces. Cattle and people are mixed up and milling about, making it more difficult to transact business in an open and fair atmosphere.

All the fairs in the survey reported that farmers at the fair receive offers for their cattle from more than one buyer. Moreover, according to the fair officials, all the prices paid are negotiated between buyer and seller. Many fair officials reported agreement among merchants regarding prices they will offer for cattle. There is no means of resolving disputes between buyers and sellers. At all but a few fairs the seller is paid cash immediately at the time of the sale.

D. Cattle Merchants

Cattle merchants are independent country livestock buyers who buy cattle directly from farmers. They are the most important buyer of cattle from the farmer. They also are major buyers and sellers at cattle fairs. They sell primarily to butchers but also serve as a source of replacement cattle for farmers. Usually they buy and sell for their own account, but some buy on a commission basis as order buyers for butchers.

Merchants generally buy from a large number of farmers (50 or more) in a wide area (50 to over 100 km). Their primary source of cattle is the small farmer.

They generally buy cattle on the basis of a fixed price per head, pay cash at time of purchase, take the cattle away in their trucks and deliver the cattle to the JNPP slaughterhouse designated by the butcher to whom they have sold the cattle. Some purchases are made on a carcass-weight basis with payment made to the farmer after the cattle have been slaughtered.

Merchants are in the market daily, are in frequent contact with butchers and cattle fairs and are well-informed on cattle prices. In most instances, they said that they know exactly, or at least very close to, the price they will get for the cattle when they sell them to the butcher.

Few merchants purchased cattle from cattle parks (concentration yards) since sale of cattle through such parks is not common. However, merchants would be willing to buy at a cooperative cattle park if cattle quality and prices were competitive. Merchants were not interested in buying cattle at livestock auctions.

E. Butchers

Small butchers are the principal suppliers of meat to Portuguese consumers. Most are individual proprietors with one or two employees. The butcher buys cattle principally from merchants although some cattle are bought directly from farmers. Although the butcher would prefer to buy the cattle himself directly from farmers, the time required to make such purchases

makes it impracticable since he has to operate his butcher shop. Therefore, he uses the services of merchants who also deliver the cattle to JNPP slaughterhouses where virtually all cattle are killed by JNPP for the butchers.

In those instances when butchers buy directly from farmers, most of their purchases are made locally and primarily from larger farmers. Butchers do not buy at cattle fairs. Nearly all cattle are bought on a carcass weight basis. Butchers know the value of the carcass from the cattle they buy and base their price on carcass value. Butchers would be interested in buying cattle from cooperative cattle parks (sales yards) as they believe that these parks would offer a good selection of quality cattle and would eliminate the costs incurred when the butcher buys through a merchant. However the cattle park would have to transport the cattle to the JNPP slaughterhouse for the butcher. Most, but not all, butchers did not think that selling cattle by auction would succeed due to resistance by merchants.

Although virtually all cattle were slaughtered by JNPP, at a cost of 20\$80 per kg, nearly three-quarters of the butchers interviewed were not satisfied with the system of slaughter through JNPP. Reasons for this dissatisfaction included: costs too high, unsatisfactory carcass cutting methods, poor refrigeration, meat transported under poor conditions, JNPP personnel poorly trained, insufficient slaughter capacity, delays in getting cattle slaughtered.

F. Cooperatives

Cooperatives play a vital role in the agriculture of the Beira Litoral and Entre Douro e Minho regions. The regions are major milk-producing areas and strong dairy and farm supply cooperatives are important. Questionnaires were completed by 30 cooperatives in these two areas. Twenty-eight out of the 30 are dairy cooperatives. Nearly all also handled feed, fertilizer, seed and other farm supplies for sale to their members. Many also marketed fruits and vegetables, grain and other products for their members.

Seven of the 30 cooperatives reported cattle marketing activities. However, these sold only a few head and not on a continuing basis. Only one cooperative reported selling over 50 cattle in 1982. Cattle marketing by cooperatives therefore is unimportant in the area.

Cattle marketing activities reported included:

- (1) Buy cattle from members, have cattle slaughtered by JNPP and sell meat to butchers or through co-op butcher shop.
- (2) Buy heifer calves from members and raise as replacement heifers to sell back to members or to others.

- (3) Buy cattle from members, feed and sell to butchers or merchants.

In contrast to the limited activities of cooperatives in cattle marketing, 84 percent of the farmers interviewed wanted their cooperatives to sell their cattle and 20 out of 25 cooperatives indicated that they were interested in cooperative marketing of members cattle. Two types of cattle marketing activity were of major interest to cooperatives in the survey:

- (1) cooperative acts as a butcher -- buys cattle from members, slaughters through JNPP and sells meat to butchers or through its own co-op butcher shop (22 cooperatives)
- (2) cooperative works closely with local câmara (municipality) to improve local cattle fairs (22 cooperatives).

Other cattle marketing activities of interest included:

- (1) cooperative trucking of members' cattle (10 cooperatives)
- (2) cooperative acts as a cattle merchant (8 cooperatives)
- (3) cooperative operates a cattle auction (7 cooperatives)
- (4) cooperative operates a cattle park (3 cooperatives).

As indicated, 84 percent of the farmers interviewed were interested in their cooperatives marketing cattle. They thought cooperative marketing would bring them better prices, would sell by live weight basis, would be an honest system and would bring organization to the marketing of cattle. However, they stipulated certain conditions: co-op must buy and pay rapidly and at a fair price, co-op must have a truck and pick up the cattle at the farm, must be honest and show no discrimination among members.

IV. RECOMMENDED ALTERNATIVES AND IMPROVEMENTS TO EXISTING CATTLE MARKETING SYSTEMS AND SERVICES

Alternatives and improvements to existing cattle marketing systems were evaluated in relation to three functional areas of marketing: physical infrastructure, market services and pricing and price discovery. Consideration was also given to traditional cattle marketing practices, the position of the small farmer and existing markets, marketing agencies and institutions.

Recommended market alternatives or improvements have been proposed in three areas.

- (1) Improving local cattle fairs
- (2) Increasing the role of agricultural cooperatives in marketing cattle
- (3) Evaluating livestock auctions as potential markets for cattle in Portugal.

A. Improvements in Local Cattle Fairs - Recommendations

Fairs are such an important traditional cattle market and are so much a part of rural Portuguese life that improvements in the physical infrastructure and operating procedures of local cattle fairs could increase significantly overall marketing efficiency.

1. Physical Improvements

Required improvements in physical facilities will vary from fair to fair depending on location and existing facilities. Proposed improvements, depending on needs, might include the following:

- Loading docks
- Receiving pens
- Livestock scales
- Scalehouse and fair office
- Simple hitching rails for segregating cattle by type and age
- Other minor improvements such as
 - planting shade trees
 - cleaning and leveling fair ground, drainage
 - establishing parking lots
 - constructing water lines and tanks
 - toilets, trash cans, and
 - benches.

2. Operating Improvements

In addition to physical improvements, changes in operating practices and regulations have the potential to increase the efficiency and usefulness of local cattle fairs. Such changes might include the following:

(a) Management Improvements

- Designation and identification of Câmara personnel having responsibilities for operating of the fair
- Appointment of a "Fair Advisory Board" of farmers, merchants, cooperative representatives, veterinarian and other Ministry of Agriculture regional personnel to work with the fair management
- Making provision for arbitration of buyer-seller disputes

(b) Health Inspection

- Establishing regulations for health inspection and sanitary control at cattle fairs
- Informing farmers and merchants of health regulations and required documentation

- Utilizing the Câmara veterinarian to make necessary inspections and to enforce sanitary and health regulations at the fair

(c) Registration of Cattle Buyers and Sellers

- Registration of sellers, collection of fees and issuance of hip number stickers for cattle offered for sale
- Registration of buyers and issuance of buyer identification cards

(d) Fees

Increasing fees to realistic levels to pay for improvements. The suggested fees are:

- Adult cattle and fed yearlings, 100 escudos per head
- Calves, 50 escudos per head

(e) Price Reporting

- Collection of prices received by farmers, on a voluntary basis
- Development and publicizing of a representative report of prices for various types and classes of cattle

(f) Other Operating Changes

- Publication of definitive rules and regulations for the cattle fair
- Establishment of definite opening and closing hours for cattle trading.

B. Cooperatives - Recommendations

Cooperatives are important in the dairy industry of the Beira Litoral and Entre Douro e Minho regions. Most farmers belong to cooperatives, have confidence in their management and are in almost daily contact with cooperative management personnel. Given this situation, it is logical that farmers should look to their cooperatives for assistance in marketing their cattle. In the farmer survey, 84 of the 100 farmers interviewed thought that sale of cattle through their cooperative would be a good way of marketing their cattle.

Given this level of interest by farmers and a high level of interest by cooperative management in expanding services in cattle marketing, a number of alternatives exist through which cooperatives can undertake or influence

the marketing of cattle in Portugal. The list of alternatives which follows has been divided into two groups. Priority one alternatives are considered to have the greatest probability of succeeding because they are of greatest interest to farmers and cooperative management and can be implemented with minimal changes from traditional marketing systems.

1. Priority One Recommendations

- (a) Cooperative acts as a merchant, buys cattle from members and sells to butchers.
- (b) Cooperative acts as a butcher or meat wholesaler or both, buys cattle from members, slaughters through JNPP slaughterhouses and sells meat as a butcher or as a meat wholesaler.
- (c) Cooperative works closely with the local Câmara (municipal government) to improve conditions at the local cattle fair.

2. Priority Two Recommendations

- (a) Cooperative acts as an order buyer, buying cattle from members only on orders from butchers.
- (b) Cooperative establishes a cattle park (sales yard) and sells to merchants and butchers.
- (c) Cooperative establishes a slaughterhouse, buys cattle from members, slaughters cattle in its own slaughterhouse and sells meat through its own butchershop or as a wholesaler to butchers, restaurants, hotels or other food purveyors.
- (d) Cooperative establishes a livestock auction and sells cattle by the auction method.

For each of these alternatives, the report describes requirements for personnel, facilities and capital, details operating procedures and discusses implementation plans.

C. Livestock Auctions - Recommendations

In the United States and in many other nations, livestock auctions have developed as major local livestock markets. Sale of livestock by auction is not common in Portugal, but auctions are held occasionally for the sale of breeding cattle. Three-fourths of the farmers interviewed indicated that they understood the auction method of selling livestock and 38 percent expressed interest in selling cattle through public auctions. However, less than 10 percent said they would be willing to consign cattle to a public auction for sale by a professional auctioneer. Farmers do not want to relinquish control of their cattle without knowing the price they will bring, they are concerned that merchants would work in collusion to control prices at auctions and they do not believe that the auction could sell single animals or small lots of animals.

1. The Palmela Experiment

The Direcção Geral dos Serviços de Comércio de Gados, JNPP, in April, 1983 established an experimental livestock auction at the Palmela Cattle Park. It was planned to hold monthly auctions and the first auction was held April 6, 1983. However, the outbreak of peripneumonia in cattle in Portugal closed all public livestock markets so no additional sales were held.

Interest, by both farmers and buyers, in the April auction was high and 374 cattle were sold. It was hoped that an auction could be held in June and nearly 200 farmers had indicated that they planned to consign cattle to the June sale. However, this sale was also cancelled because of peripneumonia.

Prices at the April sale were good, averaging 227\$27 per kilo (liveweight) or 11.4 percent above the average base price of 204\$09 established as a floor by JNPP.

2. Conclusions

The results of the Palmela experiment plus the interest of farmers in livestock auctions are such that cattle by auctions in Portugal should not be considered completely impracticable. However, the understanding of farmers concerning auction sales and their willingness to consign cattle for auction are low and it will be necessary to continue a program of demonstration auctions and evaluation of the results of such sales before undertaking an aggressive program of private or cooperative auction development.

IMPROVING THE MARKETING OF CATTLE FROM SMALL FARMS IN
BEIRA LITORAL AND ENTRE DURO E MINHO

I. INTRODUCTION

A. Background and Importance

1. Relationship to the PROCALFER Program

Although the PROCALFER Program focuses on the production of forage crops and feed grains, primarily corn, the principal market of these forage and grain crops is as feed for livestock. All forage crops are marketed through livestock and a high percentage of the grain produced is fed to livestock.

Preliminary observation of livestock marketing systems in Portugal led to the conclusion that present marketing systems, at the local market level, are inefficient and lack effective competition. The farmer/livestock producer, and especially the small farmer is at a competitive disadvantage in terms of the available buyers for his livestock and is further penalized by the inefficiencies of local marketing systems. The result is lower prices for the livestock he sells.

The aim of the PROCALFER Program is to increase farmers' ability to produce forages and grains and to increase farmer incomes as a result of increased production efficiency. Since these crops are largely fed to livestock, the ultimate return is through the sale of these livestock. If livestock marketing efficiency can be increased and the competitive market position of the farmer improved, then returns from the sale of livestock can be improved, with resultant improvement in the markets and demand for forage and feed crops. This, in turn will help realize the full potentials of PROCALFER.

2. Assessment of the Problem

a. The existing system for marketing livestock in Portugal

The existing system of marketing livestock has changed little in recent years. There have been few changes in the structure of the market. Proposals have been made to change the system, but because of its social and economic complexity, they have failed.

In general, there are two principal places where livestock are sold - at the farm or in regional fairs (feiras). Two principal private buyers exist, the butcher buyer and the livestock merchant. In addition, at times of surplus livestock supplies, the government intervenes in the market through purchase of cattle by the Junta Nacional dos Produtos Pecuários (JNPP), a national livestock board responsible for price supports and cattle slaughter.

b. The butcher-buyer

This agent can buy the cattle directly in the fairs or on the farm, from the merchants or farmers, respectively. His activity as a cattle buyer is performed mainly in the small and medium areas of rural production, guaranteeing his supplies. In these areas, the butcher frequently performs all the marketing tasks, transporting the animal from the producer to the slaughterhouse and, when there are no JNPP refrigerated trucks available, transporting the carcass. In general, however, the merchant is the butcher's main source of cattle, depending on the butcher's requirements, capacity and location.

c. The merchant

As was true for the butcher, the merchant also purchases cattle at fairs and on the farm. However, we must distinguish between the small merchant who operates only in a small area and a small number of large merchants who buy at the national level, for example, buying in Viseu and selling in Lisbon. These merchants assure the supplies of livestock for slaughter in major metropolitan areas. Their range of activities is diverse: they buy in one local market to sell to another merchant in a second market; they purchase breeding or feeder cattle and sell slaughter cattle directly to butchers; they act as order buyers, buying to fill orders from butchers; and some act also as butchers and buy and slaughter for their own account.

d. The Junta Nacional dos Produtos Pecuários

Under a price guarantee system, JNPP buys cattle consigned to them by farmers and delivered to JNPP slaughterhouses. These cattle are bought at prices previously determined by JNPP. This system of established intervention tends to guarantee a minimum price for the producer, especially when the competitive market deteriorates. However, for the small farmer, sale to JNPP presents a number of problems:

- (1) The necessity for prior authorization for slaughter.
- (2) Delay in payment to the farmer.
- (3) Lack of adequate slaughter and freezing capacity.
- (4) Problems in arranging transportation of cattle to the slaughterhouse, an especially difficult problem for the small farmer.

Under normal circumstances, intervention purchases by JNPP do not constitute a significant part of the total market. However during periods when the market situation deteriorates, JNPP purchases are important. For example, during the drought of 1981, JNPP purchases accounted for 7 percent of total slaughter. Also at times when intervention prices are above market prices, JNPP purchases become significant. JNPP usually purchases old or low quality cattle which do not find a good reception in the open market.

e. Establishment of prices and methods of payment

There is a general lack of price information in the livestock market, especially at the local farmer level. Farmers talk with their neighbors and sometimes visit local fairs to see what prices are paid, but generally they have very little information concerning the prices for cattle which they have to sell.

Against this lack of price information by farmers, the merchants and butcher-buyers, who are the principal buyers of cattle from the farmer, are much better informed regarding prices and values of livestock and thus are in a much stronger position to bargain with the farmer for the cattle he has to sell. Sales at the fairs, which the farmer may use as his source of price information, are often influenced by a few large merchants who operate on the fair and who may work together in establishing the prices they will offer. Prices for cattle are usually quoted in escudos per kilo, carcass weight after slaughter. Increasingly, cattle are being bought on a carcass weight basis (furnished by the slaughterhouse). However, sale on a per head basis is still a common method, with the merchant estimating both the live weight and the carcass weight in determining the price he will offer.

The most common method of payment is in cash, at the time of the purchase. However, when cattle are sold on a carcass weight basis, the farmer will receive the money two or three days later, after the slaughter of the animal and determination of the carcass weight.

f. Existing infrastructure

JNPP has a national plan for a series of markets for the assembly of cattle. This system of local and regional cattle markets is closely related to the planned national slaughterhouse network. However, with the exception of major facilities at Palmela and Évora, this system has not been established. These markets would guarantee to the farmer access to local concentration markets from which cattle would be trucked to the slaughterhouse. Cattle parks (concentration yards) of three types I, II and III are proposed. Type I parks are major concentration points such as now exist at Palmela and Évora. The yard at Palmela holds cattle shipped in from Azores and also cattle bought under the intervention program by JNPP during the drought of 1981. Monthly cattle auctions have been started by JNPP at Palmela but the outbreak of peripneumonia in cattle has interrupted this market. Sales have averaged 300-400 cattle, largely from the Alentejo. JNPP has been buying cattle to supply this auction, but for the June 1 auction (which was not held) nearly 200 cattle had been consigned for auction sale by farmers. JNPP guarantees a minimum price and if the auction price does not reach this level, the producer can sell to JNPP. There has been good acceptance from buyers, buyer attendance has been good and to date all cattle offered have sold above the guaranteed price.

Palmela has a capacity of 1,500-2,000 cattle, two printing scales, cattle dipping and treatment facilities, hospital pens, automatic feed wagons and good loading docks.

The cattle park at Évora has conducted some auctions of breeding cattle, but no slaughter cattle sales as at Palmela.

A proposed cattle park and auction at Famalicão has not been built, although the land is available.

Besides these infrastructures belonging to JNPP, the existing rural markets (fairs) lack adequate physical facilities such as fences and scales. Many have only simple loading docks.

g. Summary - Assessment of the problem

Improvement in local livestock markets in Portugal must be concerned with three aspects of the marketing system:

- (1) Market efficiency
- (2) Market competition
- (3) Market organization and structure

As indicated earlier in this chapter, the existing system of marketing livestock (primarily cattle) involves four major channels of sale:

- (1) Local merchants (livestock buyers), on the farm
- (2) Local butchers, on the farm
- (3) Local cattle fairs including merchants, butchers and farmers
- (4) Intervention purchases by JNPP

For the purpose of this analysis, intervention purchases by JNPP can be disregarded as being outside of the competitive, commercial market system. However, it must be recognized that JNPP intervention prices establish a price floor and as a result influence prices which are paid by other buyers, particularly during short periods of oversupply.

Merchant buyers appear to be the most important class of buyers. Small butchers buy mainly for the local market and some larger butchers buy directly, especially from larger farmers. Fairs account for an important percentage of the total number of cattle sold, but are more important for replacement cattle (calves, and yearlings for further feeding and breeding) or for cull cows and lower quality animals. Most of the cattle for slaughter are sold directly to merchants or butchers.

There seems to be only limited competition between buyers in a specific area. Farmers say "they all pay the same price," but sell to a buyer whom they know and trust, who pays promptly in cash and who takes the cattle away in his truck.

It would appear that the existing systems of livestock marketing are costly, in terms of the efforts required from buyers to assemble cattle by small lots at the farm. In addition, it appears that there may be limited competition among buyers and that the small farmer is at a disadvantage in dealing with merchants or butchers or both.

Although many cattle are sold on a carcass weight basis, most farmers complain that the way carcass yields are computed operates to favor the buyer. Given the situation, it was proposed to make a systematic and objective evaluation of the marketing of cattle from small farms in the North of Portugal and to investigate the potentials that alternative marketing systems may offer for improving the marketing of livestock in Portugal.

B. Project Objectives

This project had four major objectives:

- (1) To review, describe and evaluate existing systems of marketing livestock in Agrarian Regions 1 and 3.
- (2) To investigate the feasibility and merits of alternative local livestock marketing systems or improvements to existing systems or improvements to existing systems and the role of cooperatives in marketing livestock.
- (3) To recommend specific changes, based on the conclusions of objective (2), in order to establish alternative systems of livestock marketing in the study areas.
- (4) To develop an implementation plan, including: structure of the alternative marketing systems, the strategy of implementation, the effective requirements in human and material investments.

C. Scope of Work

To accomplish the above objectives, the following tasks were proposed:

- (1) Survey farmers, cooperatives, fairs, livestock merchants and butchers to develop information on existing livestock marketing systems, institutions and infrastructure.

- (2) Visit and evaluate alternative livestock markets, that is, alternatives to the sale to merchants or butchers, including JNPP and private cattle parks, sale yards, auctions, local fairs (feiras), cooperatives and other methods of sale.
- (3) Analyze livestock numbers and trends by region and livestock prices, in Portugal.
- (4) Describe in detail, analyze and evaluate existing systems for marketing livestock in Portugal.
- (5) Study and specify the possibilities, conditions and requirements for developing the role of local cooperatives in livestock marketing.
- (6) Study and describe, in Regions 1 and 3, the strategies and plans of existing cooperatives to enter in the existing livestock marketing system, together with the plans and requirements for improvement of the local fairs.
- (7) Describe, for alternative market systems recommended the strategy of development, operating procedures, human and material requirements, and proposed improvements.
- (8) Develop implementation plans for these alternative marketing forms, including physical and organizational requirements and an implementation schedule.

D. General Approach to the Project

1. General

This project was based on the hypothesis that improvements are needed and can be made in the existing livestock marketing system in Portugal. Consequently, the first step in the work was to develop sufficient information to test this hypothesis. The need for this study was based on the presumption, supported by statements from knowledgeable representatives of farmer cooperatives, the livestock and meat industries and Government that the present local livestock marketing system was inefficient and engendered inequities in the pricing and sale of livestock at the producer level.

2. Project Organization

Work of this project was conducted jointly by marketing specialists from the Gabinete de Planeamento, Divisao de Organizaçao de Mercados, MAFA and PROCALFER U.S. Consultants, with the support of personnel from the Direcçao Regional in Regions 1 and 3, and Cooperatives in Regions 1 and 3.

(a) The technical team for the project, under the coordination of Ramos Rocha, Chief of Divisao de Mercados of DOMEAP, included:

- Rita Horta, Gabinete de Planeamento - Co-Leader
- R. E. Seltzer, DPRÁ Consultant - Co-Leader
- Ludovina Almeida, Gabinete de Planeamento - Associate
- James Musil, DPRÁ Consultant - Associate

3. Prior Research on Livestock Marketing in Portugal

Research and data related to the marketing of livestock in Portugal is limited and as a result there did not exist data and other information required by this project.

Prior research, which had some application to livestock marketing in Portugal, included:

- (a) JNPP, Rede Nacional de Recolha de Gado (Plan for the collection of cattle, JNPP 1980). This report presented a proposed plan for the establishment of a network of cattle markets which would be tied in with the JNPP Program for concentration of livestock slaughter capacity. Four classes of markets were proposed:
- (1) Type I - large cattle parks (Palmela, Vila Nova de Famalicão e Evora) with a capacity of 800-1,600 animals.
 - (2) Type II - smaller cattle collection yards (Montealegre, Vaso, Oliveira de Azeméis, Pombal and Fundão) with collection capacity of approximately 300 animals each.
 - (3) Type III - small local collection centers, designed to collect cattle for transport to Type I and Type II markets, capacity 40-50 cattle, 200 sheep and goats and 100 swine.
 - (4) Concentration Yards - located in isolated areas where access is difficult, small truck yards designed to collect and load out local cattle for transport primarily to Type III markets.

This report is largely descriptive, defining the types of markets proposed and their locations relative to the JNPP slaughterhouse plan. It does not discuss the way in which these collection yards would be integrated with, complement or replace existing livestock marketing systems.

- (b) Meat and Livestock Commission, United Kingdom, The Portuguese Meat and Livestock Industry - April 1983. This is one of a series of general publications of the Meat and Livestock Commission concerned with the meat and livestock industry in specified European countries, primarily related to the proposed accession of Portugal to the European Economic Community. A similar study was done for Spain in 1982.

The publication summarizes published data concerned with the general role of agriculture in Portugal, production, consumption, trade and prices of livestock and meat, the feed grains situation and the future of Portugal's livestock and meat industry within the EEC. It presents a good summary of general data in 33 pages, but has nothing directly related to livestock marketing systems in Portugal.

