The Development of Agri-business in Québec
and Its Impact on the Family Farm:
The Case of Poultry Production

Hussein H. Merhi

A Thesis
in
The Department
of
Sociology

Presented in Partial Fulfillment of the Requirements
for the degree of Master of Arts at
Concordia University
Montréal, Québec, Canada

October 1984

© Hussein H. Merhi, 1984
ABSTRACT

The Development of Agri-business in Québec and Its Impact on the Family Farm: The Case of Poultry Production

Hussein H. Merhi

This study investigates the effects of the development of agri-business in Québec on the family farm engaged in poultry production. The major aim of this study is to examine how agri-business developed in Québec, and to identify the major changes that occurred in agriculture in general and the family farm in particular in the process of its adaptation to agri-business. Among these changes we distinguish the tendencies toward large-scale production, specialisation in one activity and one kind of production, and the use of wage labour. Based on the review of related literature, our argument is that these tendencies in poultry production indicate the development of a capital/labour relationship between agri-business capital and poultry farmers. This relationship necessitates the separation between capital and labour and, consequently, between production and reproduction in the family farm. Therefore,
agri-business capital places a major challenge to the survival of the family farm, which is based on the use of family labour and where production and reproduction are carried inseparably. Hence, the family form of organization of production and utilization of products is gradually replaced by a new form, more adapted to capitalist development; namely, the company or corporate form.
TABLE OF CONTENTS

Chapter

I. INTRODUCTION .............................................. 1

II. VIENNEY'S MODEL OF AGRI-BUSINESS DEVELOPMENT .......... 15

Vienney's Model
Application of Vienney's Model to the Study of
Agri-business Development in Capitalist Economy
The Limits to Our Use of Vienney's Model

III. THE DEVELOPMENT OF AGRI-BUSINESS IN RELATION TO
QUEBEC AGRICULTURE: 1939-1966 ............................ 31

Formation of Agri-business Activities
Concentration of Input and Output Industries
Vertical Integration and Its Implications
Implications of Agri-business Development for
Quebec Agriculture in General

IV. THE DEVELOPMENT OF A CAPITAL/LABOUR RELATIONSHIP
BETWEEN AGRI-BUSINESS CAPITAL AND POULTRY
FARMERS, 1966-1981........................................... 64

A Brief Review of Poultry Production in Quebec
The Implementation of Joint Plans in Poultry
Articulation of Agri-business Capital with the
Joint Plan of Poultry Meat Production
Implications of the Process of Articulation for
Agri-business and Poultry Farmers

V. THE ANALYSIS OF THE FINDINGS ............................... 86

Similarities and Differences with the Model
of Vienney
Comparison of Our Findings with the Literature

VI. CONCLUSION .................................................. 96

TABLES ......................................................... 100

FIGURES ......................................................... 128

SELECTED BIBLIOGRAPHY ........................................ 137
**LIST OF TABLES**

1. Percentage of total farms reporting input purchases, Quebec, 1941, 1951, 1956, 1966 and 1981 .................. 100

2. Total milk production and farm use, Quebec, 1931, 1951, 1966 & 1981 ............................................. 101

3. Total pork production and farm use, Quebec, 1941, 1951, 1966 & 1981 ............................................. 102

4. Total poultry production and farm use, Quebec, 1941, 1951, 1966 & 1981 ............................................. 103

5. Relative importance of each kind of products, Quebec, 1951, 1961, 1971 & 1981 ................................. 104


8. Rate of integration by branch of poultry, Quebec, 1963 ................................................................. 107

9. Percentage of poultry producers reporting farming contracts for different reasons; 1966 ........ 108

10. Percentage of integrated pork production by type of integrators, Quebec, 1966 ........................ 109

11. Number and percentage of animals and birds raised in commercial farms by kind of product, Quebec, 1961 and 1966 ........................................ 110

12. Number and percentage of commercial farms raising animals or birds by type of farms, Quebec, 1961 and 1966 ........................................ 111

13. Percentage of farm labour by category of labour, Quebec, 1941, 1951, 1961 & 1966 ................ 112

14. Farm, wholesale, and retail prices of pork, Quebec, 1961-1965 ..................................................... 113

15. Rate of farm net income to total cash income, Quebec, 1946, 1951, 1961 & 1966 ....................... 114

16. Distribution of farms raising hogs by number of hogs, Quebec, 1951, 1966 & 1981 .................... 115

17. Distribution of farms raising poultry by
18. **Total revenue from farm sales by kind of product, Quebec, 1978** .......................... 117

19. **Number of joint plans by kind of product, Quebec, 1967** ................................. 118


21. **Number of commercial specialised poultry farms by type of organisation, Quebec, 1971, 1976 & 1981** ................................. 120

22. **Farm production and prices of poultry, Quebec, 1966-1981** ............................ 121

23. **Total size of poultry meat and grill chicken quotas, Quebec, 1971-1980** ................ 122

24. **Distribution of quotas by size and number of grill chicken farms, Quebec, 1974 & 1980** ................................. 123

25. **Number and percentage of animals and birds raised in commercial farms by kind of product, Quebec, 1976 & 1981** ................................. 124

26. **Number and percentage of commercial farms raising animals or birds by type of farm, Quebec, 1976 & 1981** ................................. 125

27. **Evolution of the gross margin of grill chicken, Quebec, 1971-1978** .................... 126

28. **Number and percentage of poultry farms reporting wage labour, Quebec, 1966, 1976 & 1981** ................................. 127
LIST OF FIGURES

1. Activities of production and utilisation of products in socio-economic systems .............. 128
2. Utilisation of products by the actors .............. 129
3. The family form of organisation according to the model of Vienney ......................... 130
4. The position of agricultural production vis-a-vis industrial activities ...................... 131
5. Specialised channels of agri-business ...................... 132
6. Family and capitalist-type farmers ...................... 133
7. The family form of organisation in subsistence farming ................................. 134
8. Activities which constitute the agri-business sector ........................................ 135
9. Poultry channel of agri-business ...................... 136
CHAPTER I

INTRODUCTION

The emergence of an agri-business sector in Québec has increasingly become the subject of an important number of studies. Among the latter we may distinguish those of Lessard (1976), Ehrensaft and Marien (1978), Bernier (1980), and Morisset (1982). These studies present a relatively similar view concerning the emergence of agri-business in Quebec but differ in terms of its impact on the family farm. The common argument is that agri-business emerged in connection with the penetration of industrial capital in Quebec agriculture. This penetration took the form of

1. By agri-business we mean an economic sector which includes all the activities of fabrication and supply of input, agricultural production, and output (marketing, processing, and distribution). Hence, it is the totality of all economic activities involved in supplying the population with food. See Philip Ehrensaft and Bruno Marien, "De l'Agriculture à l'Agro-business," in LE CAPITALISME AU QUEBEC, ed. Pierre Fournier, (Montreal: Editions Cooperatives Albert St-martin, 1978), Pp.185-245.

2. The term "penetration" is borrowed from an article by Bernard Bernier entitled "La Penetration du Capitalisme dans l' Agriculture", in AGRICULTURE ET COLONISATION AU QUEBEC, ed. Normand Seguin, (Quebec: Les Editions du Boreal Express,1980), Pp.73-91.
technological innovations (machinery, chemicals, fertilizers, etc.). It was a consequence of the changes that were taking place in both sectors of industry and agriculture during the first four decades of this century. On the one hand, industrial capitalists came to regard agriculture as an important outlet for industrial products and a major source of "raw material". Therefore, to them, agriculture became an important factor for industrial development. Ehrensaft and Marien (1978) argued that although there was a tendency by Quebec farmers to use new technologies before 1939, the industrialisation of Quebec agriculture started on a wide scale only during and after the Second World War. Like Morisset, they indicated that the improvement in the means of transportation and communications, the development of new methods of preservation of agricultural products and, most importantly, the growing national and international demand enabled agriculture to make giant steps toward commercial mass production. Hence, the necessity to increase the level of productivity and the volume of production not only invited industrial capital into agriculture, but played a major role in the development of agri-business as well.

A similar argument is also found in those studies concerning the changes which occurred in agriculture during the process of its adaptation to agri-business development. Thus, there was a transition from subsistence to commercial
farming. This transition was accompanied by (1) an increase in the commercial exchange between farms and input and output industries\(^3\), (2) a decline in the number of farms, (3) increases in both productivity and volume of production, and (4) a tendency toward large-scale farming and specialisation. These changes did not occur without important implications for the family farms in Quebec. On this question, the authors mentioned above tended to proceed differently.