- (c) Centro de Experimentação e Assistência Técnica a Agricultura (CEATA). CEATA was established in June, 1968 as a joint undertaking by the Governments of Portugal and W. Germany with the objective of improving and developing agricultural production in the Alentejo and to study related marketing aspects for horticultural and livestock products. As a part of this effort Srs. Alexander Muser and Costa Campos conducted a series of studies concerned with the markets for beef and milk. Major reports issued were as follows:

- Muser, Dr. Alexander and Eng^o Luis de Costa Campos:

O Mercado de Gado de Abate e da Carne no Sul de Portugal, Lisbon, 1969, 44 pages.

Como Melhorar a Comercialização de Bovinos de Corte, Lisboa, 1970, 70 pages.

Como Melhorar a Política de Coordenação e de Fomento Pecuário, Lisboa, 1970, 110 pages.

Regulamentações na Produção e na Comercialização de Gado Bovino, Suíno e Ovino, Folheto N^o 1, Lisboa, 1971, 20 pages.

Bovinos de Corte, O Mercado e a sua Melhor Comercialização, Lisboa, 1971, 15 pages.

A brief review of these publications follows:

- O Mercado de Gado de Abate e Carne no Sul de Portugal. This report is largely a review and analysis of 1966-1969 published data on livestock slaughter, producer prices of livestock and prices of meat to the consumer. The report then draws conclusions and long range perspectives in relation to livestock production and consumption in Portugal, 1969-1985.
- Como Melhorar a Comercialização de Bovinos de Corte. This is a comprehensive summary of the actual livestock marketing situation in 1968-69, general proposals for an "ideal"

solution or restructuring of the livestock marketing system in Portugal and a proposed transition program from the actual to the ideal. Each section is organized into five subjects: determinants, marketing channels (circuits), fairs (feiras), formation of prices and position of the producer. The results of the analyses are summarized in the following table.

	A Current Situation	B Ideal Solution	C Transition Solution
1. Determinants	Municipal slaughterhouses Slaughter at the center of consumption Marketing on live basis	Industrial slaughterhouses Slaughter in the region of production Marketing on meat basis	Coexistence of A and B
2. Marketing Channels	Various, little rationale, need for intermediaries	Simple, direct producer to slaughterhouse	Various but with growing simplification
3. Cattle Fair	Unorganized	Unnecessary	While necessary, with organization
4. Price Formation	By eye or other uncertain bases	On sure basis of meat	On sure basis of meat or live cattle
5. Position of the Farmer	Weak, without influence	Strong, especially with participation in slaughterhouse	Strong, especially with sales cooperatives

A review of the actual situation for 1966-1969 in this publication and a comparison with the situation as it exists in 1983 results in the conclusion that there has been little change or improvement in marketing of livestock in Portugal during the past 20 years.

- Como Melhorar a Política de Coordenação e de Fomento Pecuário. As the title indicates, this publication addresses needed improvements in policies and coordination for livestock development. The report addresses a wide range of policy questions. Under each subject discussed, the existing situation is first reviewed and then general suggestions for improvement are made. Subjects covered include:
 - (1) Market Transparency - Availability and quality of market information in all sectors of the market.
 - (2) Production Projections - projected estimates of production to facilitate planners.
 - (3) Classification - classification and grades for cattle and the application of classes and grades.
 - (4) Guaranteed price policies
 - (5) Guaranteed prices and marketing
 - (6) Price subsidies for slaughter cattle
 - (7) Subsidies for breeding and management of cattle
 - (8) Consumer price policies
 - (9) Supply policies
 - Regulamentações na Produção e Comercialização de Gado Bovino, Suino e Ovino. This publication proposes various regulations concerned with livestock classification, guaranteed prices and breeding and management subsidies for dairy cattle, slaughter cattle, swine and sheep.
 - Bovinos de Corte, O Mercado e a Sua Melhor Comercialização. This is a short, 15-page, extension leaflet utilizing graphics and summary statements to introduce the producer to the market, market prices, sources of price information and comparison of sale of cattle by the head, on a live weight basis and on a carcass weight basis.
- (d) As Feiras de Gado na Beira Litoral. Jorge Gaspar. (Lisboa: Instituto de Alta Cultura, Centro de Estudos Geograficos da Universidade de Lisboa, 1970). This report is a history of livestock fairs in the Beira Litoral region. It provides brief backgrounds on fairs of all types and on the Beira Litoral region itself. The evolution of fairs is discussed in greater detail, from their beginning in the Middle Ages to the present. Different types of fairs are described,

such as livestock, clothing and household goods. Distinctions are made also between large, medium and small fairs. A large fair is designated as more than 250 head of cattle. A medium fair is designated as more than 60 head of cattle or more than 300 head of swine. A small fair is designated as less than 60 head of cattle or 300 head of swine. Actual fairs of each size are described in terms of size, location and meeting dates. These fairs are also discussed separately in regards to livestock marketing only. Finally, the commercial significance of the fairs is discussed.

4. Data Gathering Procedures

No recent data or other information existed on the livestock marketing practices of small farmers nor on the roles and marketing procedures of livestock merchants, butchers, cattle fairs and cooperatives. Therefore, a major part of the total work of this project was concerned with development of data from field surveys of these participants in the livestock marketing system.

A series of questionnaires were designed and field tested and both personal interviews and mail surveys were used to develop the required information. The surveys included the following:

<u>Survey population</u>	<u>Survey method</u>	<u>Usable replies</u>
Farmers	Personal Interview	100
Butchers	Personal Interview and Mail Survey*	15*
Merchants	Personal Interview	4
Fairs (Feiras)	Personal Interview and Mail Survey	21
Cooperatives	Personal Interview and Mail Survey	30

* In addition, the Association of Butchers (Associação dos Comerciantes de Carnes) sent in a consolidated reply representing the position of the members of the association.

The populations to be surveyed were developed from a variety of sources, as follows:

- Farmers
 - Direcção Geral de Agricultura, Aveiro and Porto Sub-Regional Offices.
 - Agricultural cooperatives in each area.
- Butchers
 - Records of Ministry of Agriculture
 - Random visits to butcher shops in towns in the survey area.
 - Members of the Federação Nacional dos Comerciantes de Carnes.
- Merchants - Personal acquaintance of cooperative technicians from farmers.
- Fairs - Lists of fairs from the Ministry of Agriculture.
- Cooperatives - Lists of cooperatives from the Ministry of Agriculture and membership lists of regional cooperatives in Beira Litoral and Entre Douro e Minho.

It was not the purpose of the project to develop a statistically controlled sample from which quantitative expansions to population estimates could be made. Rather the project sought to develop a broad base of both objective and subjective information from representative farmers, merchants, butchers, fairs and cooperatives in the study area. It is believed that, with the exception of merchants, the respondents to the surveys are representative of those in the survey areas. Although the number of merchants interviewed was small, the cattle buying practices of merchants were also included in questionnaires directed toward farmers, butchers and fairs.

Data from the surveys were tabulated and constituted the basic sources of information for the analysis. However, these data were supplemented by personal contacts with technical specialists in MAFA (Ministry of Agriculture, Forestry and Nutrition), and by meeting with Câmaras (municipalities who operate the fairs), with cooperatives, and with private interests in the livestock and meat industries.

II. TRENDS IN LIVESTOCK NUMBERS AND PRICES

A. Background

Livestock are important in the agricultural economy of all regions of Portugal and the production of meat, milk and wool contributes substantially to the incomes of both small and large farmers. Meat, milk and cheese are important in the diets of all Portuguese and, with fish, constitute the major sources of protein.

Livestock are widely distributed throughout Portugal. Dairy cattle, veal calves, fed yearlings, bulls and heifers and hogs are most important in the Litoral (coastal) areas and in the central part of the country. Goats and sheep are more important in the mountainous areas of the north and east.

This project was primarily concerned with markets for cattle produced on small farms in the Beira Litoral and Entre Douro e Minho regions. An analysis of size of farm and size of cattle enterprise illustrates the importance of the small farmer in the livestock industry of these areas.

1. Farm Size Distribution

Table II-1 shows the size distribution by number of farms and number of cattle for Beira Litoral and Entre Douro e Minho for 1979. These data illustrate the dominance of small farms and the importance of these farms in the cattle industry in the area.

A summary of the data in Table II-1 shows:

- Farms of less than 1 hectare comprised 38 percent of the total number of farms in the 2 regions and had 24 percent of the cattle.
- Farms of less than 2 hectares comprised 65 percent of the total number of farms in the 2 regions and had 47 percent of the cattle.
- Farms of less than 5 hectares comprised 85 percent of the total number of farms in the 2 regions and had 76 percent of the cattle.

2. Number of Cattle per Farm

Given the high proportion of small farms, most farms have only small numbers of cattle. As an average for the Beira Litoral and Entre Douro e

Table II-1. Size distribution, number of farms and number of cattle,
by size of farms, Beira Litoral and Entre Douro e Minho, 1979 1/

Size of farm	Beira Litoral <u>2/</u> percent of total		Entre Douro e Minho percent of total	
	N ^o farms	N ^o cattle	N ^o farms	N ^o cattle
Less than 1 ha	37.5	25.6	39.9	22.1
1 < 2	28.7	25.5	26.8	20.7
2 < 3	13.7	15.3	12.5	13.1
3 < 4	7.0	9.2	6.7	8.6
4 < 5	4.1	5.6	4.1	6.5
5 < 10	6.6	11.2	7.0	14.3
10 < 20	1.8	4.3	2.3	9.0
20 < 50	0.5	2.1	0.6	4.3
50 < 100	0.1	0.8	0.1	1.0 <u>3/</u>
100 or more	0.05	0.7	-	0.4
Total	100.0	100.0	100.0	100.0

1/ Source: Calculated from 1979 Census of Agriculture.

2/ Includes only Aveiro and Viseu Districts, data from the 1979 Census not available yet for Coimbra District.

3/ Includes cattle on a small number of farms of over 100 ha.

Minho regions in 1979, cattle per farm, classified by farm size, was distributed as follows:

<u>Size of farm</u>	<u>Average number of cattle per farm in Regions 1 and 3</u>
Less than 1 ha	1.8
1 < 2	2.4
2 < 3	3.2
3 < 4	3.9
4 < 5	4.5
5 < 10	5.2
10 < 20	10.5
20 < 50	18.0

The above data are for all cattle. An analysis of the number of milk cows per farm in these two regions in 1979 showed that 95.6 percent of the farms in the area had five cows or fewer and that 98.4 percent had fewer than ten milk cows.

The result of this predominance of small farms and the small number of cattle per farm is that the farmer in Beira Litoral and Entre Douro e Minho is marketing only one to three cattle per year and thus is ill-equipped to market these cattle to his best advantage given the existing markets available to him.

B. Livestock Numbers and Meat Production

1. Livestock Numbers

Current data on total livestock numbers by year and by type are not available from the Estatísticas Agrícolas. The last official data are those from the National Livestock Census of 1972. The National Agricultural Census of 1979 gives information about livestock numbers, which can be used only to make a general comparison because the statistical time periods are different. The Office of the U.S. Agricultural Attache has made estimates of annual livestock numbers which show the general trends in livestock production. These data are shown in Table II-2.

As shown from the data in Table II-2, numbers of cattle, sheep and goats have been relatively stable since 1974, but hog numbers increased substantially (90%), 1974-1982.

2. Livestock Slaughter

As was seen (Table II-3) for livestock numbers, slaughter of cattle, sheep and goats has been relatively stable, but hog slaughter has declined in recent years.

Table II-2. Estimated number of livestock, by type, Portugal 1/

Year	All cattle	Dairy cows	Hogs	Sheep	Goats
	(000)				
1973	1,400	184	2,100	2,300	710
1974	1,072	188	1,977	3,657	744
1975	1,100	200	2,000	3,657	700
1976	1,080	206	2,100	3,657	745
1977	1,100	224	2,200	3,840	745
1978	1,115	225	3,300	3,840	745
1979	1,050	172	3,300	3,840	745
1980	1,110	185	3,500	3,840	745
1981	1,100	190	3,600	3,840	745
1982	1,070	--	3,750	3,840	745

1/ Estimates of U.S. Agricultural Attache, USDA, FAS, Lisbon.

Table II-3. Slaughter of livestock, Portugal
1975-1979 1/

Year	Slaughter (000 tons)			
	All cattle	Hogs	Sheep	Goats
1975	96.8	96.9	10.0	2.2
1976	79.2	91.3	9.5	2.1
1977	79.1	106.2	8.0	1.7
1978	90.8	118.5	9.8	2.3
1979	93.2	93.0	8.5	2.3

1/ Source: Estatísticas Agrícolas, Continental Portugal only.

Portugal is a net importer of meats, imports in recent years being in the range of 22,000 to 30,000 tons. However, imports are down substantially from the 63,000 tons imported in 1977.

C. Regional Distribution of Livestock

1. Growth in Livestock Populations, 1972-1979

Numbers of livestock by district are available from the 1972 Livestock Census and from the 1979 Agriculture Census. Table II-4 shows the number of all cattle, dairy cows, sheep, goats and hogs by district for 1972 and 1979.

Since 1979 Census data are not available for all districts, comparison of total livestock numbers between 1972 and 1979 is not possible. However, an analysis of the change in livestock numbers, 1972-1979, for the fourteen available districts shows the following:

<u>Species/class</u>	<u>1972</u> (000 head)	<u>1979</u> (000 head)	<u>Percent change</u> <u>1972-1979</u>
All cattle	1,071.6	1,195.0	11.0
Dairy cows	268.3	351.9	31.2
Hogs	1,977.2	2,520.5	27.5
Sheep	2,420.2	2,091.3	-13.6
Goats	741.0	781.2	5.4

A comparison of changes in livestock numbers, 1972-1979, with the constraints resulting from different statistical periods, showed:

- All cattle. Numbers increased in ten districts and decreased in eight districts. Major increases occurred in Santarem - up 62.5 percent and Leiria - up 56.8 percent. Decreases were small in most districts, but all cattle in Bragança decreased 14.7 percent and Viana do Castelo decreased 11.8 percent.
- Dairy cows. Numbers increased, 1972-1979, in 16 districts and decreased in two. Major increases occurred in Viana do Castelo - up 14,300 head or 57 percent; Braga - up 12,400 head or 40 percent; Coimbra - up 10,200 head or 63 percent; Viseu - up 6,500 head or 90 percent; Leiria - up 6,400 head or 96 percent; and Guarda - up 5,100 head or 61 percent. Beja and Lisboa were the only districts with a decrease in numbers of dairy cows, losing 1,800 head or 12 percent and 4,000 head or 20 percent, respectively.
- Hogs. Hog numbers increased in seven districts and decreased in eleven districts. As was noted earlier, total numbers of hogs increased 543,300 or 27 percent, 1972-1979. Major increases occurred in Santarem - up 206,200 or 133 percent; Leiria - up 170,300 head or 59 percent; Lisboa - up 152,200 head or 231

Table II-4. Estimated number of livestock, by type, by district

District	Cattle				Sheep		Goats		Hogs	
	All cattle		Dairy cows		1972	1979	1972	1979	1972	1979
	1972	1979	1972	1979						
----- (000 head) -----										
Aveiro	104.0	105.5	45.9	48.7	36.0	27.9	11.1	19.9	147.7	124.4
Beja	66.4	74.8	14.4	12.6	373.6	350.6	69.7	124.7	103.8	124.7
Braga	114.9	109.4	31.3	43.7	33.9	22.8	22.5	17.8	119.6	65.5
Bragança	40.8	34.8	4.0	7.7	173.4	156.4	52.9	42.8	58.3	33.7
Castelo Branco	21.6	20.5	4.4	7.4	253.2	162.0	117.4	84.5	82.3	48.2
Coimbra	55.5	67.4	16.3	26.5	78.5	52.7	48.8	45.1	113.8	87.6
Évora	65.4	70.7	10.9	11.6	343.2	330.9	42.0	35.8	95.1	127.9
Faro	29.1	31.9	7.0	8.0	46.0	33.3	21.9	22.4	75.1	109.7
Guarda	32.3	30.4	11.3	17.4	156.8	114.2	45.1	40.2	44.9	25.6
Leiria	42.6	66.8	6.7	13.1	50.4	47.9	32.8	39.1	289.5	459.8
Lisboa	53.9	63.8	23.7	19.7	64.8	65.0	11.2	13.6	65.8	218.0
Portalegre	49.0	56.7	10.3	11.8	280.2	226.7	64.9	47.1	73.8	62.2
Porto	109.4	106.6	29.8	31.9	43.0	30.5	8.4	8.5	110.0	62.8
Santarem	49.6	80.6	8.3	13.4	139.7	125.8	66.8	69.1	155.4	361.6
Setubal	45.6	68.3	8.6	9.1	120.6	131.5	16.1	22.4	172.1	295.5
Viana do Castelo	78.5	69.2	24.9	39.2	55.0	52.9	24.0	23.2	56.8	42.8
Vila Real	51.7	45.7	3.4	8.3	61.4	46.1	35.2	49.3	83.3	46.1
Viseu	61.4	59.9	7.2	13.7	110.5	80.8	50.2	53.3	129.9	114.6
Total Portugal <u>1/</u>	1,071.6	1,195.0	268.3	351.9	2,420.2	2,091.3	741.0	781.2	1,977.2	2,520.5

1/ Totals may not add due to rounding.

Sources: 1972 Livestock Census and 1979 National Agricultural Census.

percent; Setubal - up 123,400 head or 72 percent; Faro - up 34,600 head or 46 percent; Évora - up 32,800 head or 34 percent; and Beja - up 20,900 head or 20 percent. Major decreases occurred in Braga - down 54,100 head or 31 percent, Porto - down 47,200 or 43 percent; Coimbra - down 26,200 head or 23 percent; and Aveiro - down 23,300 head or 16 percent. Thus, it is seen that increases in hog numbers occurred in the center and south of the country while major decreases were in the north.

- Sheep. Sheep numbers decreased, 1972-1979, in 16 out of the 18 districts. Setubal and Lisboa were the only districts reporting an increase in sheep numbers - up 10,900 head or 9 percent in Setubal and up 200 head or 0.3 percent in Lisboa. Districts having the greatest decreases were:

Castelo Branco - down 26,200 head or 23 percent,
 Portalegre - down 53,500 head or 19 percent,
 Guarda - down 42,600 head or 27 percent,
 Viseu - down 29,700 head or 27 percent, and
 Coimbra - down 25,800 head or 33 percent.

- Goats. Goat numbers increased in ten districts, 1972 to 1979 and decreased in eight districts. Most of the increase occurred in Beja where goat numbers rose from 69,700 in 1972 to 124,700 in 1979, a gain of 79 percent.

Significant decreases occurred in Castelo Branco - down 32,900 head or 28 percent; Portalegre - down 17,800 head or 27 percent; and in Bragança - down 10,100 head or 19 percent.

2. Major Producing Areas - 1979

a. Major districts - ranked by livestock numbers

In numbers of livestock, in 1979, the major producing districts for each type of livestock were as follows:

	<u>Rank</u>	<u>District</u>	<u>000 head</u>
<u>All cattle</u>	1	Braga	109.4
	2	Porto	106.6
	3	Aveiro	105.5
	4	Santarem	80.6
	5	Beja	74.8
<u>Dairy cows</u>	1	Aveiro	48.7
	2	Braga	43.7
	3	Viana do Castelo	39.2
	4	Porto	31.9
	5	Lisboa	19.7

	<u>Rank</u>	<u>District</u>	<u>000 head</u>
<u>Sheep</u>	1	Beja	350.6
	2	Évora	330.9
	3	Portalegre	226.7
	4	Castelo Branco	162.0
	5	Bragança	156.4
<u>Goats</u>	1	Beja	124.7
	2	Castelo Branco	84.5
	3	Santarem	69.1
	4	Viseu	53.3
	5	Vila Real	49.3
<u>Hogs</u>	1	Leiria	459.8
	2	Santarem	361.6
	3	Setubal	295.5
	4	Lisboa	218.0
	5	Évora	127.9

b. Major districts ranked by livestock intensification

The relative importance of the different species of livestock compared to all cattle is shown in Table II-5 which presents indices of livestock numbers for each species compared to all cattle as 100. Based on this comparison, the relative intensity of livestock production among species is as follows:

<u>Species</u>	<u>Rank</u>	<u>District</u>
<u>All Cattle</u>	1	Braga
	2	Porto
	3	Aveiro
	4	Santarem
	5	Beja
<u>Dairy cattle</u>	1	Guarda
	2	Viana do Castelo
	3	Aveiro
	4	Braga
	5	Coimbra
<u>Sheep</u>	1	Castelo Branco
	2	Beja
	3	Évora
	4	Bragança
	5	Portalegre

Table II-5. Relative importance of livestock production, indices of livestock numbers of each species compared to all cattle, 1979

District	Cattle									
	All cattle		Dairy cows		Sheep		Goats		Hogs	
	1972	1979	1972	1979	1972	1979	1972	1979	1972	1979
----- (all cattle = 100) -----										
Aveiro	100	100	44	46	35	26	11	19	142	118
Beja	100	100	22	17	563	528	105	188	156	188
Braga	100	100	27	40	30	21	20	16	104	60
Bragança	100	100	10	22	424	449	130	123	143	97
Castelo Branco	100	100	20	36	1,172	790	544	412	381	235
Coimbra	100	100	29	39	141	78	88	67	205	130
Évora	100	100	17	16	525	468	64	51	145	181
Faro	100	100	24	25	158	104	75	70	258	344
Guarda	100	100	35	57	485	376	140	132	139	84
Leiria	100	100	16	20	118	72	77	59	680	688
Lisboa	100	100	44	31	120	102	21	21	122	342
Portalegre	100	100	21	21	572	400	132	83	151	110
Porto	100	100	27	30	39	29	8	8	101	59
Santarem	100	100	17	17	282	156	135	193	313	449
Setubal	100	100	19	13	264	193	35	33	379	433
Viana do Castelo	100	100	32	57	70	76	31	34	72	62
Vila Real	100	100	7	18	119	101	68	108	161	101
Viseu	100	100	12	23	180	135	82	89	212	191
Total Portugal	100	100	25	29	226	175	69	65	185	211

Source: Calculated from Livestock Census of 1972 and National Agriculture Census of 1979.

<u>Species</u>	<u>Rank</u>	<u>District</u>
<u>Goats</u>	1	Castelo Branco
	2	Santarem
	3	Beja
	4	Guarda
	5	Bragança
<u>Hogs</u>	1	Leiria
	2	Santarem
	3	Setubal
	4	Faro
	5	Lisboa

D. Cattle Prices

Since there are no organized markets for cattle in Portugal, no specific price reports for cattle at a given market exist. However, the Serviço de Comércio de Gados, JNPP collects prices from certain fairs and "other markets" and estimates prices on a monthly basis.

Two price series are available:

- prices of cattle in fairs and national markets, carcass weight basis, adult animals (mainly cows) and yearling bulls, and
- prices of cattle of the first category, carcass weight basis, cows and yearling bulls.