Lessard (1976) argued that the postwar period, particularly after 1966, was characterized by the development of capitalist relations of production in Quebec agriculture. She considered the tendency toward the employment of wage labour to be an important characteristic of this capitalist development. "Parallel with the disappearance of family farming," Lessard explained, "there is the formation of capitalist farming. However, this formation is limited by the presence of a highly developed capitalist agriculture in the United States and Ontario."\(^4\)

---

3. By input and output industries we mean all the firms involved in the fabrication and supply of input items (machinery, installations, feeds, etc.) and in the marketing, processing and distribution of agri-food. Throughout this thesis, we also refer to these firms as agri-business industries or agri-business capital.

Lessard argued that until the late sixties, the development of capitalist farming did not threaten the family farm which was still the dominant form of organization of production in Quebec agriculture. On the contrary, Lessard explained, that development maintained the family farm for the following reasons.

Firstly, from an economic point of view, the family farm enabled agri-business capital to appropriate its agricultural surplus produce either in the form of interest on its loans, or by a cost-price squeeze mechanism, that is, the sale of the means of production to farmers at high retail prices and the purchase of their products at low wholesale prices. A farmer, in general, applies two kinds of labour in the process of production: necessary and surplus. With the necessary labour he produces his subsistence and that of his family; with the surplus labour he produces a surplus of products for exchange on the market. Agri-business capital appropriates this surplus produce by buying it from the farmer at prices less than its value (i.e., the value the farmer created by the application of his family labour). In Quebec, such appropriation of surplus was facilitated by the desperate need of farmers for credit and outlets to expand. Furthermore, the family farm showed a tendency to adapt to this appropriation by agri-business capital, by intensifying the labour and pressuring the consumer needs of its members.
Secondly, from a political point of view, Lessard held that the bourgeoisie of Quebec had to maintain the family farm in order to secure the support of the rural majority. By maintaining the family farm, the development of agri-business did not necessarily keep its internal organisation intact. This development necessitated a tendency toward large-scale production and the use of wage labour. According to Lessard, not all family farmers were able to keep up with this tendency. Hence, capital penetration in Quebec agriculture produced three co-existing forms of organisation of production. The first is the traditional family form which was still dominant (until the early seventies). Farmers who were still operating according to this form maintained a relatively small scale operation, and were still relying on family labour. The second is the form which is based on contract farming. Family farmers who had contracts or agreements with companies were gradually reduced to a status of wage labourers in relation to these companies. The third is the capitalist form of organisation which is characterised by large-scale production and the use of wage labour (Lessard, 1976: 15-16).

Ehrensaft and Marien (1978) argued that it is erroneous to consider the use of wage labour by farmers to be necessarily an indicator of capitalist development in agriculture. Nor can capitalisation (or the tendency toward
capital intensive farming) necessarily be an indication of that development. In the cases of dairy and cereal farming, for instance, family farms exhibited high rates of capitalisation without necessarily employing wage labour.

According to Ehrensaft and Marien, the transition from small scale to capitalist organisation is characterized by the proletarisation of family farmers, that is, their transformation to wage labourers in relation to agri-business capital.

In Quebec, despite capital penetration in agriculture, the family form of organisation, based on the individual entrepreneurship, was still dominant in the production of milk, cereals and, to some extent, in pork. According to the authors, the reason is that agricultural production in general is a located activity, and the individual entrepreneur acquires a practical knowledge of his soil and its reaction to weather changes. In addition, he or she is more flexible in terms of working hours than the administrator of a company. Hence, agri-business capital would prefer to leave the activity of actual production and its risks to the family farm (Ehrensaft and Marien, 1978:205). However, the increase in the amount of money capital needed to continue in operation forced family farmers to make arrangements with agri-business firms concerning their purchases of input and sales of output. A
state of dependency followed from these arrangements which necessitated the specialisation of Quebec farmers in one kind of production. Hence, according to Ehrensaft and Marien, the family farm in Quebec became an integral part of the capitalist agro-industrial complex.