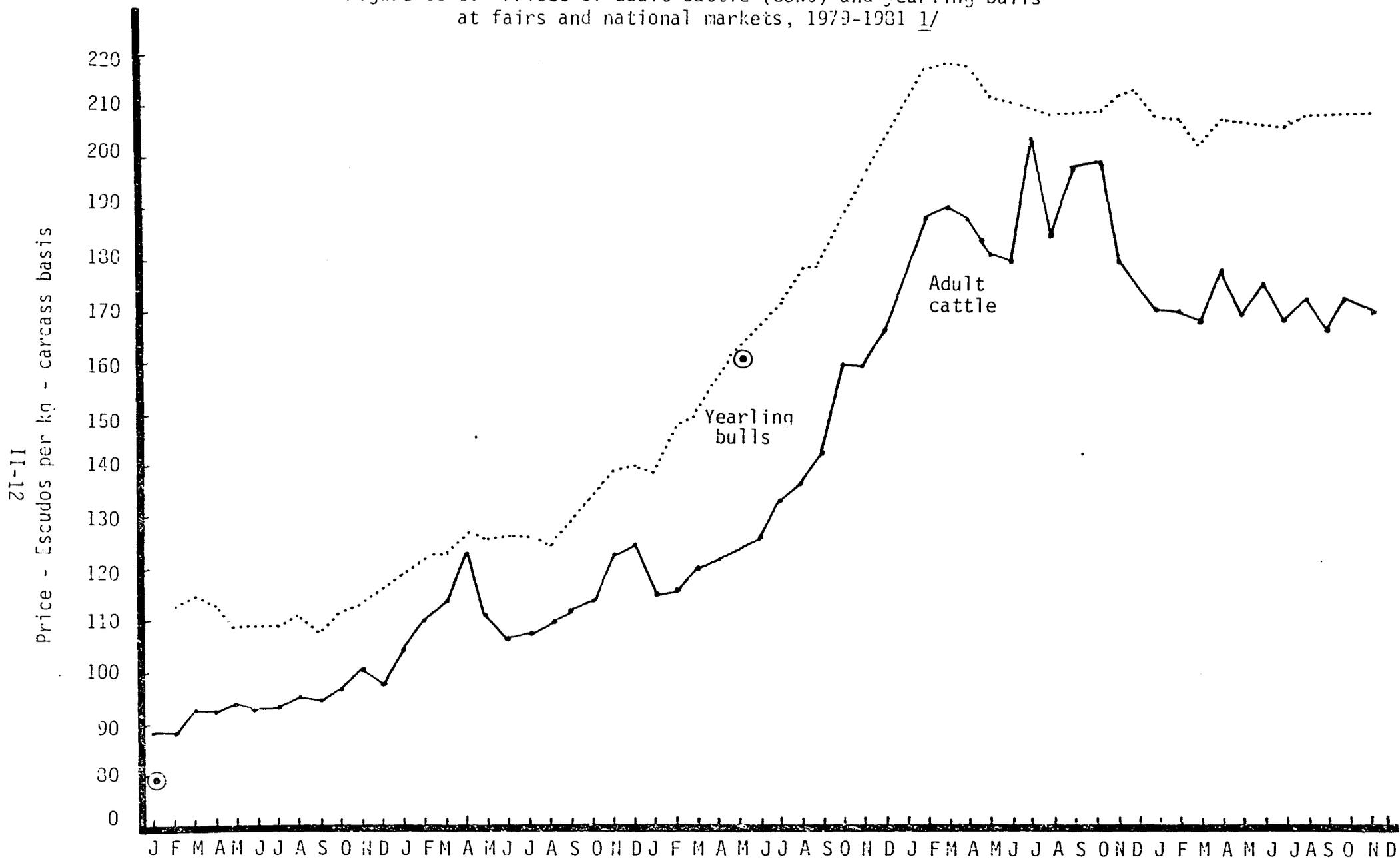
1. Adult Cattle and Yearling Bulls

Figure II-1 shows the prices of adult cattle (cows) and yearling bulls, in escudos per kilo, carcass weight basis, for the years 1977 through 1981. Prices of both classes of cattle rose rapidly from January 1977 through early 1980, prices of adult cattle increasing from 88\$50 per kilo (carcass weight) in January 1977 to 203\$7 in July 1980, declining to 164\$0 by December 1981. During the same period, prices of yearling bulls (for slaughter) rose from 113\$2 per kilo in February, 1977 to 218\$7 in March 1980 and then leveled off, standing at 210\$8 per kilo in December 1981.

During 1977 and 1978, the spread between the price of yearling bulls and the price of adult cattle averaged about 14\$75 per kilo, or approximately 12.5 percent. Beginning in 1979, this spread increased rapidly and for the 1979-1981 period averaged 31\$ per kg or 15.9 percent. In December 1981, the spread was 46\$8 or 22.2 percent.

During this five-year period, no consistent seasonal variation in prices was apparent.

Figure II-1. Prices of adult cattle (cows) and yearling bulls at fairs and national markets, 1979-1981 ^{1/}



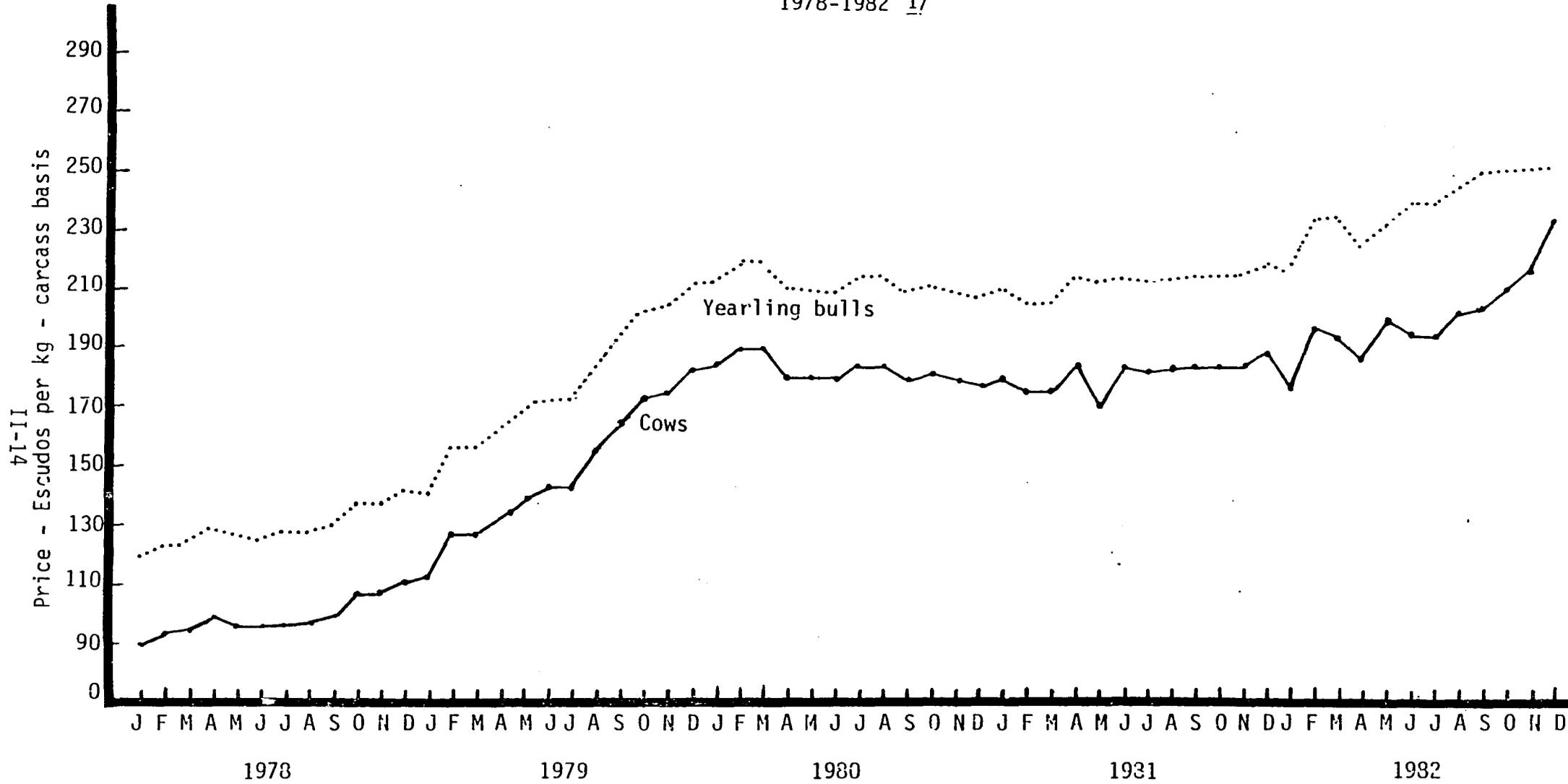
^{1/} Source: Serviço de Comércio de Gados, JNPP

2. First Category Cows and Yearling Bulls

A second price series includes prices of first category cattle, cows and yearling bulls (Figure II-2). This price series parallels closely the series reported for adult cattle and yearling bulls at fairs and other national markets, but shows less monthly variation. General price levels were approximately the same but spreads between prices of first category cattle were slightly narrower (13.6 percent vs 14.8 percent) than for prices for cattle at fairs and national markets.

Again, no consistent seasonal price variation was apparent.

Figure II-2. Prices of cattle of the first category, 1978-1982 ^{1/}



^{1/} Source: Serviço de Comércio de Carnes, JNPP

III. EXISTING SYSTEMS OF MARKETING CATTLE IN PORTUGAL

A. Introduction

The first objective of the project was to review, describe and evaluate the existing systems of cattle marketing in Portugal. This was accomplished by surveying the important participants in the marketing channels: farmers, cattle merchants, butchers, the municipalities (Câmaras) that operate the cattle fairs and cooperatives. Intervention livestock purchases by JNPP during periods of low prices are a fifth, less common, channel for marketing cattle.

Portugal's livestock marketing channels are summarized in Figure III-1. Farmers have a total of six channels in which to market their cattle or calves. They also purchase cattle from many of these same channels. First, the most common market channel used by farmers is the merchants, both for selling cattle and buying replacement cattle. Second, farmers also buy and sell cattle at the fairs, where they deal mainly with merchants, butchers or other farmers. Third, cattle are also marketed between farmers in a direct, farm-to-farm channel. Fourth, many farmers sell cattle direct to the butchers. This channel by-passes the merchant, who also supplies cattle to the butcher. Fifth, some farmers have sold or bought cattle through their cooperatives. This marketing activity by cooperatives mostly involves growing replacement cattle for their members. Finally, when certain livestock prices fall below intervention price levels, the JNPP makes market purchases from farmers to support those prices.

This chapter describes in detail the existing marketing systems for Portugal's livestock. The roles of farmers and each of the four most important market channels are described and evaluated, based on the survey results and other published sources. Tables summarizing the actual farmer survey responses are included in the Statistical Supplement, published as Volume II.

B. The Position of the Farmer

One hundred farmers in the Entre Douro e Minho and Beira Litoral regions were interviewed for the project. The purpose of the interviews was to gather information about the farmers' methods of production and their marketing practices. The survey sought information about farmers' use of the various market channels as well as their opinions of the different channels. These regions were selected for the project because of their

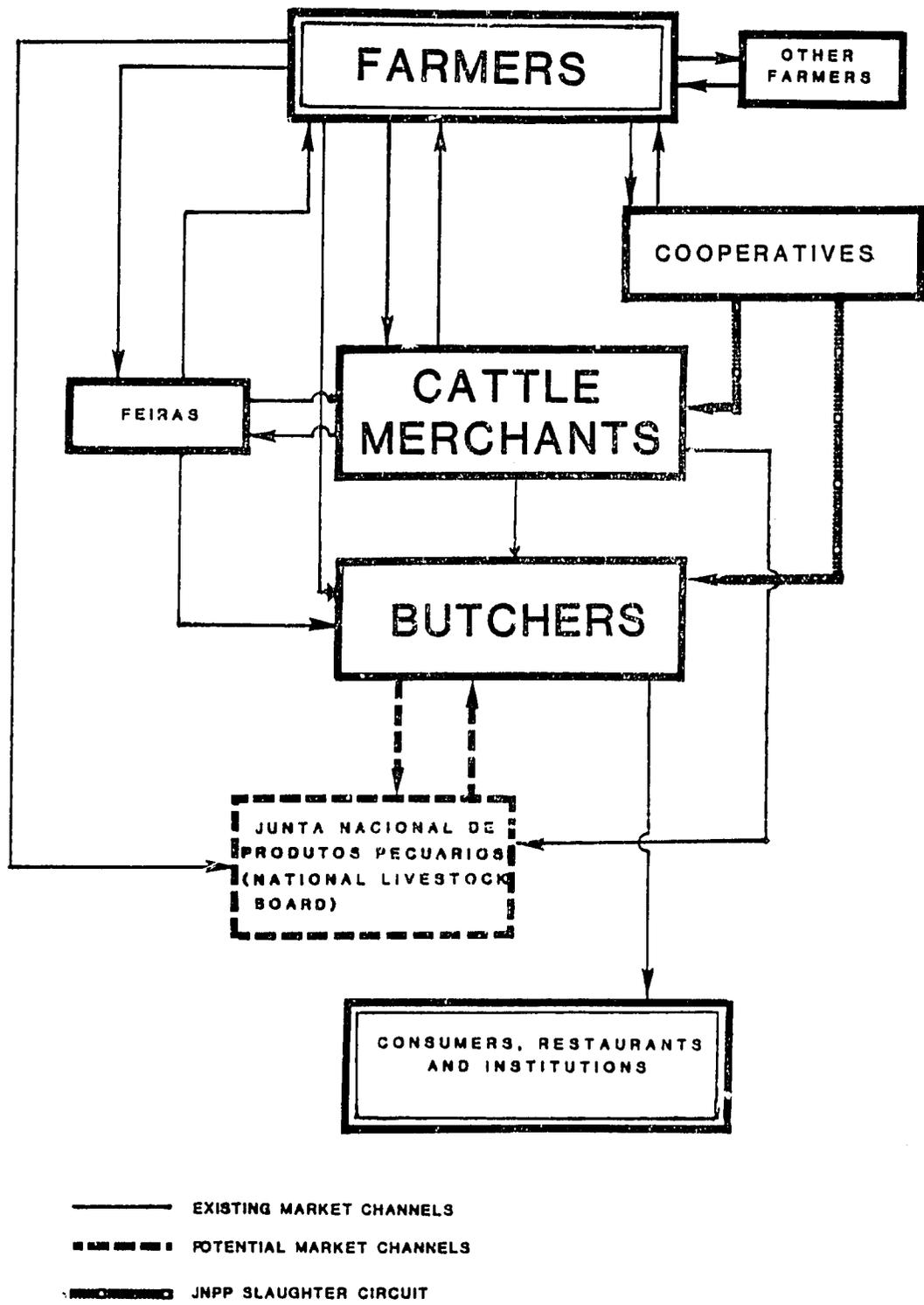


Figure III-1. Market channels for cattle in Portugal

importance in Portugal's livestock industry, because of the interest of farmers and marketing agents in making improvements and because they were felt to have good potential for improvement.

1. Farmer Profile

This section provides a background of the farmers in the Entre Douro e Minho and Beira Litoral regions. The distinguishing features of most farms in these regions are their small size and the diversity of their cultural practices.

Farmers in the two regions operate under various combinations of land tenure, ranging from total ownership to total rental. Overall, 52 percent of the surveyed farmers own all the land that they farmed. Twenty-seven percent of the farmers own more land than they rent. Only eight percent of the farmers rent all the land they farm. The combinations of land tenure did not vary greatly depending on the size of the farm.

Farmers in the survey had many types of cattle, which is compatible with the diversity of their practices. Dairy cows were the most common, found at 91 percent of the farms. Fattening bulls were second most common, found at 48 percent of the farms. Veal calves were also common, with 47 percent of the farms having them. Other types of cattle on farms of these regions include work cattle, replacement heifers and bulls. The different types of cattle that an individual farmer owns reflect his different uses of the cattle. Some uses are combined in an individual animal on the small farms of the regions. These uses are: milk, transportation, manure and meat.

Most of the farmers in the survey had fewer than five head of each type of cattle. Forty-four percent of the farms had fewer than five milk cows. Twenty-one percent had five to nine milk cows. Only thirteen percent of farms had five or more head of veal calves. Counting all types of cattle, 55 percent of farms had fewer than ten head of cattle, indicating the small size of cattle enterprises of the area.

The farmers themselves who were surveyed were a fairly diverse group. The ages of farmers was skewed somewhat toward the older range. Thirty-nine percent of the farmers were 50 years or older, but only 28 percent were less than 40 years old. Almost all the farmers in the survey had some education. By far the largest group, 82 percent, had between one and four years of school. Only twelve percent had five to eleven years of school. The sharp drop after four years represents the legal requirement in Portugal and the desire and economic need for beginning work. In labor-intensive agriculture, it is often considered more valuable for young people to work than to continue in school. Ninety percent of the farmers followed their fathers into the same occupation. Moreover, 77 percent of those surveyed had more than 20 years experience, most of it on the farm where they currently live. Sixty-five percent were always farmers. These findings suggest that farmers of these regions were not very mobile. The most common occupation prior to becoming a farmer was emigrant. Seventeen percent of farmers surveyed had been emigrants.

2. Farmer Marketing Practices

a. Farmers and merchants

Cattle merchants are the most frequently used market channel among the farmers in the two study regions, regardless of farm size. More than 90 percent of farmers reported that they used merchants. In addition, most farmers utilizing merchants sell to four or more merchants and they tend to change merchants often. These findings suggest that, although farmers depend on merchants to market their cattle, and vice versa, they appear to avoid dealing too much or too long with the same individual merchant. The tenure of the relationship is quite variable but its average length is 9.2 years. It isn't known directly if farmers make these changes to try to preserve their bargaining power with merchants in general. However, some support for this idea comes from the additional finding that farmers' main reason for selling to a particular merchant is his honesty and their trust in him. More than two-thirds of the farmers who gave reasons for selling to only one merchant gave this reason. Farmers might switch merchants when they feel their bargaining power is declining and causing a loss of trust in the merchant.

The transactions between farmers and merchants do not appear to be entirely satisfactory from the farmers' perspective. About 80 percent of the farmers sell cattle to merchants on a head, or per animal basis. However, 61 percent of farmers with an opinion about sales based on the head were dissatisfied with this basis. The predominant use by merchants of the head basis and the farmers' unhappiness with the head basis, when considered together, seem contradictory to the fact that merchants are the farmers' most widely used cattle marketing channel. A third finding also contradicting merchants' popularity among farmers is that about 61 percent of farmers are dissatisfied with the actual prices paid by merchants. This dissatisfaction is closely related to the dissatisfaction with the common use of the head basis. Forty-six percent of farmers that were dissatisfied cited their preference for selling on a carcass basis. One interesting size effect was found regarding price dissatisfaction. Among the largest farmers surveyed, those with 20 or more head of cattle, a majority (57 percent) were actually satisfied with merchant prices. This suggests that larger farmers might tend to be more satisfied because they enjoy more bargaining power with merchants.

The farmers that were surveyed were basically satisfied with other aspects of the farmer-merchant transactions. Prompt payment by the merchants is the rule. Eighty-seven percent of the farmers surveyed stated that they negotiate with the merchant for a better price rather than accept his first price offer. It is unknown how often the farmer succeeds in raising the price with these negotiations. More than 92 percent of farmers reported no serious problems in past dealings with merchants.

One very important service that merchants provide farmers is selling replacement cattle to them. Merchants, in addition to other farmers and cooperatives, are a main source of replacements. Sixty-percent of the farmers regularly or occasionally purchase replacement cattle from merchants. Most of these replacements are milk cows or veal calves. Such

a marketing role might enhance merchants' bargaining power with farmers. It is possible that by providing this service, merchants are able to overcome farmer dissatisfaction with prices and remain trusted and widely used marketing agents.

b. Farmers and butchers

The second market channel most frequently used by farmers is direct sales of cattle to the butcher. Based on survey results, farmers are fairly satisfied with this direct market channel. More than half reported that they sell cattle to butchers.

Most of the farmers in the survey sell to either a single butcher or four or more butchers; each of these practices was followed by 40 to 50 percent of the farmers surveyed. However, the group of largest farmers, those with 20 or more head of cattle, was more likely than the group of smaller farmers to sell to just one butcher. This finding seems incongruous considering the largest farmers probably market more livestock annually and are thus more active in the market.

High volume would seem to encourage use of several butchers. Since this is not the case among the largest farmers surveyed, it suggests two possibilities. First, that large farmers, because of their size, might prefer selling to a single butcher as a way to hold down their marketing costs. By doing this they avoid the costs of dealing with several butchers to make a single sale, such as showing the sale animals. Second, large farmers might enjoy production efficiencies over small farmers, for instance more and better forages, which allow them to produce a higher quality animal than the small farmer produces. If such a quality gap exists, the butcher might want to take advantage of it and strive for strong market ties with the large farmers in his area. Indeed, the butcher could be paying premium prices for quality cattle that encourage farmers to deal with only one butcher. Large farmers also can provide large numbers of animals each time, thus assuring a stable source of cattle to the butcher.

The survey of farmers revealed additional conflicting evidence about possible loyalty. The concept of loyalty based on quality is not supported by farmers' habits of switching butchers frequently. Half the surveyed farmers said they change butchers often and half said they do not change butchers often. Overall, farmers indicate, as was true with merchants also, honesty and trust were the important reasons for selling to a single butcher. The second most important reason was that he pays a good price. But when a farmer does sell to only one butcher without switching, he tends to sell to that butcher, and possibly to his father before him, for a long time. The average length of this market link was almost seven years; one farmer has sold to the same butcher for more than 40 years.

Farmers appear to be more satisfied by their transactions with butchers than by their transactions with merchants. The survey found that a majority of farmers (61 percent) sold their cattle to butchers on a carcass

weight basis. The rest sold on a head basis. Ninety-six percent of farmers who sold on a carcass weight basis were satisfied with that method. Conversely, more than 60 percent of farmers selling on a head basis were dissatisfied. Farmers' dislike of sales on the head basis, evident in transactions with both butchers and merchants, indicates their suspicion that they are at a bargaining disadvantage when selling on a head basis. However, 70 percent of farmers are satisfied with the actual prices paid by the butcher. This is in sharp contrast to farmers' attitudes about merchants' prices. Although it is necessary to remember that merchants and butchers perform different functions in the market, it is useful to consider why the difference in price satisfaction might exist. It probably can be traced to farmers' preference for the carcass weight basis, which according to the farmers, the butchers use more frequently in their purchases.

Farmers say that butchers pay fairly promptly and most of them say they negotiate with the butcher rather than accept the butcher's first price offer. Farmers are, however, more likely to accept a butcher's first offer than to accept a merchant's first offer. No farmers in the survey reported any serious problems with butchers. Unlike merchants, butchers are not a source of replacement cattle for farmers.

c. Farmers and cattle fairs (Feiras)

Fairs are an important market channel for certain types of cattle. People also sell or buy other livestock, dairy foods, clothing, household items and other merchandise. The earliest known fairs of Europe have been traced to the Middle Ages and began appearing in Portugal in the 15th and 16th centuries. With their long existence and diversity, fairs have become an important part of the social structure of rural Portugal.

Fairs are not the most popular market channel among the farmers interviewed, being used less frequently than merchants or butchers. Thirty-five percent of the farmers in the survey used the fairs to sell cattle. Almost all farmers who sell at a fair indicated they have sold at a particular fair all their lives. This long attendance suggests the degree to which a fair is an area institution. This frequently-attended fair is probably the one nearest to the farmer's home and his use of it reflects lowest travel time and least cost of transporting animals to that fair. A slight majority (54 percent) of the farmers indicated they attended more than one fair.

As mentioned above, fairs serve as a market channel for certain types of cattle. The two types of cattle most commonly sold by farmers at fairs are cull cows and veal calves. Draft cattle and yearling bulls are also sold at fairs. However, most fairs are not an important market channel for farmers' slaughter cattle. Eighty-six percent of surveyed farmers say they also purchase cattle at the fairs. Moreover, their purchases consist almost exclusively of milk cows and veal calves. These buy and sell patterns indicate fairs are an important site for farmer-to-farmer sales.

Despite the fact that some farmers actively use the fairs, they express a mixture of feelings about fairs. Only half of farmers surveyed indicated they like to sell cattle at fairs. The main reason given by farmers for liking fairs is that they can negotiate with more than one buyer.

Farmers in the survey disliked selling cattle at fairs mainly because they were uncertain what prices they will receive and the fairs lack scales and sanitary controls. Without sanitary controls, diseased animals are sometimes present at the fairs. These same reasons were also frequently mentioned as problems in buying cattle at the fairs.

Much of farmers' discontent with fairs stems from their dissatisfaction with the competitive aspects of this market. Curiously enough, some of their survey responses do not support this suspicion of the competitiveness of the fairs. For instance, all the farmers who responded said that more than one buyer customarily made offers to them for their cattle. However, this reflects the possible role of the "misseiros", who operate on the merchants' behalf at the fairs, with several misseiros representing one merchant. ^{1/} Also, 70 percent of the farmers reported that buyers' price offers differ widely for the same cattle. This range of prices reflects the misseiros' roles, working for a small number of merchants, to give the appearance of price variability. Payment by buyers is not a problem for farmers because 90 percent of them report being paid cash at the time of sale.

Transportation assumes a key role in the fair market channel since the cattle are taken off the farm before they are even sold. The farmer assumes the marketing cost of transporting the animal to the fair. The farmer incurs this cost without the complete certainty that the animal will be sold at the fair, which could force the farmer to transport the animal back home. Most small farmers hire a truck or drive the animals on foot and most large farmers use their own truck or trailer. In the case of driving the animals on foot to the fair the farmer spends considerably more time and incurs more animal shrink than if he uses a truck or trailer. These costs are completely absorbed by the farmer. Farmers occasionally have difficulty arranging for transportation. It is possible that since farmers have already incurred this transportation cost and do not want the cost of returning an unsold animal, their bargaining power is reduced at fairs compared to other channels. That is, since the farmer has already committed the cattle to the marketing process, his reluctance to withdraw might lead him to accept lower prices than he would otherwise. Of course, it must be recognized that buyers at fairs ought to be willing to offer slightly higher prices because the farmer has already absorbed part of the assembly and transportation costs.

Perhaps the most vital function that fairs provide for farmers is one of market price intelligence. The availability of price information for most types of cattle is limited in the Portuguese livestock industry. Fairs,

^{1/} "Misseiros" are agents of merchants who try to discourage offers on cattle and then try to buy these cattle at low prices just before the fair closes.

which are the most open market channel, represent one of the chief sources of price information for farmers. Eighty-six percent of the farmers surveyed indicated they use fairs as a source of price information. Many farmers go to the fairs not necessarily to buy or sell cattle, but to learn what the prices are. Unfortunately, the fairs are markets mainly for cull cows and veal calves, therefore fair prices do not directly reflect the slaughter cattle price situation.

d. Farmers and JNPP

The Junta Nacional dos Produtos Pecuários (JNPP) represents a minor market channel for farmers briefly described here. Farmers normally sell to JNPP only when cattle prices are low and JNPP intervenes in the market to support prices. Intervention prices exist for a few types of cattle.

Because JNPP deals with farmers only during intervention purchases, farmers have limited experience with JNPP. Seventy-three percent of the farmers surveyed have never sold to JNPP. Since so few farmers have sold to JNPP, it can be ignored as a market channel although JNPP purchases do provide a floor under cattle prices. Most farmers do not know the current JNPP intervention price.

The farmer survey included two interesting findings about JNPP. The Junta is the slowest to pay farmers of all the market agents analyzed. Moreover, of the eighteen farmers in the survey who sold to JNPP, thirteen reported they had some type of serious problem in the transaction. These two findings suggest that farmers are not satisfied with JNPP.

e. Farmers and cooperatives

Cooperatives represent a market channel that is not used traditionally by farmers, but which has potential for marketing significant numbers of cattle. Historically, cooperatives have been most important in the marketing of milk. Most farmers in the Entre Douro e Minho and Beira Litoral regions belong to one or more cooperatives for milk, wine, fruits and vegetables and other products. Among the farmers surveyed in this study, 66 percent belonged to one cooperative and nineteen percent belonged to more than one cooperative. The remainder did not belong to cooperatives.

In spite of this broad farmer participation in cooperatives for several products and for marketing and supplies, cooperatives play a small role in livestock marketing. Only fourteen percent of the farmers surveyed had sold cattle through their cooperatives at least once. Sale of cattle, especially slaughter cattle, through cooperatives is still a developing idea. Some cooperatives already have programs to buy heifer calves from farmers, grow them on a cooperative farm using the cooperatives' feeding program, and sell them back to farmers as replacements. Among the farmers surveyed, 84 percent thought cooperatives would be a good way to sell their cattle. Farmers favor cooperatives because they feel it would be an honest sale and would benefit the farmer. They would also favor eliminating the

middlemen from livestock marketing. The main requirements farmers would place on cooperatives marketing cattle are honesty and rapid payment of a fair price.

f. Farmers and auctions

Auctions are a common method of livestock marketing in many countries. The survey of farmers included several questions about livestock auctions.

Most of the surveyed farmers understand the auction concept and many have attended an auction, either of livestock or other merchandise. However, only 38 percent say they are interested in the possibility of a livestock auction. Twenty percent say they have no opinion. Almost 80 percent of the farmers are unwilling to consign their cattle to an auctioneer who will sell the cattle for the best price. This unwillingness to consign cattle reflects small farmers' individual relationship with their animals, their desire to maintain direct control over the marketing of their cattle, and their desire to know the price they will receive before they agree to sell the animal.

C. Local Cattle Fairs (Feiras)

Fairs are important markets for livestock and other goods and have existed in Portugal for many centuries. The fairs are held periodically at a specified site in a town, under the authority of the local Municipality (Câmara). During this project the livestock fairs were closed by the outbreak of peripneumonia in Portugal. Fairs are, however, important markets for the future when they are allowed to resume livestock sales. To gather information about the fairs and the future of fairs, the project team used a combination of mail surveys and personal interviews of Câmara officials in the two regions of the study. Twenty-one Câmaras replied or were interviewed. Based on those results, the role of fairs in the Portuguese livestock market is described and evaluated. Complete results of the mail survey of Câmaras are contained in the Statistical Supplement, published as Volume II.

1. General Description

a. Town size

Fairs have existed for many years in towns of all sizes. Only one fair in the survey was in a town of less than 600 population. Only about 25 percent of the fairs are in towns with more than 30,000 population. There is no positive relationship between the size of a town and the size of its cattle fair. These findings reflect the large number of small towns in the two regions and the importance of small town, rural areas in the cattle fair markets. Most of the fairs in the survey were quite old. Seventy-six percent had operated more than 200 years old. Seventy-six percent had operated more than 200 years. All of the fairs had operated for at least 40 years.

b. Fair schedules

All Câmaras hold the fairs on a set schedule of both the days of the fair and its frequency. A fair can be set for a particular day of the week or a particular day of the month. Fifteen of 21 fairs were held on specific days each month and twelve of the fifteen were held twice each month. Câmaras that scheduled fairs by the day of the week usually chose Monday, Wednesday or Friday. Frequency of fairs includes both regular fairs and special fairs. The common frequency for regular fairs is bi-weekly, used by 71 percent of Câmaras in the survey. At this rate, 24 to 26 fairs are held each year. Only four fairs ran on a weekly basis. Slightly more than half the Câmaras hold special fairs besides the regularly scheduled ones. Special fairs are held annually by nine Câmaras and semi-annually for four Câmaras.

c. Goods sold at fairs

Portuguese fairs are important markets for many products in addition to livestock. In fact some goods sold at fairs are unique to fairs and cannot be purchased in shops. Nearly all fairs include sales of cattle, chickens and eggs and fruits and vegetables. Sheep and goats were less common at fairs, being reported by sixteen of the surveyed Câmaras. Other products reported for sale are shoes, clothing and household goods. Large fairs (in terms of livestock sold) are not more diversified in merchandise than small fairs.

d. Physical facilities

The general physical facilities of fairs vary considerably from town to town. All but one of the 21 fairs in the survey had loading docks. The prevalence of such docks reflects the fairs' traditional importance as a cattle market. Many fairs also have perimeter fences or walls and parking lots. The least common fair facilities are shelters, restrooms and livestock scales. Only two Câmaras reported having scales on the fair site. Two other Câmaras indicated there are private scales near the fair.

2. Types of Cattle Sold at Fairs

The type of cattle sold at fairs varies among the towns that were included in the survey. Some typically handle more of a particular type of cattle than other types of cattle. However, on an overall basis, different types of cattle are fairly equally distributed in the fair market. The most prevalent type of cattle are young calves; heifer calves and bull calves each account for an average of 21 percent of the sales volume at fairs. At a few fairs, these calves amount to 40 to 50 percent of the total volume. The next most important types of cattle are cull cows, which account for an average of eighteen percent of sales, and yearling bulls, which account for seventeen percent of the sales. Most of these bulls and old cows are slaughter animals. Fairs are a significant market for dairy heifers that farmers use as herd replacements. Thirteen percent of the average sales volume is replacement heifers. One Câmara reported that 40 to 50 percent

of its cattle sales are dairy heifers. The type of cattle sold the least is work cattle. They constitute only ten percent of the average volume. Even at the fair selling the most work cattle, they are only between 20 and 30 percent of the sales volume.

3. Size of Fairs

a. Number of cattle sold

The current size of cattle fairs in the survey was assessed in two ways: the average number of cattle sold per day and the record number of cattle ever sold in a day. No fairs in the survey exceeded 1,000 head in average cattle sold per day. Only three, or fourteen percent of those surveyed, exceeded 500 head in average volume. Slightly more than half sold between 150 and 500 head on average. One third sold fewer than 150 head per average day.

The size distribution of fairs becomes wider when size is based on record number of cattle ever sold in one day. This measure of size is based on a day when, for whatever reason, the fair sold a record number of cattle. The cattle fair might even have overflowed its physical bounds. Although none averaged more than 1,000 head per day, four exceeded 1,000 head on the biggest day. Two topped 2,000 head on the record days, at least doubling the normal volume. Most fairs in the survey had record days in which 200 to 500 head of cattle were sold. Two failed to exceed 100 head even on record sales volume.

The growth trend for a fair is as important as its current size. Only three of nineteen Câmaras reported an increasing trend in size for their cattle fair. All of these were in the 250 to 500 head size. Equal numbers of Câmaras indicated the size of cattle fairs was stable or declining. The two largest fairs, which sold more than 500 head on average days, are decreasing in size. Moreover, all of the smallest fairs that sell fewer than 100 head per day were reported to be decreasing in size. Some in the two medium size categories were also decreasing in volume of cattle sold. These trends do not indicate a favorable future for cattle fairs under present conditions. Much of this decline is attributable to institutional problems of the fairs as described below.

Despite the declining trend in fair size, many Câmara officials expect that cattle sales at fairs will actually increase in the next five years. Seven Câmaras felt their cattle fair would increase in size and nine felt theirs would remain the same size. Only three Câmaras expected a decrease. This optimistic outlook in the face of the recent declines depends a great deal on the eventual reopening of fairs after the control of peripneumonia. The fairs closed in the first half of 1983 after the outbreak of peripneumonia in the north of Portugal and had not reopened as of November, 1983. A complete shutdown of the fairs with no foreseeable reopening has certainly damaged their position in Portuguese livestock marketing.

b. Radius of influence

Another way to measure the importance of a fair besides the number of cattle sold is its area of influence. This influence is a gauge of the fair's drawing power and its effect on the region's society and commerce. In the survey, importance was measured by the radius of influence and by the number of towns within that radius. There is a natural relationship between a fair's cattle volume and its radius of influence measured in kilometers. Among all the fairs in the survey, the most common radius of influence was 50 km or less. The next most common radius was 100 km or more, which five Câmaras reported. The most important fairs attract cattle and merchants from all parts of the country.

Most of the fairs with fewer than 100 head average sales drew cattle from a radius of less than 50 km. Medium volume fairs varied in radius of influence but still were likely to gather their cattle from a 50 km radius.

One interesting finding was that two large fairs gathered all their cattle within a 50 km radius. These fairs are obviously located in areas with high cattle densities. The typical large fair operates in a much larger area. Five of seven large fairs attract cattle from a radius of 70 km or more. Three of those five even attract cattle from beyond 100 km.

The number of towns within the radius of influence is a measure of the fair's importance to the area commerce. All of the large fairs contain more than six towns within their areas of influence. Most of the small fairs affect the commerce of only three or fewer towns.

4. Buyers

At the average fair, 45 percent of the individual buyers are merchants and 40 percent are farmers. It is important to note that merchants buy many more cattle than farmers buy. Farmers are usually buying only dairy cows and calves but merchants are buying many types of cattle, such as cull cows, young calves and yearling heifers. Only eleven percent of the buyers are butchers. Four percent are other buyers, such as misseiros. Merchants are at least ten percent of the buyers at all the fairs surveyed. Five Câmaras reported that merchants are more than 50 percent of the buyers at the fairs. Seven of the Câmaras reported that farmers are at least 50 percent of the buyers present at the fair. The group of buyers at a fair is typically unchanging. Overall, 71 percent of the Câmaras in the survey reported that the same buyers are usually present at each fair. This stability of the buyers was reported to be even more common at the large fairs, 89 percent of which usually have the same buyers. This suggests that buyers are regularly attracted by the high volumes of cattle from which the buyer can purchase what he needs. Conversely, the smallest fairs appear likely to attract new buyers. Because they are small, these fairs do not attract a set of regular buyers; instead, buyers probably visit them occasionally, on a periodic basis or whenever it is convenient.

5. Sellers

The most important sellers at fairs are farmers. They sell on average about 60 percent of the cattle at fairs in the survey. Merchants sell an average of 35 percent of the cattle at fairs. At six fairs in the survey, farmers were reported to sell between 60 and 70 percent of the cattle. At eight fairs, farmers sold more than 70 percent of the cattle. At twelve fairs, merchants account for less than 30 percent of the sales. This indicates merchants are not major sellers at fairs.

6. Operating Procedures

Fairs technically are operated by the local Câmara (municipal government) and the buyers and the sellers operate under some sort of procedure and policies set forth by the Câmara. The presence or absence of these procedures structures the cattle market and determines buyer or seller attitudes about its usefulness. Each of the important procedures at the fairs in the survey is discussed below.

a. Animal health inspection

One of the most important considerations is animal health. Fairs, where many cattle from different farms are mingled in a single place, are ideal conductors of communicable diseases. The outbreak and spread of peripneumonia is an example. Diseased animals should be kept out.

Of the 21 Câmaras surveyed, only three reported that inspection was required. The nature and thoroughness of these inspections is unknown. Two of the three fairs with inspection are in the smallest size category of fewer than 100 head per day.

b. Marketing charges

Nearly half the Câmaras in the survey charge participants a fee for selling cattle. This fee is quite low compared to the value of the animal. Per head fees on calves range from 3\$00 up to 7\$50, with 5\$00 most common. All reported fees on yearlings were 10\$00. Sellers of adult cattle pay fees ranging from only 4\$00 up to 25\$00, with 10\$00 and 25\$00 most common. The medium and smaller fairs were the most likely to have a seller fee. Only two of nine large fairs reported seller fees. There were no Câmaras levying fees on buyers of cattle.

d. Câmara officials at fairs

Câmaras operate the fairs and sometimes have officials or employees on the grounds the day of the fair. Only four Câmaras have managers. Two of these fairs are in the large category. The other twelve large fairs in the survey have no manager on the grounds. This lack of managers suggests that Câmaras are not maintaining adequate control. Clerks or cashiers are the most common employees used by seventeen of 21 Câmaras; their main function is fee collection.

7. Physical Facilities

Physical facilities for sale of cattle at fairs vary greatly. The facilities can be described in a sequence fair participants and cattle follow the day of the fair.

a. Cattle transportation and loading

Cattle reach the fairs by four widely used means, which depend on the distance and the owner of the animal. As reported by the Câmaras, practically all merchants haul cattle to and from the fairs in trucks. Sixteen of 21 fairs receive farmers' cattle hauled in the farmers' trucks or wagons. Transportation in hired trucks is also common. All receive cattle that are driven on foot from the farm. By driving cattle on foot, the farmer incurs higher animal shrinkage than he would with motor transportation. He also spends considerable time.

If cattle are hauled to the fair, they must be unloaded on a loading dock or jumped off on a nearby dirt bank. Loading docks are almost universal. All but one of the fairs surveyed had a loading dock. These docks vary in width from long walls to only the width of a truck. The height of some wider docks varies along their width to accommodate different size trucks and wagons.

b. Livestock scales

Nearly all fairs lack scales to weigh cattle. Only one medium and one large fair in the survey had scales. Without scales, cattle cannot be sold on a live weight basis and must be sold on a head basis. This is a problem particularly with slaughter livestock sales. Farmers selling on a head basis sometimes are at a bargaining disadvantage to merchants because merchants buy many more cattle and are more able than the farmer to estimate an animal's value, such as its dressing percentage.

c. Organization of cattle at fairs

The physical organization of the cattle at a fair affects the operation significantly. The more organized the display of cattle, the easier it is for all parties to transact business in an open and fair atmosphere.

Sixteen of the Câmaras reported they have no reserved spaces for buyers or sellers and do not assign spaces. Rather, participants take up positions on the grounds on a first-come, first-served basis, regardless of seller registration or the type of cattle. This results in cattle and people being mixed up and milling about. Only five Câmaras specify areas reserved for each type of cattle. This orderly system allows buyers to move about to view different classes of cattle, to bargain and to purchase their needs. Only two Câmaras reported that merchants occupy the same area at every fair.

8. Prices and Competition at Fairs

The establishment of prices and the competitive aspects of fairs are viewed with some suspicion by farmers and the Câmaras. The survey of farmers gathered their views of prices at fairs and the survey of Câmaras gathered the fair operators' views of the same issues.

a. Establishment of prices

All the Câmaras in the survey reported that farmers at the fair receive offers for their cattle from more than one buyer. Moreover, according to the Câmaras, all of the prices paid are negotiated between the buyer and the seller. These findings do not suggest a lack of competition.

However, many of the Câmaras reported agreement among merchants regarding prices they will offer for cattle. Overall, the survey revealed fourteen of 21 fairs where agreement over prices was thought to exist.

Three Câmaras reported that agreement sometimes occurs. All three of the small fairs were thought to have price agreement among the buyers. This finding is especially interesting considering that the small fairs were more prone to have occasional new buyers. If price agreement can be maintained even among a fluid group of merchants, then they are able to agree quickly on the fair grounds or they have a means to establish agreement outside the fair. This outside mechanism can be simple communication or possibly there merely seems to be agreement because of a common basis, such as meat prices, for calculating price offers. The means of establishing and maintaining price agreement at a large fair is also remarkable considering there might be more than 100 merchants operating in a rather chaotic setting. It is possible that price agreement at large fairs is established by a few important merchants, acting with small or occasional merchants and misseiros. Under such an arrangement, price agreement could be reached even at large fairs.

Câmara comments on the possibility of price agreement support all of those ideas. Regarding agreement on the fair grounds, the Câmara stated that buyers meet informally to agree on prices and even avoid new buyers in the group. Two Câmaras stated that buyers occasionally agree not to compete and also reported that merchants use misseiros to help keep price agreement intact. The misseiros act as agents for the merchants and at the close of a fair offer a low bid to the farmer for his unsold cattle. Another Câmara reported that merchants at its fair visit producers before the fair, offer them a price and advise other merchants at the fair about the price offered.

A few Câmaras supported the idea that prices are not based on agreement but on supply and demand considerations. Three of 21 Câmaras reported that competition among buyers always exists. Eleven thought competition normally exists and six thought competition exists only when supplies of cattle are tight.

b. Arbitration of disputes

When disputes between buyers and sellers arise, they may or may not be resolved in a systematic fashion, because there is no institutional arbitration system, locally or nationally, to solve these problems. Five Câmaras report that friends, acquaintances, or neutral parties arbitrate the dispute and five Câmaras report the buyer and seller simply reach agreement themselves. Two Câmaras stated that the merchant decides unilaterally and two stated that the seller decides unilaterally.

c. Terms of payment

Terms of payment are important to livestock transactions inasmuch as trust is an important element. Sellers lose trust when payments are delayed. At sixteen of the fairs in the survey, sellers are always paid immediately in cash at the time of the sale. At the remaining fairs, payment is sometimes delayed when the animal was sold on a carcass weight basis and payment is delayed until JNPP provides the carcass weight information.

D. Cattle Merchants

1. Background

Cattle merchants are independent country livestock buyers who buy cattle directly from farmers, from fairs (feiras) and from other merchants. They are the most common and the most important buyer of cattle from the farmer. They buy cattle primarily to sell to butchers, but also sell at fairs, to other merchants and are a common source of replacement cattle for farmers. Usually they buy and sell for their own account but occasionally they act as order buyers or cattle brokers and buy on a commission basis for butchers. They are often farmers themselves, usually operate out of their home and have their own truck for hauling the cattle they purchase.

2. Characteristics and Marketing Practices

Cattle merchants are generally experienced livestock dealers, most of whom have been in business for over 20 years.

a. Sources of cattle purchased

Merchants generally buy from a large number of farmers (50 or more) in a wide area (50 to over 100 km) surrounding their base of operations. Although most purchase all species of livestock, they tend to specialize to some degree. Most buy primarily cattle although some specialize to a degree in buying hogs or sheep and goats.

Their primary source of cattle is the small farmer. All merchants interviewed indicated that from 80 to 100 percent of their cattle purchases were from small farmers, those having fewer than five cattle. This is particularly true of the smaller, local merchants.

Some large, regional merchants who buy for butchers in Lisbon or other large cities buy a higher percent of their cattle from larger farmers with whom they deal on a regular and continuing basis.

In addition, the survey of butchers indicated that when they buy directly from farmers they deal primarily with larger farmers and depend on merchants as their source of cattle from small farmers.

Since most purchases are from small farmers, five cows or fewer, most merchants only bought cattle from the same farmer one or two times a year and then only one to three head. Thus the merchant has to contact a larger number of farmers over a wide area to acquire the cattle he needs. In addition, merchants reported that most of the farmers sell to more than one merchant, take cattle to the fairs and a few sell directly to local butchers or other farmers.

Merchants indicated that although they visit farmers to find cattle, most of the time they are contacted by the farmer who has cattle to sell. In most cases, the farmer stops by to tell the merchant he has cattle for sale although in some cases the farmer telephones the merchant or sends word by other persons such as the rural mail carrier.

The interval between notification by the farmer that he has cattle for sale and the purchase of the cattle by the merchant was short. Often the cattle are purchased the same day or at least by two or three days later.

Many merchants are, in reality, only part-time cattle buyers and buy only 10-20 head per week. However, others are active on a full-time basis and may buy 20 head per day or more.

b. Outlets for cattle purchased

Nearly all merchants buy cattle for their own account although a few also buy on a commission basis for large butchers. One merchant indicated that he operated entirely as an order buyer for a large merchant and that his commission was 1,000\$ per adult animal purchased.

As indicated earlier, all merchants sell cattle to butchers and the butcher is the primary outlet for the cattle they sell. Most merchants have established butcher customers to whom they sell the bulk of the cattle they buy and a few buy primarily for large butchers in metropolitan area. In most instances, the merchant buys such cattle as farmers want to sell and then finds butcher customers. However, in many cases butchers contact merchants, or have standing orders with merchants who buy according to the butchers' requirements. Besides sale to butchers, many merchants resell animals through cattle fairs (feiras), sometimes buying at one fair for resale through another fair. Most merchants also sell cattle to farmers, especially veals for feeding and in some cases dairy heifers.

c. Trucking services

When merchants buy cattle for butchers, they usually deliver the cattle to the JNPP slaughterhouse for the butcher and the availability of the merchant's truck is an important consideration both to the butcher who buys the cattle from the merchant and to the farmer who sells his cattle to the merchant. Virtually all merchants own and drive their own truck, although larger merchants may have two or three trucks and hire drivers.

Most merchant trucks are relatively small with a capacity of six to seven adult cattle being most common. Very few have portable loading ramps. In most cases, they back the truck up to a dirt bank or drop the rear wheels in a ditch and jump or push the cattle in.

d. Price basis for cattle purchased

Purchase of live cattle by the head is the most common basis on which merchants buy cattle at the farm or at the fairs. Some cattle are also sold on a carcass weight basis with the carcass weight furnished by the slaughterhouse. However, many farmers prefer to sell on a per head basis since when they sell on a carcass weight basis they have to wait until after the animal is slaughtered to receive payment and in many cases farmers indicated that they do not trust the carcass weight. Virtually no cattle are purchased by merchants on a live weight basis because livestock scales are not available at the farm or the fair. However, merchants generally indicated that they would be willing to buy on a live weight basis if scales were available.

e. Pricing and payment for cattle purchased by merchants

Farmers almost always want to negotiate with the merchant to arrive at a mutually acceptable price. However, some merchants indicated that the farmer usually accepts the price offered. In most instances, merchants said that they know exactly, or at least approximately, the price they will get for the cattle they buy and in practice this price, less the merchant's usual margin, represents an upper limit to the price he is willing to pay. Merchants are in contact almost daily with cattle markets and are well informed concerning prices for different classes of cattle. They buy and sell cattle at fairs and prices there are important guages of the market. Butchers are also an important source of price information to merchants. Other merchants do not appear to be a common source of price information.

Nearly all purchases of cattle, where cattle are bought live by the head are paid for immediately in cash and this is a major factor in farmers' preference for such sales. When cattle are purchased on a carcass weight basis, payment is not made until the cattle have been slaughtered and the carcass weight has been received from JNPP and this may delay payment for as much as a week. However, merchants who often sell to butchers on a carcass weight basis, usually have to wait several days before they are paid by the butcher.

f. Cattle purchases by merchants at fairs

As indicated earlier, nearly all merchants buy cattle at fairs. The importance of fairs to merchants varies widely. Fairs are not good sources of slaughter cattle (fed yearlings) and thus are not important markets for purchase of cattle for resale to butchers. However, some merchants specialize in buying cull cows or veal calves and to these merchants fairs are a major source of cattle. Most merchants consider fairs useful markets and major sources of cattle. They point out that there are large numbers of cattle at many fairs (some fairs sell more than 1,000 cattle on a good day) and that there is usually a good selection of cattle available. This concentration saves the merchant time and expense of buying small numbers of cattle from a large number of individual farmers scattered around the area. Merchants also indicated that it is easy to deal with farmers at fairs and that it gives them an opportunity to meet and to talk with a large number of farmers.

g. Cattle purchases by merchants at cattle parks (sales yards) and cattle auctions

There are no cattle parks in Portugal as an institutional form of selling cattle. However, most merchants would favor purchase of cattle through such sales yards, primarily because the concentration of cattle at such sales yards would permit a wide selection, offer a large number of cattle for sale and make their job easier. Merchants would be willing to buy at a cattle park operated by a farmers' cooperative if cattle quality and prices were competitive.