Bernier (1980) argued that family farming was disappearing gradually from Quebec agriculture without being replaced by capitalist farming. The postwar increases in productivity and volume of production did not necessarily lead Quebec farmers to a financial success. The reason was that an important percentage of the increase in their revenues was absorbed by increases in farming expenses. Like the other authors, Bernier considered indebtedness to finance capital and vertical integration to be instruments for the gradual expropriation of farmers, as well as for their transition from a relatively autonomous status to that of wage labourer in relation to agri-business capital. Bernier did not see the possibility of the development of capitalist relations of production within agriculture. In contrast to Lessard, he considered that large-scale farms were equally affected by this process of expropriation, especially because of their high rates of indebtedness. In sum, Bernier did not suggest any specific form of organization—which would replace the obsolete family form.

Morisset (1982) argued that the development of a
capital/labour relationship between agri-business capital and family farmers during the last two decades necessitated a transition from commercial diversified to commercial specialised farming. According to Morisset, such a relationship developed as a result of processes of industrial concentration and vertical integration. On the one hand, the concentration of input and output industries left a small number of agri-business firms in control of the prices of input and output products. On the other hand, vertical integration (or contract farming) reduced the Quebec farmers to a status of supplier of "raw material" to processing firms. By specialising in one kind of production, farmers became dependent on agri-business capital. Hence, a capital/labour relationship followed from this dependency, and was characterized by the appropriation of the farmers' surplus produce through a cost-price squeeze mechanism. Hence, the transition to specialised farming created major difficulties of adaptation for the family farm in Quebec.

According to Morisset, this transition was characterized by the concentration of production and, consequently, by a tendency toward large-scale production and the use of wage labour. This tendency necessitated the restructuring of the family farm along the company form which is based on the complete separation between capital and labour and, consequently, between production and
reproduction (immediate consumption and consumption of goods purchased on the market). However, this change in the family form of organisation was, until the early eighties, still limited to a small percentage of large-scale farms. In general, according to Morisset, the family farm has managed so far (until the early eighties) to adapt to the transition to specialised farming, and it continues to be the dominant form of organisation as long as it maintains the relationship of capital/labour with agri-business capital.

Hence, Morisset did not see the possibility of development of capitalist farming in agriculture to the extent that it will replace family farming completely. Furthermore, agri-business capital restraints the transformation of the family organisation to a capitalist organisation since it appropriates the surplus produce of the family farm.\(^5\)

The preceding presentation of literature enables us to draw the following observations. In general, there is an agreement among the authors we have just reviewed on the fact that the last two decades witnessed the development of a capital/labour relationship between agri-business capital

\(-------------------\)

and Quebec farmers. This relationship developed according to the following model:

Integration --> specialisation --> dependency --> appropriation

Model 1

According to this model, vertical integration necessitated the specialisation of farmers in one kind of production. In its turn, specialisation implied dependency on agri-business capital. From dependency followed a relation of appropriation of surplus products, which the authors identified by the cost-price squeeze. However, there is a disagreement among the authors concerning the implications of this model of relationship for the family farm. In this context, we may distinguish two different approaches. The first one was that of Lessard who indicated that the development of a capital/labour relationship between agri-business capital and Quebec farmers led to the gradual disappearance of the family form of organisation and the simultaneous emergence of capitalist farms in agriculture. And the second approach was that of Morisset who maintained that the family farm survived, but with changes in its internal organisation.

In this thesis, we are going to examine these approaches with respect to the case of poultry production in Quebec. We have selected this branch of production because it has been relatively neglected in comparison to the cases of milk and pork. In general, our study is concerned with
the following issues: (1) the origins of the agri-business phenomenon in Quebec, (2) the characteristics of its development, and (3) its implications for agriculture in general and for family farms in particular. Therefore, the questions we will try to answer in this thesis are the following.

The first question: Did a capital/labour relationship develop between agri-business capital and poultry farmers in Quebec?

From the literature we have reviewed above, we adopt model 1 as a model of development of this relationship. Hence, our task is to see if vertical integration, specialisation, dependency and appropriation of surplus occurred between agri-business and poultry farmers.

The second question: What implications did the development of this relationship have for poultry farming in general and the family farm engaged in poultry in particular?