Although merchants indicated that they were acquainted with the auction system of selling cattle, nearly all indicated that they would not be interested in buying cattle through auctions. No reasons were given for such resistance.

E. Butchers

1. Background

Small butchers are the principal suppliers of meat to Portuguese consumers throughout most of the country. However, in the larger cities, supermarket chains have become important retailers of meat and meat products. The hotel and restaurant market is supplied by small butchers and a few specialized meat wholesalers.

Most butchers are single proprietorships or partnerships with one to three employees. The butcher buys cattle from merchants or farmers and has them slaughtered at the nearest JNPP slaughterhouse. The carcass and edible by-products are then delivered by JNPP to the butcher's shop (or in some instances picked up by the butcher). In addition to retailing cuts of meat, most butchers make sausage and process by-products. They also buy sausage and other processed meat items from specialized meat processors.

Butchers were surveyed by personal interviews and by leaving questionnaires to be completed by the butcher at his shop. Fifteen usable questionnaires were completed in the Beira Litoral and Entre Douro e Minho regions. Also, the Association of Butchers of Lisbon and Other Areas, which represents a large number of butchers throughout Portugal, prepared a consolidated reply to the questionnaire stating the position of the association on relevant questions. The description of butcher characteristics and cattle marketing activities which follows is based on the survey results and is believed to be representative of butchers' operations in the areas studied.

2. Characteristics and Marketing Practices

a. Characteristics

All butchers interviewed had all been in business more than five years and eleven, out of a total of fifteen, had operated more than ten years.

Eleven operated only one butcher shop, one butcher had three shops and one large butcher operated fourteen shops. Fourteen were individual proprietorships and one was a cooperative. Five of the butchers interviewed worked alone and had no employees, five had one employee and the remaining five had two or more employees.

Since most butchers are small, they required only a few cattle per week to meet their needs. Out of fifteen butchers in the survey, three bought only one to two cattle per week, five bought three to five cattle, four bought six to ten cattle and two bought eleven or more cattle per week. The large butcher who operated fourteen butcher shops bought 42 cattle per week.

All butchers contacted had some refrigerated storage capacity. Capacity was generally one to three carcasses. However, three butchers reported refrigerated storage capacity of ten cubic meters or more.

All butchers contacted bought cattle, fourteen bought hogs, thirteen bought sheep and goats and eleven bought chickens. Other purchases included rabbits, ducks and turkeys.

b. Sources of cattle purchased

Cattle were bought primarily through merchants, but two-thirds of the butchers also bought some cattle directly from farmers. Small butchers in small communities commonly buy cattle from local farms for slaughter by JNPP and sale through their shops.

Butchers indicated that they preferred to buy cattle directly from farmers rather than through merchants. They stated that it was cheaper to buy from farmers rather than paying a commission or absorbing the merchant's margin of profit. They also indicated that by dealing directly with farmers they were able to get the type and quality of cattle they needed. They also believed that they were in a stronger competitive position in dealing with farmers than with merchants.

Nevertheless, merchants are the primary source of cattle purchased by butchers and six (out of fifteen) butchers indicated that they bought primarily from merchants rather than from farmers. The principal reason given by butchers for buying from merchants is that they do not have the time to go to the farms to find cattle to buy. Most of the butchers are small, many have only one employee, and they do not have the time to operate their butchershop and also to buy cattle in the country. Other reasons given by butchers for buying from merchants included:

- Merchant provides trucking service and delivers cattle to JNPP slaughterhouse.
- Merchant is a professional buyer, gets the kinds of cattle the butcher wants.
- Has established relationship with the merchant, merchant keeps butcher supplied with the cattle he needs. Accustomed to buying from merchants.

c. Direct purchases from farmers

In those instances when butchers buy directly from farmers, most of their purchases are made locally and they buy from a small number of farmers, usually less than ten. A few large butchers have developed continuing relationships with a few large farmers and customarily deal with these farmers to buy their requirements.

Although most of the farmers from whom butchers buy cattle are small (ten head or fewer), butchers bought more of their cattle from large farmers than merchants bought. As a result, the number of cattle bought by butchers at one time from a farmer tended to be larger (three or four) than the number bought by merchants.

As a result of their dependence on local sources of cattle, the distance from which butchers bought cattle was small (normally less than 50 km) in contrast to merchants, who operate over a much wider supply area. About half the butchers owned their own trucks and picked up cattle at the farm. Butcher trucks were small, usually with a capacity of five cows or fewer.

Farmers selling to butchers all sold to other buyers as well--other butchers, merchants and at fairs. Butchers commonly contact farmers by telephone or the farmer comes to see the butcher when he has cattle to sell. Fewer than half of the butchers made a practice of visiting farmers to solicit cattle for purchase, probably because they needed to remain in their shops.

The interval between notification of the butcher by the farmer and actual purchase of the cattle by the butcher, was longer than it was for merchants. One third of the butchers bought the cattle the same day, one-third within two days and one-third three days or later.

Butchers buy cattle from farmers primarily on the basis of carcass weights. Twelve out of fifteen butchers interviewed bought on carcass weights, but five also bought live animals by the head. Nearly all butchers indicated that they would be willing to buy cattle on a live weight basis if scales were available to weigh the cattle.

Butchers reported (nine out of fourteen) that farmers usually wanted to negotiate the price they receive for their cattle. However, three butchers said that farmers always accept the price offered and two other butchers said that farmers usually accept the offered price.

Over half the butchers said that they know exactly what price they will get for the meat when they buy an animal, and all but two of the others indicated that they knew approximately the price they would get. Butchers' primary sources of price information were other butchers and cattle merchants, but one-third also indicated that they got useful price information from cattle fairs.

Since most of the cattle purchased by butchers were bought on a carcass weight basis, payment to the farmer cannot be made until the cattle are slaughtered and the carcass weight is received from the JNPP slaughterhouse. When cattle are purchased on a live weight basis, they are almost always paid for in cash when loaded at the farm.

d. Purchases from merchants

Merchants were the most common source of cattle for butchers. Half of those interviewed said that they always bought from the same merchant. Eight (out of fifteen) indicated that they bought from two or more merchants and three said they bought from four or more merchants.

Eleven butchers bought cattle on a carcass weight basis and seven indicated that they also bought live cattle from merchants (some bought both ways).

Most butchers (eleven out of fifteen) said that they buy about the same number of cattle each week from merchants but three said that their purchases from merchants varied appreciably according to their needs.

In most instances the merchant trucked the cattle to the slaughterhouse (ten out of fifteen). If the merchant did not furnish this service, the butcher hauled the cattle in his own truck or hired a trucker.

Butchers were asked whether, for the same quality cattle, they paid different prices to farmers and merchants. Although half replied that there were no differences in prices paid, about one-third indicated that they paid more to merchants than to farmers primarily because of the service that the merchant provides in locating cattle and also because the merchant trucks the cattle to the slaughterhouse. Butchers also stated that merchants are good judges of cattle and are able to negotiate good prices with farmers.

e. Other types of purchases by butchers

In addition to purchase of cattle from merchants and directly from farmers, butchers buy to a limited extent at fairs, and could buy cattle from cattle parks or livestock auctions if such markets were available.

- (1) Purchases by butchers at fairs. Fairs are not an important source of slaughter cattle for butchers. Only three of fourteen butchers reported that they bought cattle at fairs. Most butchers did not believe that fairs were good markets. They stated that the quality of cattle sold at fairs was generally poor, there was a danger of buying diseased animals, the source of the cattle was often unknown, few suitable cattle were available and that most of the sellers at fairs were merchants, not farmers.
- (2) Purchases by butchers at a cooperative sales yard. Thirteen out of fifteen butchers indicated that they would be willing to buy cattle offered by a cooperative cattle park (sales yard). Many qualified their willingness by indicating that purchases would depend on favorable quality-price relationships.

However, neither butchers nor merchants would resist buying from cooperative cattle parks. Butchers comments on the idea of a cooperative cattle park included the following:

- should represent an opportunity to find good quality cattle,
- should have a good number of cattle,
- should be cheaper than buying through a merchant,
- no merchants - one less middleman,
- would buy, but cooperative would have to provide, transportation to the slaughterhouse, and
- would support the idea, thinks cooperative marketing of cattle would help the farmer.

- (3) Purchases by Butchers' at livestock auctions. One-third of the butchers surveyed had been to a livestock auction (mainly auctions of breeding cattle). Most butchers did not think that a livestock auction would succeed. Most felt that the merchants would not bid and would work together to control prices. Others feared that there would be too many different and dishonest interests. However, two butchers felt that if farmers would support the livestock auction it should succeed.

3. Slaughter Systems and Services

All butchers had their cattle slaughtered in JNPP slaughterhouses. In isolated instances the small butchers indicated that they slaughtered cattle themselves. Normally, all slaughter was done by JNPP personnel, but four butchers indicated that they slaughtered cattle themselves, reportedly using JNPP slaughterhouse facilities.

Amounts paid by butchers to JNPP for slaughtering cattle were reported to range from 16\$50 per kg to 20\$80 per kg. Eight butchers reported the "official rate," which is 20\$80 per kg.

Although all butchers had cattle slaughtered by JNPP, which is the only "authorized" slaughterer of cattle in Portugal, eleven butchers out of the fifteen surveyed indicated that they were not satisfied with the system of slaughter through JNPP.

Reasons given by butchers for this dissatisfaction were as follows:

- costs of slaughter are too high,
- dislike the way JNPP cuts the carcass,
- meat is transported under bad conditions,
- refrigeration is poor,
- JNPP has too few personnel and cannot get animals slaughtered promptly; slaughterhouse should kill two shifts per day,
- encounter delays in getting cattle slaughtered,
- JNPP personnel not well trained, need apprentice program to train personnel,
- prefers to do slaughter himself,
- would prefer private slaughterhouse, and
- slaughterhouse should be operated by the Câmara (municipality).

Most cattle purchased by butchers were slaughtered the same day that they were bought. However, if slaughter was delayed, the cattle were usually held on the farm where they were bought.

4. Butcher Ideas on Possible Improvements in Cattle Markets

As a final question, butchers were asked for their ideas concerning ways in which markets for cattle could be improved. Suggestions made were:

	<u>Number of butchers</u>
● Creation of wholesale market for meat	8
● Development of cattle parks (sales yards)	4
● Improvement of existing cattle fairs	3
● JNPP should buy cattle from farmers and sell meat to butchers, avoiding the need for cattle merchant	1
● JNPP should increase slaughterhouse capacity by operating two shifts when necessary	1

F. Cooperatives

1. Background

Cooperatives could play a vital role in the agriculture of Portugal. Strong cooperatives exist in the dairy industry and in the processing of wine. Local cooperatives often are associates of larger regional cooperatives, which may be members of even larger cooperative unions.

Within the Ministry of Agriculture (MAFA), the Cooperatives Service, Extension Service and Regional Agricultural Offices all have personnel concerned with agricultural cooperation. In addition, the Division of Marketing in the Planning Cabinet is concerned with the role of cooperatives in agricultural marketing. In many situations, MAFA assigns technical specialists to specific cooperatives who work closely with the officers and employees of those cooperatives as technical specialists.

The Beira Litoral and Entre Douro e Minho, the focus areas for this study, are major milk producing areas, where strong dairy and farm supply cooperatives exist and are also areas having many small dairy farmers.

Most of the dairy cooperatives in Beira Litoral and Entre Douro e Minho were contacted, either by personal interviews or by sending them mail questionnaires which they completed and returned.

In total 56 cooperatives were contacted, either by personal interview or by mail and 30 usable questionnaires were completed.

2. Types of Cooperatives and Products and Services

a. Types

Out of the total of 30 cooperatives responding to the survey, the greatest number were associated with the dairy industry. Nineteen were essentially local cooperative milking parlor associations, eight were cooperatives providing milk collection and transportation services and one was a milk processing cooperative. Eleven were providing farm supplies to their members and nine were agricultural product marketing cooperatives. However, most were multiple product or service cooperatives providing marketing services, farm supplies and consumer products.

b. Farm supply products and services

Nearly all the surveyed cooperatives handled feeds, fertilizers, seeds, small equipment, tools and hardware. agricultural chemicals (primarily pesticides) and such miscellaneous products as food, wine and oil. A few cooperatives furnished artificial insemination services, limestone, irrigation equipment and fencing materials.

c. Agricultural products marketed

Since this survey was conducted in a major dairy region, it was natural that milk would be the major product marketed. However, most cooperatives also marketed potatoes and corn for their members. Other products marketed included beans, other grains, wool, grapes, cattle, vegetables and seed.

3. Cattle Marketing Activities

Cattle marketing activities of cooperatives surveyed were, for the most part, small and not highly organized. Most of them sold only a few head on an occasional basis. Only one cooperative reported selling over 50 cattle in 1982.

The most common cattle marketing activities reported by the cooperatives were:

- Buy cattle from members, have them slaughtered by JNPP and sell meat to butchers or through co-op butchershop.
- Import heifer calves to supply the members with replacements.
- Buy cattle from members and sell to merchants or butchers.

All but two of the cooperatives marketing cattle had been in this activity less than five years. One co-op reported eight years experience and one thirteen years. In general, the longer the co-op had been marketing cattle, the larger the number sold. Although all types of cattle were sold, yearling fed bulls and cows were most important.

Cooperatives marketing cattle believed that the volume of cattle they sell would increase substantially. However, lack of available operating capital was mentioned as a major constraint.

4. Interest and Plans of Cooperatives in Cattle Marketing

a. Interests

Twenty of the 25 cooperatives responding to the interest question were favorably interested in marketing cattle. Eight of the 20 were very interested. Some cooperatives expressed interest in more than one type of marketing activity.

Two major types of marketing activity were of greatest interest to cooperatives:

- (1) Cooperative buys cattle from members, acts as a butcher and sells the meat to butchers, meat wholesalers or through its own cooperative butcher shop - 22 cooperatives expressed interest in this type of activity.

- (2) Cooperative works closely with local Câmara (municipality) to improve the facilities, services and other conditions at the local cattle fair (feira) - 22 cooperatives expressed interest in fair improvement.

Other cattle marketing activities of interest to cooperatives included:

<u>Activity</u>	<u>Number of co-ops interested</u>
Cooperative has trucks and provides transportation for members' cattle	10
Cooperative acts as a cattle merchant, buys cattle from members and sells to butchers	8
Cooperative organizes a slaughter cattle auction and sells members' cattle by auction	7
Cooperative establishes a sales yard (cattle park) and sells members' cattle to merchants and butchers	3

b. Plans

Most cooperatives had no definite plans for initiating marketing of cattle for their members. However, specific plans which were mentioned included the following:

<u>Plan</u>	<u>Number of co-ops</u>
Buy cattle from members to slaughter and sell meat through co-op operated butcher shop	6
Install a co-op feedlot to feed high quality veal calves	1

5. Attitudes of Farmers, Merchants and Butchers Toward Cattle Marketing by Cooperatives

In the surveys of farmers, butchers and merchants, they were asked about their interest in and attitudes toward marketing of cattle by cooperatives.

a. Farmers

Eighty-four out of 100 farmers thought that sale of their cattle through their cooperative would be a good method of marketing cattle. Only six farmers were opposed to cooperative marketing of cattle and ten did not respond or had no opinion.

Farmers' reasons for favoring sale of cattle through cooperatives included:

<u>Reasons</u>	<u>Number of farmers</u>
Protects interest of farmers	16
Honest form of sale	10
No middlemen	9
A better organized way of selling	4
Should result in better prices	4
Would have a livestock scale and could sell on a live weight basis	2

Farmers' reasons for opposing cooperative cattle marketing included:

<u>Reasons</u>	<u>Number of farmers</u>
No confidence in the existing management of the cooperative	3
Doesn't believe cooperative system of cattle marketing would succeed--too much opposition by merchants	2
Direct sale by the producer would involve less expense	1

However, many farmers who favored cooperative marketing attached conditions to their opinion as follows.

<u>Condition</u>	<u>Number of farmers</u>
Co-op must buy and pay rapidly at a fair price	20
Must be honest	12
Co-op must have trucks to provide transportation	10
Co-op must pay a better price than merchant	4
Cooperatives must have a butcher shop	4

b. Merchants

Merchants were asked whether they would be willing to buy cattle through a cooperative sales yard. None opposed the idea, but qualified their answer by indicating their acceptance would depend on the condition and the price of cattle offered for sale.

c. Butchers

Butchers were asked the same question as merchants concerning their attitudes toward purchase of cattle through a cooperative sales yard. Again, no butchers were opposed to the idea. Thirteen out of sixteen answering the question indicated that they definitely would buy and three qualified their answer depending on prices and condition of the cattle offered. In general, butchers' attitudes toward a cooperative sales yard were more positive than merchants' attitudes. Butchers' reasons for favoring purchase of cattle through cooperatives included:

- better opportunity to find good quality cattle,
- no merchants, eliminating one middleman,
- should be cheaper than buying through a merchant, and
- would buy but cooperative would have to provide transportation.

IV. RECOMMENDED ALTERNATIVES AND IMPROVEMENTS TO EXISTING CATTLE MARKETING SYSTEMS AND SERVICES

A. Introduction

The principal objective of this project was to identify, describe and evaluate alternatives and improvements to existing systems of marketing cattle in Portugal which would improve equity, increase efficiency and reduce costs in the marketing of cattle. The study emphasized the problems of the small farmer and field work was concentrated in two regions: Beira Litoral and Entre Douro e Minho.

Alternatives and improvements to existing cattle marketing systems were evaluated in relation to three functional areas of marketing:

- (1) physical infrastructure,
- (2) market services, and
- (3) pricing and price discovery.

Principal emphasis was given to the identification of alternatives and improvements which would benefit the small farmer. However, the positions of other cattle marketing participants (large farmers, merchants, butchers, cattle fairs and cooperatives) were also considered.

Traditional cattle marketing practices and traditional relationships between the farmer and his cattle and the farmer and existing markets, marketing agencies and institutions were also considered and constrained the range of marketing alternatives.

Based on surveys of farmers, merchants, butchers, cooperatives and municipal cattle fairs (feiras) and discussions with technical specialists in the Ministry of Agriculture, at both the regional and national level, recommendations for improving the marketing of cattle are discussed in three areas:

- (1) Increasing the role of agricultural cooperatives in marketing livestock.
- (2) Improving local cattle fairs as markets for cattle.
- (3) Evaluating livestock auctions as potential markets for cattle in Portugal.

For each of these areas, the analysis includes:

- description of alternatives or improvements considered,
- evaluation and recommendation of priority program, and
- implementation plans and schedules.

B. Cattle Fairs - Recommendations

1. Background

Fairs are such an important traditional cattle market and so much a part of rural Portuguese life that improvements in them could increase significantly overall marketing efficiency. Certain characteristics of fairs discussed in the preceding chapter cause inefficiencies that could be eliminated with some changes.

The unfavorable characteristics of fairs are a combination of physical and management problems. The major problems of fairs are:

- (1) lack of livestock scales,
- (2) chaotic mingling of all types of cattle,
- (3) lack of health inspection and control, and mingling of healthy and diseased cattle
- (4) price information is not transmitted out from the fair,
- (5) lack of management control by the Câmara,
- (6) low fees for sellers,
- (7) no registration of buyers and sellers and no control of access, and
- (8) no records of transactions.

Most of these problems can be overcome with simple, often inexpensive, changes at the fair sites and in the management. These changes might allow the Câmaras to reverse the downward trend in the size of cattle fairs. The recommended changes to address these problems are discussed in detail in the following sections. Some Câmaras in the survey indicated they plan already to make some of these changes. Câmaras have an excellent opportunity to make these changes with minimum disruption while the fairs are closed by the peripneumonia outbreak.

2. Physical Improvements

The physical improvements that can be made vary among the fairs depending on their location and existing facilities. In most cases, the recommendations can be applied to all fairs needing such improvements. However, all improvements must be made within the physical limitations of the fair. For some of the recommendations, we use an existing fair as an example of the physical layout.

a. Loading docks

Most have loading docks of some sort. These docks should be designed to prevent injury to cattle during unloading or loading. The best design is a concrete or heavy wooden wall for the truck or trailer to back up against. The wall should have a concrete or earthen ramp leading down to the grade of the fair. Most cattle in the study area are so docile that fenced ramps are not needed for safe handling. If the wall varies in height along its length, it can accommodate trucks and trailers of different heights. The width of loading docks should be sufficient to unload and load cattle without long waits. The ramp of the loading dock leads down into the receiving and inspection pens.

A typical loading dock in relation to the fairgrounds is diagrammed in Figure IV-1.

b. Receiving pens

A frequent comment by fair participants and Câmaras concerns the need to control access to the fairgrounds. Entry and exist can best be controlled if the cattle are moved through receiving or holding pens when they arrive or depart. These pens will also be the site of health inspections. One pen will be designated for sick cattle that are refused entry onto the grounds and this pen should have solid sides to prevent contact. These pens should be of sufficient number and size to comfortably process the number of cattle expected.

Cattle should flow smoothly through the receiving and inspection process to a central location for release to the fairgrounds. The receiving process will also include weighing the animals at the seller's request.

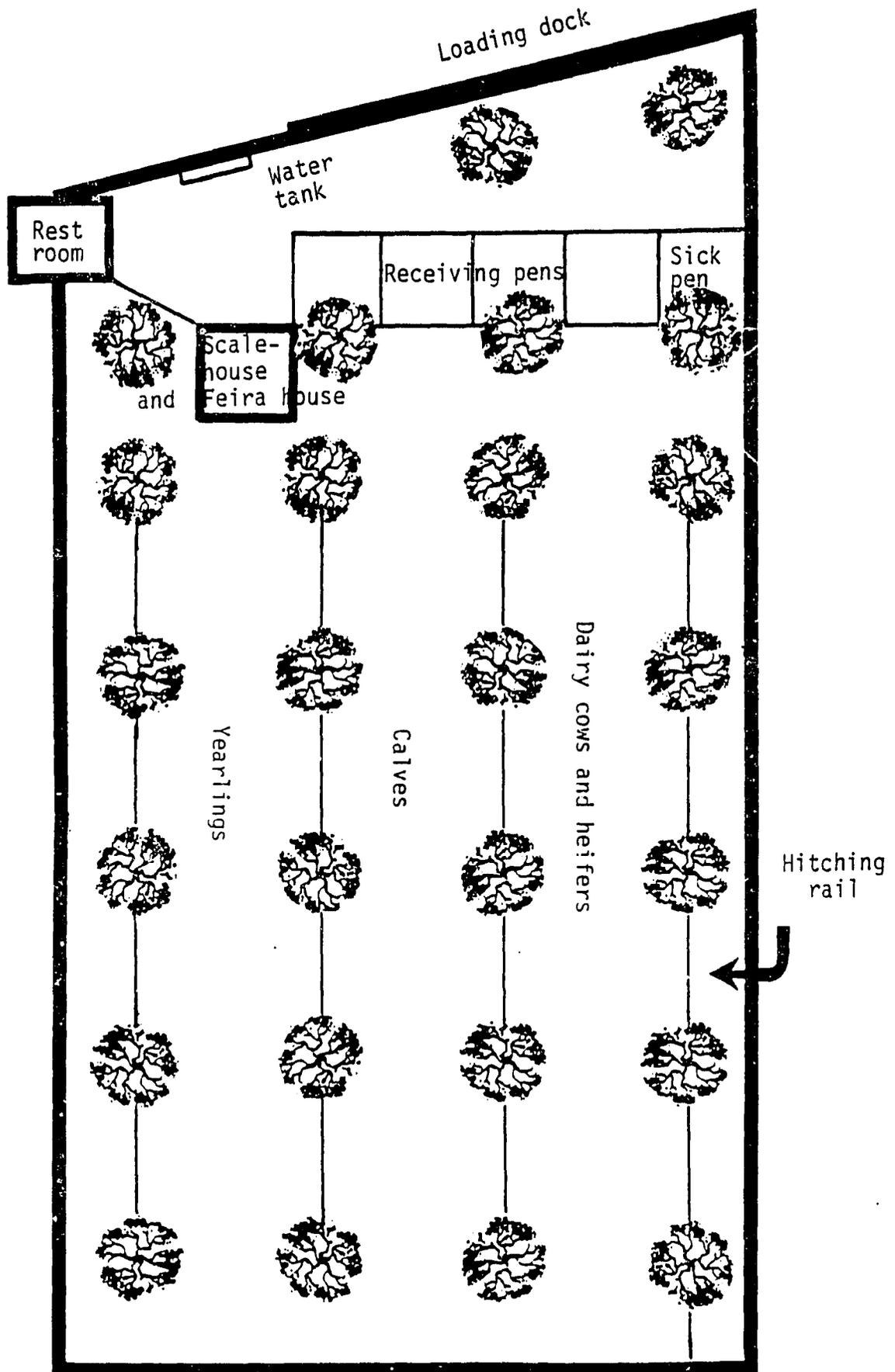
A variety of fencing materials exist in Portugal, for a wide range of costs. Fences could be built of the following:

- (1) wood posts and rails or boards,
- (2) steel pipe,
- (3) tile and concrete, and
- (4) woven wire or barbed wire.

Although wooden fences are perhaps not as durable as some of the other materials, they are recommended for their low cost and ease of construction. Portuguese cattle are, for the most part, docile and accustomed to strangers and so will not put a great deal of pressure and wear on fences. If heavy creosote posts are set down in the sandy soil and the surrounding soil well-tamped, they will hold as well as if set in concrete. The top of the fence should be about 1.5 m high. The boards can be nailed or bolted to the posts and should be painted for protection.

Gates should be hinged to swing either way to ease movement of cattle in either direction out of a pen to the scales, the fairgrounds or the loading dock.

Figure IV-1. Schematic diagram of improved Feira grounds (scale = 3:1000)



An example of the layout for receiving and holding pens is shown in Figure IV-1. This figure represents a typical site, with shade trees.

c. Livestock scales

One of the most popular improvements wanted by farmers and planned by many Câmaras is the installation of scales to weigh cattle. Farmers prefer selling on a live weight basis to selling on a head basis, but few are able to weigh their cattle before the sale. Installing a livestock scale on the premises would allow onsite weighing and would provide the buyer and seller with accurate information on which to base the transaction. Such information is most important for sales of slaughter and growing stock. Weight is less important in sales of cull cows or other types where weight is not necessarily related to value.

The livestock scale should be adjacent to the receiving and inspection pens so that arriving cattle can be weighed on their way to the fairgrounds. Its location also must allow cattle to pass easily if they are not to be weighed. The arrangement for scales in relation to the receiving pens is shown in Figure IV-1.

The type of scales recommended for installation is generally available from Portuguese manufacturers. The Câmaras should chose a scale that is adequate in each of the following factors:

- (1) weight capacity,
- (2) size,
- (3) rugged construction,
- (4) ticket-printing capability, and
- (5) price.

A scale to meet adequately the needs of a medium to large fair should have the following specifications:

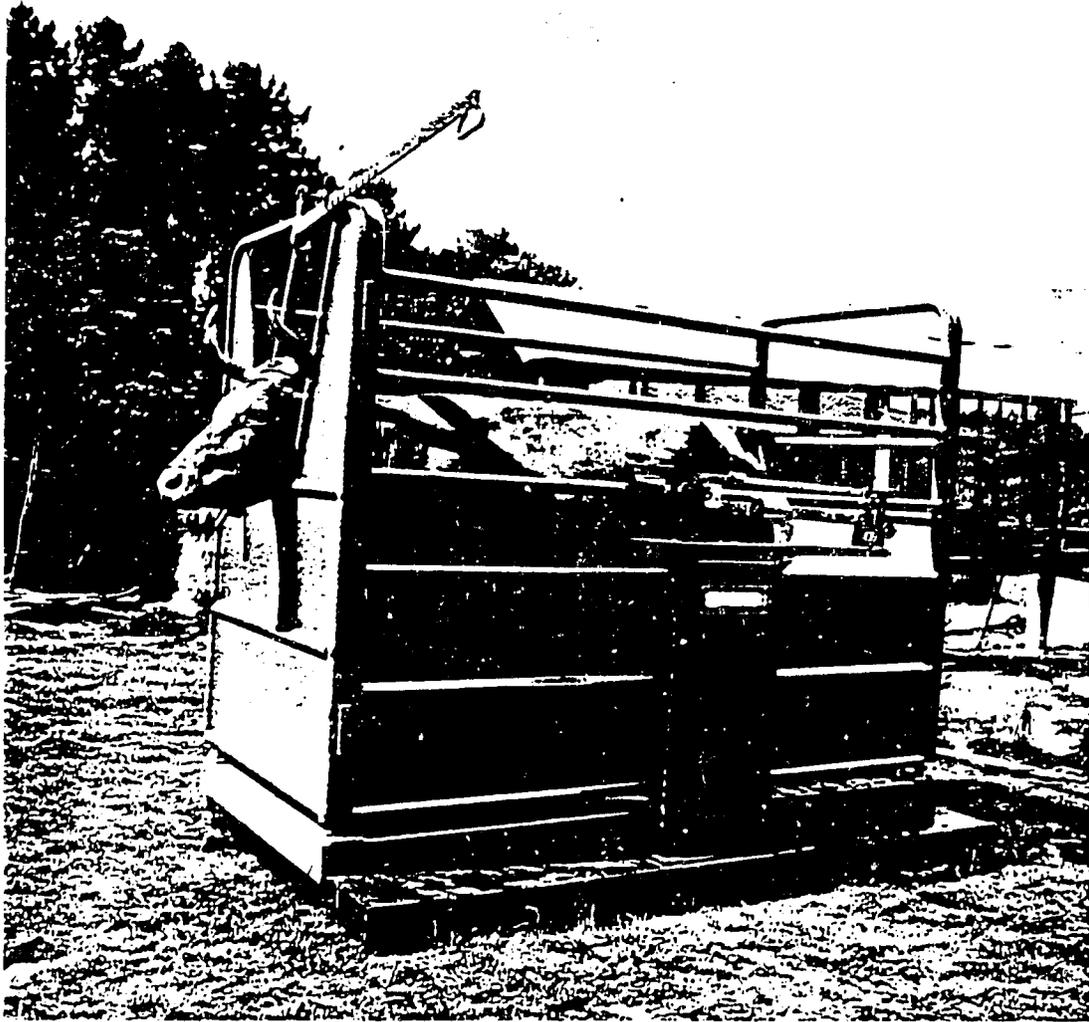
capacity -- 1500 kg
scale precision -- 500 g
chute height -- 1.7 m
chute dimensions -- 1m x 2m
weight ticket printer
head catch

The approximate costs of a scale with these specifications are itemized below:

<u>Item</u>	<u>Dealer price</u> (000 escudos)
Scale	111
Installation fee (10 percent)	11
Weigh ticket printer	14
Head catch	5
Total cost	<u>141</u>

An example of this type of scale is shown in Figure IV-2.

Figure IV-2. Livestock scale with head catch
and weight ticket printer



d. Scalehouse and fair office

The scales will require protection from tampering, vandalism and weather. A small building is recommended for this purpose and to house cattle receiving and loadout functions and general fair business. The building should be large enough to accommodate a clerk or scale operator or both and the fair's records and registration materials. It also should have a small counter where fair participants can conduct business.

An example of this building is diagrammed in Figure IV-3. The building must be equipped with electricity for lights. This building can function for both the cattle fair and the general fair. Sellers will be registered and fees collected in the building. Permanent records should be kept at the main Câmara offices.

A bulletin board should be put on an outside wall of the building that faces the fairgrounds. The main purpose of this board will be the posting of the last fair's cattle prices, by class or weight of livestock. One of the most frequent complaints by farmers and Câmara officials is the lack of price transparency at the fairs. Although farmers sometimes attend for the sole purpose of learning the prices, the prices are not widely disseminated. By posting recent prices, the Câmara can reduce this problem and people can gauge price trends. Prices should be posted the day after a fair, and the board should, if possible, be available for viewing during nonfair days.

e. Organization of cattle on fairgrounds

Once cattle have been received, inspected and weighed, they are released to the fairgrounds where, traditionally, cattle and people mill around and people do business. The best improvement fairs can make to the general grounds is to designate sections of the grounds for specific types and ages of cattle and to erect hitching rails so that cattle can be tied. These rails should be one meter high and bolted to rows of heavy posts anchored in sand. Or, if the fairgrounds already have rows of shade trees, the rails can be bolted to tree trunks and posts. Cattle can be hitched to both sides of the rail and thus arranged in rows according to the types of cattle, such as veal calves, cull cows and replacement heifers. Signs should be placed on the rails or posts clearly designating the type of cattle for each area.

f. Cost of major physical improvements

The costs of the physical improvements described above are itemized in Table IV-1. These are materials and labor costs, based on 1983 national price estimates, of receiving pens, a scale and scalehouse, and picket rails. Since most fairs already have loading docks, these were not included in the cost estimate. These improvements represent the simplest changes that will enhance the fair markets for cattle. They do not include such improvements as parking lots or toilets. The total materials and labor cost for the improvements is 805,693\$00. If the Câmara uses

Figure IV-3. Scalehouse and Feira offices (scale: 2.5 : 100)

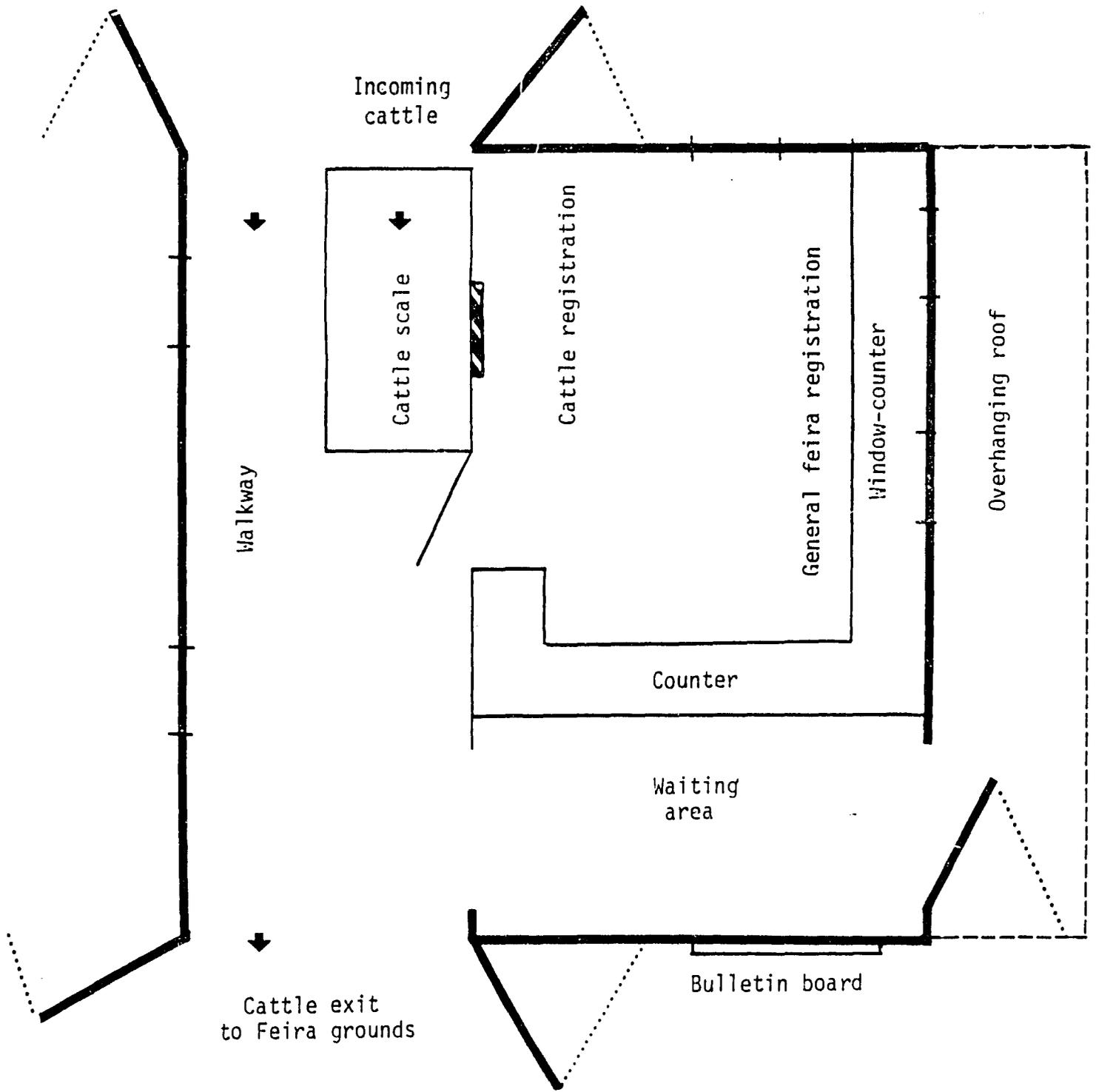


Table IV-1. Costs of recommended physical improvements at fairs

Improvement and material description	Quantity	Prices of November, 1983	
		Unit cost <u>1/</u>	Total cost
<u>Receiving pens:</u> Creosote posts	23	3 200\$ ea	73 600\$
Lumber	525 m	60\$	31 500\$
Bolts, hinges and miscellaneous materials @ 10% of other materials			<u>10 510\$</u>
Total materials for receiving pens			115 610\$
<u>Picket rails:</u> Creosote posts	17	3 200\$	54 400\$
10 cm x 7 cm wooden rails	170 m	127\$50	21 675\$
Bolts and miscellaneous materials @ 10% of other materials			<u>7 608\$</u>
Total materials for picket rails			83 683\$
<u>Scalehouse (including concrete slab and labor):</u>			450 000\$
<u>Scale:</u>			141 000\$
<u>Labor:</u>	140 hrs	110\$	<u>15 400\$</u>
GRAND TOTAL			805 693\$

1/ Prices of November 1983.

volunteer labor of area farmers and merchants, the cost could be reduced to 790,293\$00. If a fair sold an average of 500 head of cattle at 24 feiras and received an average fee of 75\$00 per head, it would recover its improvement costs the first year.

g. General physical improvements

In addition to construction of the improvements discussed above, Câmaras can also make some less-essential changes to facilitate buying and selling of cattle. These improvements are:

- Planting shade trees to keep people and livestock more comfortable at summer fairs. Free saplings are available from MAFA. Other, more elaborate, shelter is probably unnecessary.
- Cleaning weeds and debris off the grounds and leveling the area for proper drainage.
- Establishing a parking area or parking zones on nearby streets for trucks, cars and carts. This will ease traffic and congestion around the fair.
- Constructing water lines and tanks if water is not available on the grounds. The tanks need to be conveniently located on the grounds, perhaps in more than one spot, and there should be enough tank space to handle the expected number of cattle. Hydrants should be placed around the grounds in case the Camara wants to control dust by hosing down the grounds.
- Making other improvements to aid participants comfort. These include toilets, wastepaper baskets and benches (possibly along perimeter walls).

3. Operating Improvements

Câmaras should make several operating changes to enhance the fair's position in the Portuguese livestock marketing system. Some of the recommended changes are more important and more specific than others but all will help fairs maintain or improve their role as livestock markets, especially after the peripneumonia shutdown ends.

a. Management of the fair

Perhaps the most important operating improvement a Câmara can make is in the way they manage a fair. A common complaint among farmers is that nobody appears to be in charge. A Câmara official should be appointed and should be present on the grounds the day of the fair. This official will supervise the scale operator, the clerks and any maintenance personnel working at the fair. Câmara personnel can wear colored badges to identify themselves. In the event of disputes between a buyer and seller, this official will arrange for a disinterested third party to arbitrate the case within a specified time.

Câmaras can also seek help from users in operating the fairs. The Câmara should appoint a Fair Advisory Board of farmers, merchants, butchers, cooperative representatives, MAFA Direcção Regional technicians and the Câmara's veterinarian. This board will meet on a monthly basis to advise the Câmara. If the board includes users, they will understand firsthand the problems of the fair and, it is hoped, solve them before they become unmanageable. All cattle fair participants will feel they have meaningful input if they are able to informally air grievances with a peer.

b. Health inspection

The outbreak of peripneumonia, which closed cattle fairs in 1983, has shown the importance of strict health inspection. Fairs are gathering places for cattle from hundreds of different farms and thus are prime means of spreading disease. Unfortunately, there is no health inspection of incoming cattle at the fairs. Peripneumonia has made all fair participants sensitive to the health of cattle and, especially, concerned about the disease potential present at fairs. Many of the market agents surveyed during the project felt that fairs are the poorest source of good, healthy cattle and would welcome health inspection.

Câmaras have their own veterinarians, who can also work for JNPP, for the Direcção Geral da Pecuária or for the Direcções Regionais de MAFA, depending on the contracts the veterinarians are offered. These veterinarians currently have general animal health responsibilities but do not inspect cattle at fairs. If health inspection is initiated at the fairs, it would be possible for either the Câmara veterinarians or the MAFA veterinarians to make the inspections. The Câmara would pay for this service.

Regulations already exist in Portugal requiring certified vaccination of certain ages and types of cattle against such diseases as tuberculosis, contagious abortion and brucellosis. If farmers know that proof of vaccination is required to enter the fair, they should be willing and able to produce the certifications. The veterinarian, or perhaps a trained clerk, can review these documents as the animal is brought through the receiving shed. In addition to checking proof of certain vaccinations, the veterinarian should also remain in the area of the receiving pens to make visual inspection of the cattle. This inspection for general health covers such signs of infections or contagious diseases as diarrhea or nasal discharge. In cases of suspicious animals, the veterinarian can move the animal to the hospital pen for a temperature check. The Câmara and the veterinarian should not allow sick animals onto the fairgrounds.

The Câmara and the veterinarian might consider other animal health work at the fair. Once the cattle inspections are finished, the veterinarian might provide small animal vaccinations and care on a fee basis. This care should be done where the people and animals and their owners will not disrupt the cattle or the general fair.

c. Registration of cattle and buyers and sellers

Registration is another step Câmaras can take to aid orderly operation. Registration will be the basis for several other improvements. Entry and exit of cattle is controlled at the loading dock and receiving pens and buyers and sellers can also be registered at that stage.

Once the seller has proved the animal's proper vaccination status and the animal has passed a general health inspection, the seller can register the animal and, if desirable, weigh the animal in the scalehouse. The seller will pay a registration fee on each animal. The fair clerk will record the animal type, its weight if known and will assign it a recorded hip number for identification. The hip number is a printed adhesive sticker that is stuck on the animal's hip. If all cattle entering the fair were weighed, then hip numbers could be made to correspond with printed weigh ticket numbers. Since universal weighing is unlikely, it is more feasible if the clerk simply writes the hip number in ink on the weigh ticket to prove clearly the animal's weight. The seller's name will not be recorded to protect his anonymity and to encourage him to report the prices he receives for cattle. After the seller has registered and identified the animal, he is free to take it onto the fairgrounds. No animals without valid hip numbers should be allowed on the grounds.

To further increase the orderliness of the fair and the openness of the transactions, the Câmara should require cattle buyers to register in the office. A frequent complaint is the role of misseiros as agents for merchants. Registration of buyers would help eliminate unauthorized buyers or agents and reduce the confusion. Registration should be required only for people buying cattle for resale and not for farmers buying cattle for home use. Farmers would be exempt because they usually buy in lower volumes than merchants and, thus, are of less financial importance in the fair market. Merchants purchase and collect large numbers of cattle from many different farmers. Their importance makes it desirable for the Câmara to exert some control over his activities on the fairgrounds.

In the recommended system of merchant registration, the merchant would be required to obtain a registration card from the Câmara. This card will contain the merchant's name and address, a card number and should bear the Câmara's impressed seal. The card will be available for a nominal fee at the office on fair days. It will be valid for a specified time and the merchant must merely present it at the fair manager's request to do business on the grounds. The merchant will not be required to have the card to enter the grounds. However, if a farmer wishes to, he can ask to see the merchant's identification before negotiations begin. If misseiros want to operate, they must obtain their own registration cards. When a merchant collects the cattle he purchased that day and takes them to the loading dock, the fair clerk will record the card number before he is allowed to load the cattle. This gives the Câmara a record of what merchants operate at the fair. No other information regarding the size of the purchase will be collected. Registration could be useful in the event of a dispute between buyers and sellers or a financial problem with a merchant.

d. Fees

When sellers register cattle, they will be required to pay fees on each animal. Many Câmaras already charge fees for different types of cattle; however, these amount to extremely low percentages of the animal's total value. If the Câmaras want the fairs to prosper when they reopen after peripneumonia is under control, they will need to make the improvements recommended in this study. To pay for fencing, livestock scales, scalehouse, health inspection, additional personnel and new miscellaneous expenses, the Câmara must increase livestock sales fees. The Câmara does not run the fair for profit. However, fees can probably be raised to the following levels without seller resistance or decreased volume:

<u>Class of livestock</u>	<u>Escudos per head</u>
Adult cattle and novilhos (fed yearling)	100\$00
Calves	50\$00

At a live price of 170\$00 per kilo, a 350 kilo novilho would have an approximate value of 59,500\$00. The 100\$00 seller fee represents less than two-tenths of one percent of the animal's value.

e. Price reporting

Farmers often go to fairs to learn about prices, even if they are not selling cattle. Although this seems to be an important function of the fair, farmers and Câmara officials often assert that prices are not widely known. To overcome this problem, it is recommended that Câmaras request sellers of cattle to voluntarily report the prices they received for each hip number before they leave the grounds. The Câmara clerk could record confidentially this information by hip number. Average and actual prices could be reported for each class of cattle, including weights if available, at next week's fair.

f. Miscellaneous operating changes

Several minor changes can also be made by Câmaras to improve fairs.

First, a definitive set of rules and regulations for the cattle fair should be published and made available to cattle buyers and sellers. Most Câmaras currently publish booklets of regulations, but these are usually of a general nature for the entire fair. A specific section of cattle fair regulations should be published, under the general regulations, covering such items as fees, registration and health inspection requirements. These regulations should be distributed to farmers, merchants and butchers and be permanently and prominently displayed outside the fair office building facing the fairgrounds and facing the receiving pens where incoming buyers and sellers can see them.

Second, the Câmara should set definite opening and closing hours for cattle trade. For example, no sales could be made before 8:00 a.m. A definite opening time would give buyers and sellers equal access to the market and help prevent early sales before the market trend is established. An opening time also allows orderly receipt of cattle so the seller will not miss any trades waiting to register his cattle.

4. Implementation Schedule

The following implementation schedule for fairs can begin once the Câmara takes the decision to improve its fair. The schedule outlined represents the approximate order of the improvements. This would depend on the actual situation of the fair and its exact needs. Although this is presented as a two-year program, the actual length could vary while Câmara officials work to affect the political and institutional changes that will support the improvements.

The first three changes should be relatively simple to accomplish because they do not involve much construction. Physical changes might be accelerated in this schedule to take advantage of the suspension of fairs by peripneumonia. Construction can then take place without disrupting the fair. Some physical construction is needed to implement health inspection, registration, fees and price reporting.

Year 1:

1. Clean and level fairgrounds if needed.
2. Install picket rails and system of organizing cattle by type.
3. Appoint Câmara official who will be in charge of fair and present on fairgrounds the day of the fair.
4. Improve loading dock, if needed.
5. Construct receiving pens and scalehouse.
6. Install scales.

Year 2:

1. Institute health inspection.
2. Institute buyer and seller registration.
3. Increase seller fees if necessary.
4. Institute price reporting.

C. Cooperatives - Recommendations

1. Background

Cooperatives are important in the livestock economy of the Beira Litoral and Entre Douro e Minho regions. Strong cooperatives provide services to both small and large farmers in the collection of milk (milking parlors), milk transport, milk processing and distribution and in farm supply. As a result of these services, farmers are in contact with their local

cooperatives on a daily basis. Most farmers have confidence in the management of their cooperatives, are well acquainted with technical personnel of the associations and look to their cooperatives for services which they are unable to provide themselves or for assistance in areas related to marketing and farm supply.

Given this situation, it is logical that farmers should look to their cooperatives for assistance in marketing their cattle. Cooperatives have been successful in the study area in assisting farmers in marketing their milk and for technical assistance in the production of crops such as corn, potatoes and forage crops.

In the farmer survey, 84 of the 100 farmers interviewed thought that sale of cattle through their cooperative would be a good method of marketing cattle.