In response to this question, we will see if a tendency toward large-scale specialised farming based on the use of wage labour developed in poultry production. We will evaluate the impact of this tendency on the family farm in reference to the two approaches of Lessard and Morisset.
In order to answer these questions, we need to follow a model of agri-business development. Almost all the authors we have reviewed examine the phenomenon of agri-business from the point of view of the changes that were taking place in agriculture during the postwar period. In doing so, they did not provide a model of development of agri-business. For this purpose, we are going to use the study of Claude Vienney. The model of Vienney (1980) deals with how agri-business activities are formed and transformed in capitalist economy in general and what impact that has on agriculture and family farming in particular.\(^6\)

The Plan of the Thesis

This thesis is organized into six chapters. Except for the Introduction and the Conclusion, each of the chapters addresses a particular question.

In the second chapter, we will present Vienney's model which we are going to use in our study. The chapter is divided into three sections. The first section deals with a general scheme of Vienney's model. The second one summarizes Vienney's application of that model to the study

---

of the formation and the transformation of agri-business activities in the capitalist economy in general. In the third section of chapter II we draw the limits to our use of this model.

Chapter III addresses the question of development (formation and transformation) of agri-business in Quebec from 1939 to 1966. There is a general consensus among the authors we have reviewed on the fact that the year 1939 marked the beginning of the emergence of agri-business in relation to Quebec agriculture. In addition, the year 1966 marks the beginning of a new trend in agri-business development: that of open confrontation with agricultural syndicalism. In this chapter, we will underline the major characteristics of agri-business development during that period, as well as their implications for agriculture in general, with special emphasis on livestock and poultry production.

In chapter IV, we will examine the 1966-1981 period of agri-business development. We will look at how agricultural syndicalism developed in poultry, in what form, how agri-business capital tended to confront or articulate with that syndicalism, and what were the implications of such articulation for poultry producers in general and family farms involved in that branch of production in particular.
In chapter V, we will establish a comparison and outline the similarities and differences between the model of Vienney and our findings on the case of Quebec. We will also analyse our findings in reference to the two questions we have raised in this chapter.
CHAPTER II

VIENNEY'S MODEL OF AGRI-BUSINESS DEVELOPMENT

The model we are going to use in the study of the phenomenon of agri-business in Quebec is derived from Claude Vienney (1980). In his study, Vienney deals with agri-business development only to explain the formation and transformation of cooperative organisations in capitalist economy in general. As methodology, Vienney uses a combination of two models: (1) the Marxist one which deals with the formation of the capitalist mode of production and its impact on agriculture, and (2) the functionalist one which helps explain the functioning and transformation of that mode (Vienney, 1980: 63).

A. Vienney's Model: Articulation of Activities, Actors, and Rules of Socio-economic Systems

Vienney presents the economy in general as an "ensemble" of activities of production and utilisation of products which are governed by certain rules, and as an
"ensemble" of actors who have different patterns of behavior and powers according to their places vis-a-vis the activities (Vienney, 1980: 64-65).

The activities are presented as productive combinations of labour power, primary materials, and equipment (see figure 1)\(^1\). As figure 1 demonstrates, the products obtained from these combinations are utilized for the renewal of the factors of production.

The actors are those individuals who have the capability of engaging money-capital for the purchase of the factors of production. They have different patterns of behavior depending on the results they seek and the capacities they possess (see figure 2). The products obtained return to the actors who consume them immediately in the farm or sell them on the market. Hence, the patterns of behavior of individuals who participate in those activities are presented as modalities according to which actors tend to make decisions concerning the following: (1) The combination of the factors of production in the same unit of production for the purpose of obtaining products, (2) the utilisation of those products for final consumption or intermediate consumption as primary materials, and (3) the re-engagement in production of that part of the

\(^1\)See all figures in the end of the thesis.
products, which is not consumed, for the renewal of equipment. Vienney argues that

In order to articulate the "activities", "actors", and "rules" and understand how a socio-economic system functions and is transformed, the central question is therefore to determine by their places vis-a-vis the activities the categories of actors who, as dominant agents, have the power to make decisions that transform the conditions of production, and [to determine] what their patterns of behavior are.2

Hence, according to Vienney, in order to explain the functioning and transformation of a socio-economic system in general, we will have to examine (1) how the economic activities of that system have changed, and (2) what kind of changes in the relations among the actors involved and their patterns of behavior have accompanied the changes in those activities.