They believed that marketing cattle through a cooperative would protect their interests, constitute an honest form of sale, eliminate the need for sale to merchants, give the farmer greater competitive strength and result in better net returns for cattle sold. However, farmers also specified certain conditions which would be necessary if they were to market their cattle through a cooperative. The most important conditions were:

- The cooperative must buy at a fair price and pay rapidly - immediate cash preferred.
- The cooperative must have a truck and be able to pick up the cattle at the farms.

The survey of cattle merchants and butchers indicated that both would be willing to buy cattle from a farmer cooperative. However, butchers' attitudes toward purchase of cattle through cooperatives were more positive than attitudes of merchants because butchers see the cooperative as a more direct source of cattle, avoiding, in part at least, the costs associated with buying through merchants. These findings justify the choice of cooperatives as a realistic and economic alternative to the current system of marketing cattle.

2. Cattle Marketing Alternatives and Priorities

There are several ways cooperatives can enter into or improve the marketing of cattle in Portugal. Possible alternatives include the following:

Priority One Alternatives:

- (a) Cooperative acts as a simple merchant, buying cattle from members and selling to butchers.
- (b) Cooperative acts as a butcher or meat wholesaler or both, buying cattle from members, slaughtering through JNPP and selling the meat as a butcher or meat wholesaler.

- (c) Cooperative works closely with local Câmara (municipal government) to improve conditions at local cattle fairs (feira).

Priority Two Alternatives:

- (d) Cooperative acts as an order buyer, buying cattle from farmers only on order from butchers.
- (e) Cooperative establishes a cattle park (sales yard) and sells to merchants or butchers or both.
- (f) Cooperative establishes a slaughterhouse, buying cattle from members, slaughtering cattle in its own slaughterhouse and selling meat through its own butcher shops or as a wholesaler to butchers, restaurants, hotels or other food purveyors.
- (g) Cooperative establishes a livestock auction and sells cattle by the auction method.

All of these alternatives represent viable options to be considered by cooperatives interested in helping members market their cattle. However, given the present situation in Portugal, the Priority One alternatives could be implemented with the greatest probability for success.

It is entirely possible that a cooperative could undertake a program in livestock marketing which could include more than one alternative. For example, the cooperative could operate as a merchant or a butcher and at the same time work closely with the Câmara to improve conditions at the local cattle fair.

Although the three Priority One alternatives are considered to be the most feasible, the other alternatives are also of interest. But the others represent greater departures from traditional cattle marketing systems than do the Priority One alternatives. However, as institutions change in the long run, they may offer greater opportunities for major impacts than the Priority One alternatives proposed at this time.

The remainder of this section on cooperatives will be concerned with a discussion of each of the alternatives listed above, followed by a discussion of an actual plan being considered by a cooperative in the study area.

3. Cooperative Acts as a Merchant Buys Cattle From Members and Sells to Butchers - Priority One.

a. Background

This is, perhaps, the most obvious and direct way in which the cooperative can provide a cattle marketing service to its members. It represents no appreciable change from the existing system, but simply replaces the services of the private cattle merchant with similar services provided by

the cooperative. It is a popular alternative with farmers and would be accepted by butchers. It would not entirely replace the private merchant, but would offer a competitive alternative available to the farmer. In summary, the advantages of this alternative are:

- no important capital requirements for such facilities as butcher shop or refrigeration
- direct impact at the producer level and gradual impact at the merchant level
- support of butchers, who would provide outlet for cattle, and
- low cost, which should allow higher revenue for the producer.

As has been indicated in other parts of this report, cooperatives are well established in the dairy industry of Beira Litoral and Entre Douro e Minho. The large regional milk marketing cooperatives have done a good job for their farmer-members and are accepted and trusted by these farmers. In addition, the local cooperatives, which are the members of the regional milk transport, processing and marketing cooperatives, provide milking services through the cooperative milking parlors and have a major role as farm supply cooperatives furnishing feed, fertilizer, pesticides, other farm supplies and consumer products to their members.

As a result, most farmers are in contact with their cooperative almost daily and, for the most part, seem to have confidence in the management of the association. Given this situation, the farmer would generally have confidence in and be willing to sell his cattle through his cooperative. However, discussions with farmers indicated that to be accepted, the cooperative must meet three requirements:

- It must pay as good a price for the cattle as the farmer can get elsewhere.
- It must pay promptly, preferably in cash.
- It must have a truck to transport the cattle from the farm.

b. Marketing functions

The following functions would be performed by the cooperatives acting as cattle merchants for their members.

- (1) Survey butchers in the local area and possibly in larger metropolitan areas such as Lisbon, Porto or Coimbra, to establish buyer contacts for members' cattle and to acquaint butchers with the marketing services of the cooperative.
- (2) Inform members of the availability of cattle marketing services through the cooperative. Sponsor meetings to explain services to members. Disseminate information through the cooperative's news

bulletin, through articles or advertisements in local newspapers, through special announcements sent to members and through discussions with cooperative technical and service personnel and managers of milking parlors who would then pass this information on to members.

- (3) Locate members who have cattle for sale. In most cases, the member would contact the cooperative when he has cattle for sale - by visiting the cooperative, by telephone or by sending word through the driver of the truck which collects the milk from the milking parlor.
- (4) Solicit butchers who would buy the cattle, negotiate a price with the butcher, on a carcass weight basis.
- (5) Contact farmer-member who has cattle for sale. It is proposed that the price to the farmer be based on the price negotiated by the cooperative with the butcher minus a standard fixed marketing fee, varying by class of cattle (cows, yearlings, calves, etc.) which is estimated to approximate the costs incurred by the cooperative in operating the marketing service plus a 5-10 percent contingency on these costs. As an alternative, the cooperative could simply charge the farmer a percentage fee based on the price negotiated with the butcher. At the end of the year, surpluses above actual costs would be returned to the farmer as a patronage dividend. However, the price the farmer receives at the time that his cattle are sold must equal that which he would have gotten had he sold to an independent merchant or butcher.
- (6) Pick up the cattle at the farm and deliver to JNPP slaughterhouse designated by the butcher buyer. In some cases, it may be desirable for the cooperative to have a small holding pen where small lots of cattle can be held until a sufficient number have been bought to make a truck load to take to the slaughterhouse. It is recommended that the truck have a loading gate or simple portable loading ramp to facilitate loading and unloading the cattle.
- (7) Pays farmer for cattle. Payment should be made as soon as possible after the cattle are picked up at the farm. However, in most instances, the cooperative will sell to the butcher on a carcass weight basis (the normal basis on which butchers buy cattle) and will be unable to determine the value of the cattle until the carcass weight is received from the JNPP slaughterhouse. The price per kg will be known but the weight will be unavailable. Farmers place great emphasis on being paid immediately for the animals they sell. One of the major reasons they gave for preferring to sell to merchants was "receive payment in cash immediately at the time the animal is sold." Given this preference for immediate payment, farmers would be

reluctant to wait up to a week until carcass weights are received from JNPP. Since the price per kg will be known, it is recommended that the cooperative pay the farmer 75 percent of the estimated value of cattle purchased immediately after the cattle are picked up by the co-op truck with the balance payable when the carcass weight is received.

Each farmer would be assigned an account number and a patronage record would be maintained of the weight of cattle by class, which he sold through the cooperative. This patronage record would be used to allocate patronage dividends at the close of the dividend period. This should cause no major problem since similar patronage records are maintained for milk delivered.

Patronage periods may run for one year or for six months. At the end of the period, the accounts of the cooperative cattle marketing unit would be closed and any excess of revenues over costs would be distributed to members prorated on the basis of the total weight of cattle which each member marketed through the cooperative.

- (8) Provide price reports on cattle sold during the previous week. This information could be posted on a bulletin board at the cooperative.

c. Requirements

The requirements for operating the cooperative cattle marketing service would be as follows:

- (1) Physical infrastructure. The physical infrastructure required for such a marketing system would be small.

Minimum requirements would include:

- cattle truck, and
- desk and telephone for buyer.

In addition, another facility might be useful:

- A small holding pen (or pens) with a capacity of 15-20 cattle to accumulate truck loads of cattle for transport to JNPP slaughterhouse.

- (2) Personnel requirements. Personnel required to operate the system would vary with the volume of cattle handled, but would include:

- Manager/cattle buyer/salesman. One or more, part or full time. Must be a good judge of cattle and be able to negotiate prices successfully with butchers.

- Truck drivers. One or more, part or full time. If volume of cattle marketed is small, the manager may also drive the truck. Most private merchants are, in effect, trucker-buyers who drive their own trucks and buy at the farm.
 - Accounting/records personnel. Part time, to maintain patronage records, operating records and cost accounts for the cattle marketing unit, invoice butchers for cattle sold.
- (3) Operating capital requirements. Since it is proposed that the cooperative pay farmers, in the form of an advance, at the time that the cattle are delivered by the farmer and since payment by butchers will not be made until the cattle are slaughtered and carcass weights received from the JINPP slaughterhouse, operating capital will be required to provide for advances to farmers and for other operating expenses during this period.

The primary determinant of operating capital requirements will be number of cattle sold through the cooperative and the interval between payment by the cooperative to the farmer and payment to the cooperative by the butcher. Interviews with cattle merchants indicated that the interval between sale to butchers and payment for cattle sold was, in most cases, "more than three days," and was actually five days to one week.

Estimating a seven day delay between purchase by butchers and payment by butchers and payment by the cooperative to the farmer of 75 percent of estimated value at time of sale, the operating capital requirements to cover this interval, per head on a 350 kg novillos would be as follows:

Value of 350 kg fed yearling at 170\$00/kg live weight =
 59,500\$00
 75% of value (.75 x 59,500\$00) = 44,625\$00

Assuming a weekly sales volumes of fifty and one hundred head per week and a seven day lag between payment to farmers and collection from butchers, plus five percent operating costs, then the weekly operating capital requirements for the cattle marketing cooperative would be as follows:

<u>Payment to producers</u>	<u>Operating costs</u>	<u>Total</u>
50 head/week x 44,625\$ = 2,231,250\$00	+ 111,562\$00	2,342,812\$00
100 head/week x 44,625\$ = 4,462,500\$00	+ 223,125\$00	4,685,624\$00

On the basis of these calculations, the operating capital requirements of the cooperative cattle marketing service would be in the range of 2,350,000\$ per week for 50 head to 4,700,000\$

per week for 100 head. If it is necessary to borrow operating capital then interest on an operating loan, at more than 25 percent per year, must be included as a cost. This would add approximately 11,300\$ to the weekly operating capital requirements for 50 head and 22,600\$ for 100 head.

d. Implementation

If the cooperative decides to proceed with the establishment of a cattle merchant service for its members, the following sequence of actions would be necessary to initiate the service.

- (1) The president of the cooperative should appoint a committee to consider the idea and to develop a specific plan for implementing the service. The committee should include one or more officers of the cooperative, representatives of the management of the cooperative and progressive farmers. The assistance of the MAFA Technical Director assigned to the cooperative, representatives of the regional agricultural office and specialists from MAFA/Lisbon should be requested.
- (2) When the plan is completed, subcommittees or task groups should be appointed to develop detailed information required. Possible task groups should include:
 - member interest,
 - butcher demand,
 - finance - requirements and sources,
 - patronage records and accounting,
 - physical facilities, and
 - personnel.
- (3) If the reports of these task groups are favorable and indicate that the potential for the proposed service is good, then the committee should proceed as follows:
 - Develop information for members describing the proposed marketing service, explaining its operation and benefits to members.
 - Hold meetings at convenient locations within the area served by the cooperative to acquaint members with procedures for marketing their cattle through the cooperative.
 - Visit butchers, explain the service to them, leave materials with them describing how to contact and buy through the cooperative.
 - Explore sources of financing operating capital requirements and get loan commitment.

- Employ manager.
- Develop patronage account systems.

At this time, the manager should take over and with the assistance of the officers and general management of the cooperative should complete the arrangements for necessary financing, purchase the truck(s) and other capital items, hire any additional employees (such as truck drivers) and seek the first order from butchers.

It is recommended that after the first month, the operation of the new service be evaluated and any necessary changes made.

4. Cooperative Acts as a Butcher, Buys Cattle From Members, Slaughters Through JNPP and Sells Meat - Priority One

a. Background

Under this type of marketing program, the cooperative would, in effect, act as a commercial butcher, rather than as a marketing agent (merchant) for its members. The advantage to the members would be increased because they would share in the profits from the operation of the butcher shop or meat wholesaling operation. In the survey of cooperatives, this alternative received the greatest interest of those considered. The cooperatives, and their farmer-members, see this form of vertical integration as offering them the opportunity to participate in the margins presently taken by both merchants and butchers. Many of the cooperatives responding to the survey indicated a desire to operate as butchers and to sell meat through their own cooperative butcher shop. Others also proposed to wholesale meat to other butchers, retailers, restaurants and other institutional food outlets.

If the cooperative is to support the market for members' cattle, it must market a sufficient number to offer an important outlet for the total number of cattle members have for sale. If it is the intent of the cooperative to operate a local butchershop, to provide meat to members through the cooperative, or to function only as a butcher in the local area, then the volume of cattle which could be marketed by the cooperative through the butchershop would be small. In the survey of butchers, it was found that most buy only 5 to 10 head of cattle per week. The maximum reported, by a butcher with multiple shops, was 42 head per week. As was indicated earlier in this section, most of the cooperatives in the study area are large, having from 1,000 to 4,000 members. If a cooperative had 2,000 members and each member sold three animals per year, total member sales for the year would be 6,000 cattle or approximately 115 per week.

Although it appears that a cooperative butchershop venture would not provide an outlet for this many cattle, the idea is popular with cooperative members and does represent a viable alternative. In addition,

it would be entirely possible for a cooperative to operate its own butchershop, and at the same time, also sell cattle as a merchant for its members.

In summary, this alternative has the following advantages:

- a guaranteed outlet for the cattle, and
- potential profits as a retail agent, depending on the consumer prices and the costs of the alternative.

The disadvantages are:

- low impact at the producer level because of the small number of cattle bought,
- competition from existing butchers,
- a larger more complex organization is necessary,
- higher costs for retail functions and facilities, and
- the need for knowledge of meat-cutting practices.

b. Marketing functions

The cooperative, acting as a butcher would perform all of the functions specified for operation as a merchant, and in addition would have some cattle slaughtered through JNPP and then would receive, cut and retail the meat.

As indicated, the cooperative butcher shop would probably be able to receive and kill only a limited number of cattle per week (6-10). Possible bottlenecks might arise if a large number of members wanted to market their cattle through the butchershop. To accommodate the excess cattle, the cooperative would need to operate a merchant operation also. The manager of the merchant operation and the butcher would decide how many cattle the butchershop received and the remainder would be marketed through the merchant operation to other independent butchers. To avoid possible accusations of favoritism, the needs of the cooperative butchershop would have to be generally known, the information would need to be available to all members and cattle would have to be purchased on a first-come, first-served basis.

Pricing, marketing fees and payment could be established in the same way as specified for the cooperative merchant operation. The total profits of the merchant and butchershop operations would be pooled and returned to farmers in relation to the number of cattle they contributed.

If the purpose of the butchershop was to improve returns from cattle sold, the butchershop would have to sell meat at prevailing retail prices and no patronage dividends could be paid to co-op customers who patronized the shop. The co-op member as a supplier of cattle would want to maintain the highest possible price whereas the co-op member as a buyer of meat through the butchershop would want lower-than-market prices for meat.

Operating functions would be as follows:

- (1) Co-op obtains a permit (license) to operate as a butcher, buying cattle from members on a carcass weight basis, having the cattle slaughtered by JNPP slaughterhouse and selling meat to members or general public through a co-op butchershop and wholesaling meat to other butchers, restaurants and hotels in the area.
- (2) Buys cattle from members on a carcass weight basis.
- (3) Co-op picks up cattle from members in its truck and delivers to JNPP slaughterhouse for slaughter for account of co-op.
- (4) Co-op operates a butchershop or meat wholesaling establishment.
- (5) JNPP delivers meat to co-op butchershop.
- (6) Co-op cuts and retails meat to its members or general public or both and wholesales meat to other butchers, supermarkets, hotels and restaurants.
- (7) Members paid going price for cattle at time delivered to co-op butcher. Profits from co-op butchershop operation distributed to members on basis of volume of livestock delivered to co-op butchershop and merchant service.

c. Requirements

- (1) Co-op employee who acts as butcher-buyer. Other employees of butchershop to cut and retail or wholesale meat.
- (2) Truck and driver to pick up cattle.
- (3) Butchershop with meat cutting equipment, coolers and retail sales cabinets and counters.
- (4) Established records and accounting system.
- (5) Moderate operating capital.

d. Implementation

The butcher operation would have all of the requirements of a merchant plus it would require the acquisition of a butcher's license or permit and would

have to buy or build a butchershop. Two possibilities would exist:

- (1) The cooperative could buy an existing butchershop.
- (2) The cooperative could construct a new butchershop.

In each situation, the capital required to buy, rent or build the shop would need to be acquired along with additional operating capital, above that of a merchant operation, to pay JNPP slaughter fees and to carry the meat inventory from the time the farmer was paid for his animal and the meat had been sold to customers.

Because of the equity problems between members who sold cattle and members who bought meat, it is recommended that:

- (1) If the purpose of the butchershop is to improve the market for cattle, it must sell meat at full retail price and share the returns with farmers who marketed cattle through the shop.
- (2) If the purpose of the butchershop is to sell meat to members at lower-than-market costs, or to distribute saving among member customers, then it must pay full market prices for all cattle purchased and share its returns above costs with members who purchased meat through the cooperative butchershop.

5. Cooperative Works Closely with Local Câmara to Improve Conditions at the Local Cattle Fair - Priority One

a. Background

The local cattle fairs are operated by the local Câmaras (municipal government). Most are well-established markets and many have been in operation for hundreds of years. The cattle fair (feira de gado) is just one part of the local fair which also offers fruits and vegetables, other agricultural products and a wide variety of nonagricultural products: clothing, household utensils, shoes, toys, pottery and other handicrafts. It is not considered feasible to separate the cattle fair from the other elements of the fair as it is both an economic and a social institution.

b. Implementation

Under this alternative, the Câmara would continue to operate the fair and the cooperative would work with the Câmara on an informal basis to improve the fair as a market for cattle.

If the cooperative is interested, the president of the cooperative would appoint a committee of interested members to evaluate the local fair (or a specific regional fair) in terms of its desirability and present or potential usefulness as a local market for cattle. If the Fair Advisory Committee finds that the fair is, or could be, a useful market for members' cattle, it recommends to the president that further study be given to ways in which the fair could be improved and how the cooperative could assist the Câmara in accomplishing the needed improvements. Following this study,

the fair committee develops a report presenting its findings and suggestions for improvement of the fair. This report is then discussed with the president and technical director of the co-op and if the reception of the report is favorable, a meeting is requested with the president of the local Câmara (and other Câmara officials or employees associated with the fair) to discuss the interest of the cooperative in the fair and suggestions for its improvement. The fair will continue to be operated by the Câmara, and physical improvements or changes in operating practices will have to be done by the Câmara. However, the cooperatives can help implement the improvements in several ways.

First, the Fair Advisory Committee works with the Câmara fair administration in identifying, planning and securing support for needed improvements.

The idea of a fair advisory board to advise the Câmara concerning the operation of the fair was first discussed in Section B of this chapter under the topic, "Operating Improvements - Management of the Fair." The Board described there would be representatives of all livestock marketing interests, including local cooperatives. However, in this instance, a close and specific working relationship between the cooperative and the local Câmara fair authority is proposed.

The committee proposed should include, as a minimum:

- Farmer cooperative members - three to five, representing different types and sizes of farmers in different geographic areas served by the cooperative and the fair.
- The president or a member of the board of directors of the cooperative.
- The general manager, technical director or other representative of the management of the cooperative.

The committee should meet with officials and employees of the Câmara who have responsibility for or a direct interest in the operation of the local cattle fair. Others might be invited to participate in discussions as non-voting members of the committee, including the Câmara or MAFA veterinarians and representatives of the regional MAFA office.

The members of the Cooperative Fair Advisory Committee should be appointed by the President of the Cooperative subject to approval by the Board of Directors.

As the Fair Advisory Committee begins to function, frequent meetings with the Câmara representatives will be necessary. Following this initial effort, less frequent meetings may be required. However, as a minimum, monthly meetings are suggested, otherwise the committee would have little opportunity to function. It is important that these meetings be held regularly and that the cooperative members be faithful in attending. The

meetings should be conducted by the Câmara and should include reports on fairs held during the period (number of cattle sold, prices received and other matters), problems encountered and suggestions for improvement of the feira.

The cooperative should make all of its members acquainted with the names of their representatives on the Cooperative Fair Advisory Committee and should emphasize the function of the committee as a vehicle for getting comments, complaints or other suggestions of farmers to the Câmara and fair management.

Second, co-op members (farmers) volunteer their labor and perhaps use their farm machinery to accomplish physical infrastructure improvements at the fair, including for example:

- Cleaning and leveling fair area.
- Planting shade trees or establishing similar shade or shelters.
- Laying out and constructing simple streets or roads.
- Erecting fences or walls.
- Marking out space in fair where cattle are to be displayed, by class of cattle, constructing simple hitching rails or picket lines to which cattle for sale can be tied.
- Improving loading dock(s).
- Establishing a parking area for trucks, cars, carts, and motorcycles.
- Installing a water line (or well) so cattle (and patrons) can have access to water.
- Preparing area for installation of cattle scale and scale house.
- Building hospital pens or establishing a hospital area for segregation of sick, crippled or weak cattle.

Third, the Fair Advisory Committee could work with the Câmara to provide "unofficial" support and advice in such areas as:

- Establishing sanitary regulations and veterinary inspection procedures and securing farmer acceptance and compliance.
- Establishing realistic and equitable fees for use of fair facilities and sale of cattle.
- Registering both sellers and buyers of cattle using the fair.
- Arbitrating disputes between buyers and sellers.
- Collecting information on prices received for cattle sold and publicizing such information.
- Encouraging farmer support of the fair.
- Establishing general regulations and procedures for the operation of the fair and the maintenance of the grounds and facilities.

6. Cooperative Acts Only as an Order Buyer - Priority Two

a. Background

This alternative and the remaining three (cattle park, cooperative slaughterhouse, cooperative auction) are ranked as Priority Two alternatives, either because they do not offer sufficient advantage to the members of the cooperative (order buyers) or because it is not considered that they could be implemented within the next three years (cattle park, slaughterhouse, auction). They will be discussed in less detail than the Priority One alternatives.

Operation of the cooperative as an order buyer for butchers could be an improvement over the present merchant/butcher buyer system, but does not represent an aggressive approach to marketing cattle by the members and does not have the same potential for volume or net returns to the members as when the cooperative acts as a merchant. However, it involves little risk, requires only minimum operating capital, gives the member a stronger competitive position in negotiating prices with butchers and has the potential for providing the farmer with some additional return through sharing of any net returns realized from commissions collected from butchers after operating costs have been deducted.

b. Marketing functions

Acting as an order buyer, the cooperative would do the following:

- (1) Receive orders from butchers who require cattle to kill.
- (2) Act as member's agent in negotiating price with butcher on a carcass weight basis. However, farmer would not be obligated to accept price if he feels it is too low.
- (3) Cooperative truck picks up cattle from farmer and delivers to JNPP slaughterhouse for butcher.
- (4) Butcher pays farmer directly for cattle purchased, based on negotiated price (2) and carcass weight.
- (5) Cooperative collects order buyer commission from butcher (e.g., 1,000\$ per adult animal purchased for the butcher).
- (6) Cooperative maintains patronage records of members cattle sold through the order buying service.
- (7) At end of the year, cooperative deducts total operating costs from total commissions received and distributes balance (profits) to farmer-members in proportion to patronage.

c. Requirements

- (1) Cooperative employee, order buyer, who acts as merchant taking orders from butchers, negotiating prices, locating cattle available from members and delivering cattle for butcher to JNPP slaughterhouse. Unless volume of cattle is large, the order buyer can also act as truck driver. If volume is large enough, a second truck driver may be hired.
- (2) Patronage records and general cost accounts for the operation of the service.
- (3) Truck or trucks, desk, telephone for order buyer.
- (4) Minimum operating capital to pay manager and truck drivers, operating costs of the truck and telephone charges.

7. Cooperative Establishes a Cattle Park - Priority Two

a. Background

Interest among cooperatives in establishing a cattle park was low. However, the survey of butchers indicated that nearly all would be interested in, and would buy from, cooperative cattle parks, which they saw as a more direct link with the farmer than their present source of cattle through merchants. Merchants also indicated that they would be willing to buy from cooperative cattle parks "if cattle prices and quality were satisfactory."