Before we present Vienney's application of his model to the study of agri-business development, a distinction has to be made between the "patterns of behavior" and the "rules". According to Vienney, each actor or agent involved in the economic activities behaves in a particular manner which corresponds to the results he/she seeks and to his/her place in the system of activities. However, all these patterns of behavior, though different they may be, exist in the frame of the general rules of the socio-economic system. They

are, therefore, conditioned by those rules which may take
the form of laws, legislations, regulations, etc.

By agents, Vienney means all the individuals,
enterprises, organisations, and institutions (private and
public) of a particular socio-economic system who/which
enter into relations among each other via their places in
the activities of production and utilisation of products,

B. Vienney's Application of his Model to the Study of the
Development of Agri-business in Capitalist Economy

In order to apply his model of articulation of
activities, actors, and rules, Vienney deals with two major
issues: (1) the changes in the economic activities that lead
to the formation and transformation of agri-business
activities in the capitalist economy in general, and (2) the
way these changes in the economic activities are articulated
with the changes in the relations among the actors involved
and with the rules of that socio-economic system.

1. Changes in the economic activities

Vienney argues that until the twenties of this century
the development of the capitalist mode of production in
Europe had not produced the same effects in the sector of agriculture as it already did in industry. According to him, important changes had taken place in the sector of industry as a result of the formation of the capitalist mode of production. Firstly, the exchange of commodities was generalised as a result of the transformation of the factors of production (primary materials, equipment, and labour power) and farm products to commodities.

Secondly, producers were separated from the means of production of their "craft-type" units of production. These means of production were concentrated by industrial capitalists in new units of an industrial type. Therefore, new productive combinations emerged and were characterized by the concentration of equipment, the use of wage labour, and the engagement of money-capital in production for the purpose of accumulating capital.

Thirdly, with this new mode of production (the capitalist one), the ownership of equipment became the major criterion for the differentiation of social classes and patterns of behavior. On the one hand, capitalist entrepreneurs tended to adjust their decisions concerning the engagement of capital to the anticipated profitability of that capital; on the other hand, wage labourers tended to regulate the sale of their labour power in terms of the value of the commodities necessary to their subsistence.

- 19 -
Hence, with the advent of the capitalist mode of production, the patterns of behavior of capitalist entrepreneurs and wage labourers tended to generalize and, thereby, became the rules of the socio-economic system (Vienney, 1980: 65-69).

As those changes were taking place in industry, subsistence farming continued to dominate agriculture (see figure 3). This type of farming was characterized by the following: (1) the use of unpaid family labour as the major source of farm labour, (2) the combination of different activities and kinds of production in farms, (3) the immediate consumption of a part of the farm produce, and (4) the commercialisation of the remaining part of the produce for the purpose of reproducing the same relationship between the family units and the units of production (Vienney, 1980: 104-105 & 257-258). In this subsistence-type of farming, the family unit was the owner of farm capital and supplier of farm labour; hence, the characteristic of owner-labourer of that relationship. Furthermore, the family unit was the utilizing of farm products for (1) the renewal of labour power (i.e., self-remuneration by immediate consumption and consumption of purchased goods), and (2) the renewal of primary materials and equipment. Hence, according to this type of farming, farmers would utilize their products primarily for the reproduction of the same conditions of production without necessarily accumulating capital. "...Their decisions to produce,"
Vienney explained, "are not determined mainly by the engagement of money-capital for the purpose of accumulation." In other words, the utilization of farm products was primarily concerned with satisfying the needs of family units.

According to Vienney, those conditions of subsistence farming in agriculture made it difficult to:
1- concentrate the equipment and to engage wage labour, since agricultural units of production were not mechanisable and organisable along those of the industrial type;
2- industrialise agriculture, since the ground rent, which was appropriated by landowners, was transferred instead to industrial activities in the form of purchases of consumer goods or investments in these activities. Whereas, in the case of industry, the surplus value was appropriated by capitalist entrepreneurs and re-invested in industrial activities; and
3- offer competitive remuneration to the labour power engaged in agriculture and in related rural activities. A part of this labour power was, therefore, transferred to industrial activities (Vienney, 1980:102-103).