The cattle park is essentially a concentration yard where members may bring their cattle to be offered for sale to merchants and butchers. The farmer can sell them himself or can consign them to the cooperative to be sold by the manager of the concentration yard. The farmer would be charged a small "yardage" fee if he elects to sell the cattle himself or if he consigns them for sale by the cooperative, a sales commission fee would be charged. In effect, the cattle park would operate as a cooperative cattle fair, but since it would be under the control of the cooperative it should avoid many of the abuses of the cattle fair and provide a more competitive market. The cattle park could operate as a daily market or it could have one or two sales a week. If periodic sales are proposed, they should be scheduled to avoid conflict with nearby cattle fairs.

Although the size of the cattle park will vary with the number of cattle expected, it is estimated that a facility with a capacity of 100 cattle should be adequate to start. However, adjacent land to permit expansion of the cattle park would be desirable. If possible, the cattle park should be adjacent to the cooperative farm supply center, for the convenience of both members and co-op staff. A layout for a simple sales yard is shown in Figure IV-4.

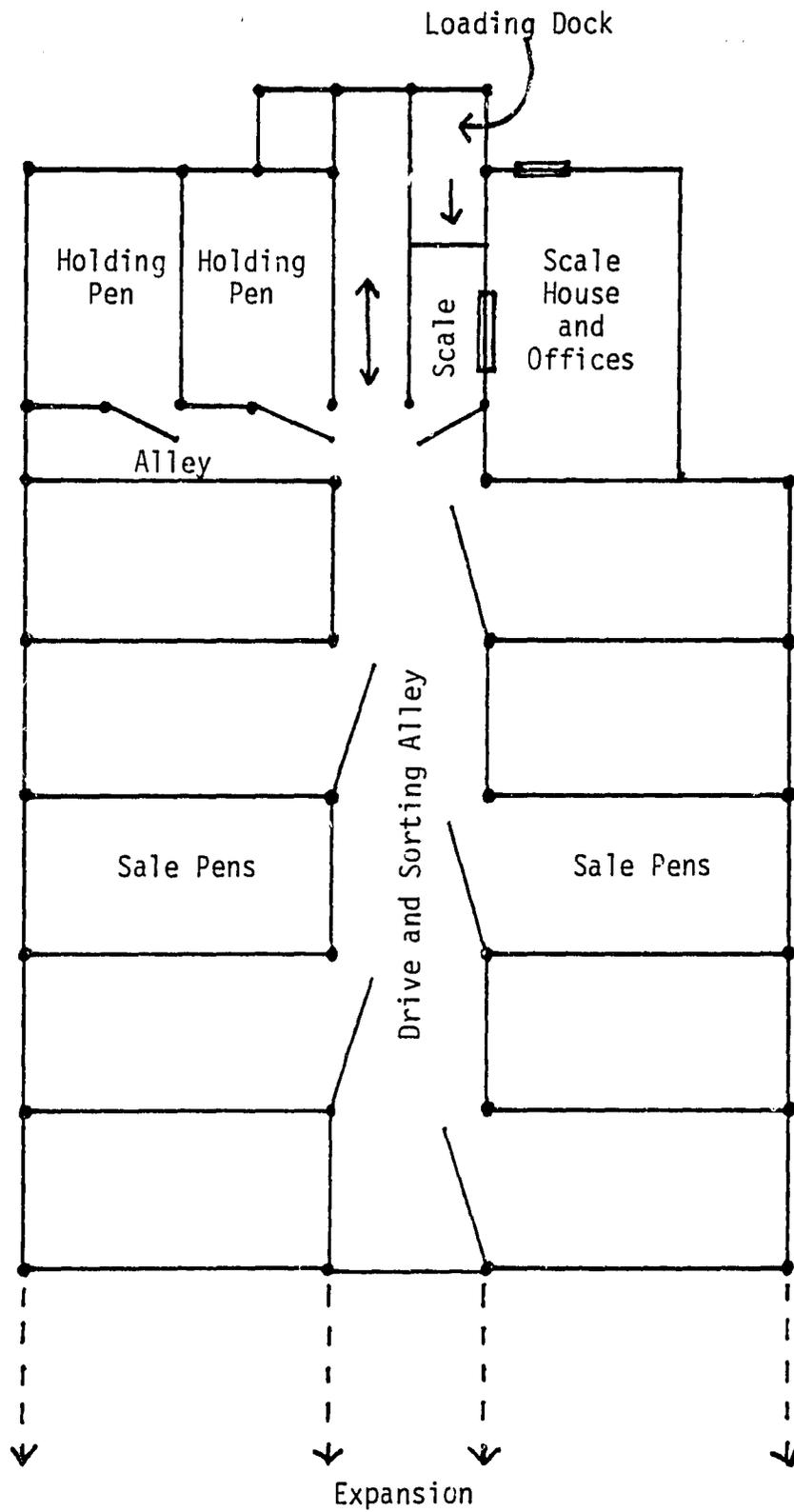


Figure IV-4. Suggested layout of cooperative cattle park, 50-100 head (Scale = 1:200)

b. Marketing functions

The cattle park would concentrate cattle in sufficient number that butchers and merchants would be attracted to the park as a source of cattle.

The cooperative would perform the following functions for the member who consigned cattle for sale through the park:

- (1) Receive the cattle, identify the animals with hip tags, weigh the cattle and record the cattle number and weight.
- (2) Pen the cattle prior to sale and "show" them to prospective buyers (butchers or merchants).
- (3) Negotiate with the buyer for an acceptable price for the cattle. All sales would be on a live weight basis.
- (4) Collect payment from the buyer (prior to his removal of cattle from the yard).
- (5) Deduct from the buyer's payment for each animal a standard sales fee and remit the balance to the farmer who consigned the cattle for sale.
- (6) Maintain records of member patronage and of operating revenues (from sale fees) and operating costs. At the end of the year, deduct costs from revenues and return any balance to farmers in relation to their patronage of the sale yard.

It would also be desirable for the sales yard to have one or more trucks, to pick up cattle at the farm and to deliver cattle to JNPP slaughterhouse for butcher-buyers. However, this should be a separate service, charged only when utilized by farmers or butchers.

c. Requirements - physical facilities

The physical facilities required for this alternative are:

- (1) a cattle park with pens of various sizes sufficient to hold the number of cattle expected; probably about ten pens holding a total of 100-150 cattle would be sufficient,
- (2) loading chute,
- (3) livestock scale - see fair recommendations,
- (4) small-scale house/office - see fair recommendations, and
- (5) truck or trucks.

The manpower requirements are:

- (1) manager/cattle salesman,
- (2) truck driver, and
- (3) accounting personnel to maintain patronage and cost records.

The operating capital requirements for a cattle park are less than for merchant activity since cattle are paid for when purchased.

8. Cooperative Establishes its own Slaughterhouse - Priority Two

This is a major, integrated venture which has been proposed by large cooperative unions. It will not be discussed in detail here. The establishment of such a system would require major financing and would be contingent on making arrangements for permission to operate a private (cooperative) cattle slaughterhouse, a function now reserved for JNPP.

The cooperative slaughterhouse would buy cattle directly from its members, slaughter and sell meat to butchers, supermarkets, wholesalers, hotels and restaurants. In some of the plans advanced by cooperatives, the slaughterhouse would also operate its own retail butchershops.

Members would participate in the earnings of the slaughterhouse proportionate to the classes and weight of cattle they delivered to the slaughterhouse during the accounting period.

The development of a venture of this scope will require careful study. A major question could be whether to build an entirely new slaughterhouse or attempt to acquire an existing slaughterhouse from JNPP. The project would require personnel trained and experienced in the buying of cattle, slaughterhouse operation, by-product processing, and cutting and wholesaling meat and meat products.

Such a project would require three to five years to implement and possibly even longer if a new slaughterhouse were to be built.

9. Cooperative Establishes a Livestock Auction - Priority Two

This is also a viable alternative for a cooperative cattle marketing service. Although cooperatives were not interested in livestock auctions, 38 percent of the farmers interviewed favored the idea and the experience at Palmela, with the JNPP auction, indicates that farmers might be willing to consign cattle to an auction especially if it were to be operated by their own cooperative, in which they have confidence.

However, action on a cooperative auction should be delayed until the Palmela auction is reopened (after the peripneumonia ban is lifted) and sufficient experience is gained there, or through other JNPP auctions which may be established, to prove the potentials and acceptance of selling cattle by auction in Portugal.

If a nongovernment livestock auction is to be established, and to succeed, it is believed that ownership by an existing and successful cooperative would be the best form of ownership.

Detailed recommendations concerning livestock auctions are found Section D, Livestock Auctions - Recommendations, of this report.

10. An Actual Plan Considered by a Cooperative

As a result of the survey, the project team was contacted by and met with a cooperative in the project area which was actively considering establishing a cattle marketing service for its members.

a. Background

The cooperative had, in a general way, developed a project for marketing cattle for its members. The plan was based on the cooperative acting as a merchant and supplying cattle to butchers, both in the local area and in major centers of consumption such as Lisbon and Coimbra.

Specifically, the cooperative proposed the following:

- (1) to undertake an area survey of butchers who would be interested in buying cattle through the cooperative,
- (2) to inform the members of the cooperative of the quantity and quality of cattle which would be required regularly to meet butchers' requirements, and
- (3) for interested farmers, ask them to specify the number and quality of the animals they would have available and the day they would have these animals available for sale.

The cooperative would then match butcher requirements with cattle available from farmers and develop an efficient system to collect the animals, deliver them to the JNPP slaughterhouse where they would be slaughtered and the meat delivered (by JNPP) to the butchers.

This marketing activity would complement the sanitary control activity presently executed by the cooperative. This sanitary control program resulted from the outbreak of peripneumonia among cattle in the country and as a consequence, the Direcção Geral de Pecuária had authorized agricultural cooperatives to provide transportation for members' animals.

The proposed marketing service of the cooperative and the closure of the cattle fairs result in conditions in which farmers are more open-minded and prone to accept a modification of existing marketing systems and the appearance of new systems, according to the management of the cooperative.

b. Requirements for establishing the system

Four requirements must be met for successful implementation of this proposal marketing plan:

- (1) The cooperative must have trucks to guarantee transport of members' cattle.

- (2) Sufficient working capital must be available to permit the cooperative to pay members for cattle as rapidly as the merchant pays. A problem exists in this respect because most butchers or other buyers to whom the cooperative would sell do not pay promptly for cattle, thus, requiring substantial amounts of working capital.
- (3) Another constraint is limited capacity of many JNPP slaughterhouses and the existence of historical slaughter quotas which might preclude the increased local slaughter that would result from the activities of the cooperative. As a result of this constraint, it would also be worth considering the potential for slaughter by the cooperative instead of JNPP.

Paralleling the initial proposal for cooperative marketing, the cooperative might secure a license to operate as a butcher, which would enable them to guarantee a supply of meat.

- (4) Other questions to be resolved prior to establishment of the marketing service include:
 - How to penetrate the retail butcher market and how to obtain butcher customers: by offering better quality, equal prices, lower prices or other forms of bonuses or incentives as a form of market inducement.
 - The need to establish veterinary legislation at the national level which will permit improvement of existing conditions in cattle marketing, sanitary inspection of animals at cattle fairs and control of the movement of cattle.

D. Livestock Auctions - Recommendations

1. Background

Auctions can serve as local markets for cull cows and bulls, calves, feeder cattle (cattle for further feeding), replacement cattle and, in some areas, for sheep. They are also used for the sale of breeding cattle.

Auctions represent a flexible and fast method of sale and can sell single animals as well as lots (groups) of animals. Where they are used, they are normally held one day a week and attract large numbers of buyers. They represent a truly competitive method of sale and have been well accepted by both livestock producers and livestock buyers in many countries.

Auctions may be organized as corporations, partnerships, individual proprietorships or cooperatives. The ownership of physical facilities and the selling functions of auctions are all under the same management.

Auctions consist of public bidding in response to the auctioneer's chant and final sale is to the highest bidder. The owner of the livestock consigns the livestock to the auction, thereby authorizing the auction to act as his agent in selling the animals. Usually the owner notifies the auction manager several days prior to sale day of his intention to deliver. It also is common for the auction manager to visit patrons on request, to inspect the livestock and advise the patron about the condition of the livestock, the market situation and the livestock's value.

When livestock are delivered to the auction, they are penned or marked to maintain the owner's identity. The livestock are presented for sale in the order in which they were received.

Auction operators frequently sort an owner's livestock for size, quality or other characteristics to gain uniformity when the animals are presented in the sale ring and raise the total sales price. When the animals arrive in the ring, the manager usually makes a starting bid to help speed up movement through the ring. Bidding follows the auctioneer's chant to higher levels until no one is willing to advance the bid. Sales may be done on a per head basis or on a weight basis. Usually the average weight of the group of livestock in the ring is made known before bidding begins. Some auction operators provide market support by buying livestock that otherwise would sell at a price below a competitively established price. Other price protection methods available for consignors include specifying a reservation price which is the minimum acceptable bid or declaring "no sale" when the auctioneer receives the final bid.

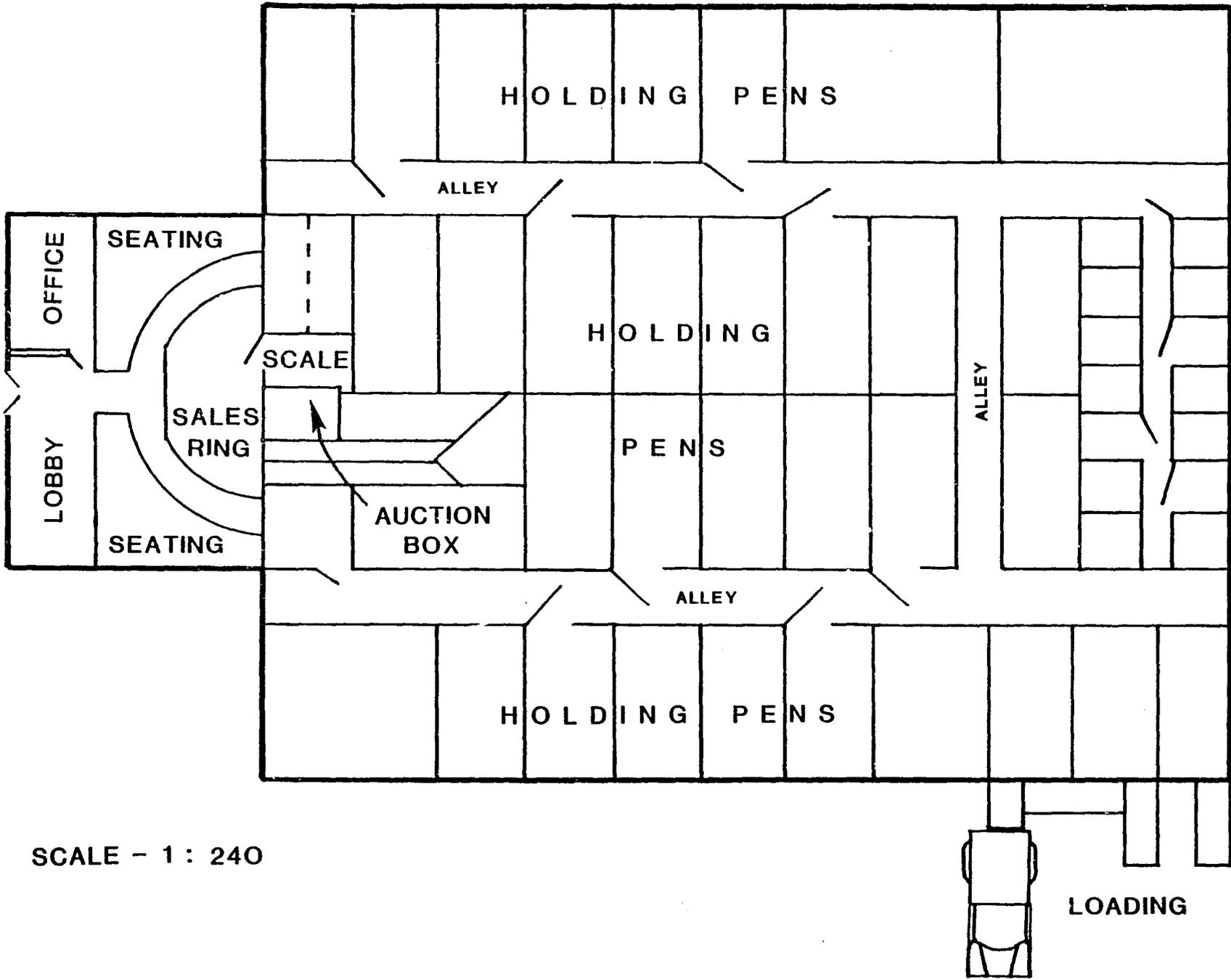
Once the livestock are sold, they are penned for loading out by the buyer. Large buyers might have their purchases penned by sex, weight, quality or other characteristics.

A diagram of a livestock auction is presented in Figure IV-5.

2. Livestock Auctions in Portugal

Sale of livestock by auction is not common in Portugal, but auctions are held, primarily for the sale of breeding cattle. Most of these auctions are conducted by the Ministry of Agriculture or in connection with large special fairs such as Agro Vouga, a large international dairy cattle fair held annually in Aveiro. Some special auctions have also been conducted by cooperatives.

Of the one hundred farmers interviewed, 75 percent indicated that they understood the auction method of selling livestock and 43 percent had attended an auction at one time or another, primarily sales of breeding cattle. Interest in selling cattle through a public auction was expressed by 38 percent of the farmers interviewed, but less than 10 percent indicated that they would be willing to consign cattle to a public auction for sale by a professional auctioneer. The small farmer, who only sells two or three cattle per year, wants to participate personally in the price negotiation. Farmers' concerns in selling through auctions were that the



SCALE - 1 : 240

Figure IV-5. Suggested layout of a livestock auction
IV-36

same buyers at the fairs would be at auctions and that it would be difficult for the auction to sell only one animal at a time. Farmers do not want to sell their cattle in lots with cattle of other farmers. Farmers were also concerned with problems of transporting their cattle to the auction. However, uncertainty over prices they would receive was their most important concern. Farmers, in the areas surveyed, have substantial confidence in their cooperatives and an auction operated by a local cooperative would probably be better supported by the farmers.

Most cattle merchants were not interested in buying through livestock auctions since their business consists primarily of direct purchase from farmers at the farm.

Butchers, although more interested than merchants in auctions, did not believe that auctions would succeed in Portugal. Over 70 percent of those who expressed an opinion on the probable success of livestock auctions believed that they would not succeed.

3. The Palmela Experiment

In April 1982, the Junta Nacional dos Produtos Pecuários (JNPP) Serviço de Comércio de Gado began livestock auction at the JNPP cattle park at Palmela, southeast of Lisbon.

The Palmela cattle park, built in 1981, is a modern facility with eight paved and covered lots with pens, concrete feed bunks and water for approximately 1,000-1,500 cattle. Other facilities include three rebuilt loading docks, two printing platform livestock scales, facilities for inspecting and treating cattle, a squeeze chute, a dip tank, a small feed mill, self-unloading feed wagon, a laboratory and an office.

The facility was not built primarily as an auction sales yard, but as a facility for receiving, holding and distributing breeding cattle. There is no auction sales ring but plans have been developed to build one.

It was planned to have monthly auctions and the first auction of 1983 was held on April 6. However, the outbreak of peripneumonia in cattle in Portugal forced the closure of all public livestock markets so no additional sales have been held.

Farmers are responsible for delivery of cattle to the Palmela auction. Animals are unloaded, weighed, inspected by a veterinarian and evaluated and a base price is established for each animal (a price guaranteed by JNPP). The cattle are then penned, usually in lots of four to fifteen head to await sale. Farmers can bring cattle to the auction eight days before the sale and buyers have eight days to remove the animals after purchase. JNPP feeds and cares for them during this period at no cost. However, if the cattle are not removed by the buyer within eight days, there is a daily charge of 220\$ per head.

On the day of the sale, buyers inspect each lot of cattle in the pens and then come to a central point where the auction is held. When the sale ring is built, the cattle would be sold through the sale ring.

Each farmer consigning cattle to the auction receives a statement which includes:

1. his name,
2. number and weights of cattle consigned,
3. sale price (or base price),
4. total return,
5. sales charges deducted, and
6. net return.

For the April 1983 sale, the JNPP bought cattle in the drought stricken Alentejo to assure a supply of cattle and brought them to Palmela for the auction. In addition, to encourage farmer interest in the auction, each animal was evaluated and a guaranteed base price was determined for each animal. If the auction price was below the base price, JNPP paid the farmer the base price for the animal.

Sales charges are 5 percent commission on sale value to be paid by the seller, plus 5 percent commission on sale value to be paid by the buyer.

Farmer and buyer interest in the April auction was substantial and 374 cattle were sold. The outbreak of peripneumonia forced the cancellation of the May 1983 sale. It was hoped that a sale could be held in June and nearly 200 farmers had indicated that they planned to consign cattle to the same sale. However, this sale was also cancelled and there have been no subsequent sales because of the peripneumonia problem.

At the April 1983 sale auction, prices were higher than the base price for every animal sold, ranging from 1\$00 to 48\$00 above the base and averaging 227\$27 per kilo live weight or 11.4 percent above the base price average of 204\$09. Price details are presented in the Statistical Supplement, published as Volume II.

4. Conclusion

The results of the Palmela experiment plus the interest of farmers surveyed (38 percent interested in livestock auctions) are such that sale of cattle by auction in Portugal should not be considered completely impracticable. However, the understanding of farmers concerning auction sales and their willingness to consign cattle for sale by auction are both low and it will be necessary to continue a program of demonstration auction sales and evaluation of the results of such sales.

5. Recommendations

With regard to auction sales of cattle in Portugal, the following recommendations are made:

- (1) As soon as the ban on public livestock sales, resulting from the outbreak of peripneumonia, has been removed, the auction sale at Palmela should be resumed.
- (2) The auction sale ring at Palmela should be constructed and the cattle sold through the ring rather than by pen lot.
- (3) Adequate publicity should be given to the Palmela auction and representatives of cooperatives, merchants, butchers and fairs from other areas should be invited by JNPP to come to observe the operation of the auction.
- (4) Consideration should be given to the possibilities for establishing one or two additional auctions in such important cattle producing districts as Aveiro, Braga or Évora.
- (5) The interest of major dairy cooperatives in operation of livestock auctions should be explored. It is believed that farmers would have confidence in an auction if it were operated by their cooperative.
- (6) Consideration should be given to replacing the usual system of selling cattle at an important cattle fair with a livestock auction. In other words, the Câmara (municipal government) which operates the fair would replace the cattle fair with a livestock auction.
- (7) Since livestock auctions are not a well established institution in Portugal, it would be desirable for JNPP to support new auctions until it is evident that they are operating successfully. Based on the Palmela experience, such support would involve only minimal cost to JNPP. Support could be of three forms:
 - (a) Assisting in the planning and the financing of the construction of the auction.
 - (b) Supporting cattle prices by guaranteeing a minimum base price for cattle sold at the auction.
 - (c) During the initial period of development of the auction, guaranteeing an adequate supply of cattle for sale by purchasing cattle for resale through the auction.

6. Implementation Schedule

The following implementation schedule begins once the ban is lifted on public livestock sales, which has resulted from the outbreak of peripneumonia. It is recommended that initiative for livestock auction development be assigned to JNPP Serviço de Comércio de Gado.

Year 1:

1. Resume the Palmela livestock auction sales on a monthly basis.
2. Initiate construction of the auction sales ring at Palmela.
3. Explore the potential for livestock auctions in other regions: Beira Litoral, Entre Douro e Minho and Alentejo.
4. Explore the interest of cooperatives, fairs and private individuals or firms in operating an auction. Initiate preliminary discussions of contractual agreements between JNPP and interested parties.
5. Design and estimate cost of a simple, low-cost livestock auction facility with a capacity of 1,000 cattle.

Year 2:

1. If potentials exist for livestock auctions in other regions, identify potential auction operators, select specific sites and complete agreements between potential operators and JNPP.
2. Adapt prototype auction design to selected site or sites, estimate costs and returns and conduct economic feasibility analysis.
3. If feasibility analysis is positive, prepare bid documents.
4. Explore alternative sources of financing and secure financing commitment.

Year 3:

1. Continue operation of Palmela auction.
2. Request bids and award contracts for additional auctions at sites selected.
3. Complete construction of additional auctions.
4. Hold first sales in new auctions.