Agriculture was, thus, relatively isolated and

---
3. Ibid., p.105.
autonomous vis-a-vis the industrial sector. Although the exchange with input and output markets was increasing during the first three decades of this century, it did not, however, produce any significant effects on the subsistence-type of farming. Vienney explained that

The development of input and output markets and the decrease in the available labour power brings about an increase in agricultural productivity without transforming the nature of the "units of production" and their reciprocal relationship with the "family units" in terms of self-supply of labour and utilisation of products.4

However, these conditions of subsistence farming were gradually transformed during the last fifty years. The prewar era marked the beginning of a new type of relationship between agriculture and industry. Industrial capitalists were becoming more interested in agriculture as an important factor for industrial development. On the one hand, they considered agricultural products as components of industrial activities either as primary materials (i.e., components of the value of the products of industry), or as a means of subsistence of the wage labour employed in industry (i.e., components of the market value of this labour power) (Vienney, 1980:103). There was a need, therefore, to "restructure" the farming activities in order to make agricultural production more responsive to the requirements of industrial development. Therefore, the

--------
4.Ibid.
postwar period witnessed a "reversal" of the old relationship between agriculture and its industrial and rural environment.

a. Formation of an agri-business sector

According to Vienney, the process of formation of agri-business activities involved restructuring the activities of input, agricultural production, and output in one economic sector of agri-business (Vienney, 1980:103). To him, this process of "restructuration" means the dissociation of input and output activities from farms and their transfer to urban industrial units (Vienney, 1980:103). As a result of this process of transfer of activities, primary materials and equipment, which were formerly prepared in farms or by rural craftsmen, became "commodities", produced by urban industrial units. On the other hand, farm products also became "commodities", purchased and processed by industrial units. This was how, according to Vienney, agri-business industries developed in relation to the agriculture of France. Hence, the process of agri-business development consists of a "reversal" of the relationship between agriculture and its industrial environment. Whereas the activities of input and output used to be regulated according to the conditions of agricultural production, it is precisely these conditions which tended to adapt to the requirements of industrial
activities (Vienney, 1980:302). Agriculture became, therefore, an outlet to input industries and a supplier of "raw material" to processing industries (see figure 4).

b. Development of channels of agri-business

According to Vienney, the formation of agri-business activities occurred when farming was still a diversified activity (i.e., farms were still combining different kinds of products). However, the development of agri-business channels specialised in one product necessitated the specialisation of both farms and industrial units respectively in the production and processing of one particular kind of products. Farmers became, thereby, an integral part of an agro-industrial complex which supplies them with input and handles their products (see figure 5). Hence, the development of specialised channels of agri-business transformed the farms into specialised "workshops". This transformation was encouraged by the technical and biological control over the process of production, by the pressure of market demand, and by profit incentives. According to Vienney, this change in the relationship between agriculture and industry "corresponds to a destructuration and a profound restructuration of activities and of the identity of farmers." 5

5. Ibid., p.302.
2. Changes in the identity of actors

According to Vienney, the family farm in Europe in general and France in particular went through important changes in the process of its adaptation to the conditions of agri-business development. There were increases in both production and productivity as a result of the application of new technologies and techniques of production (mechanization) and of specialization in one activity and one kind of production. However, farmers were not the only beneficiaries of the increase in their own productivity, since a part of the surplus of that productivity was transferred to agri-business industries in the following forms.

Firstly, this occurred in the form of a relative increase in the share of input industries in the value of agricultural products sold to final consumers. By abandoning input activities farmers had to purchase many of the input items which they previously prepared on their farms. Therefore, their costs of production increased.

Secondly, part of the surplus productivity was transferred to output industries in the form of a relative increase in their share in the value of finished products. This was due to the specialisation of farmers in the
production of semi-finished products. The share of farmers in the value of finished products was, therefore, squeezed between the increasing costs of production, on the one hand, and the prices they received for their semi-finished products, on the other. According to Vienney, the reversal of the relationship of activities between agriculture and its industrial environment was, therefore, accompanied by a reversal of the position of farmers from a "...beneficiary of surplus productivity to that of a supplier, with agri-business industries following the reverse course." 6

As agriculture was transformed in the process of its adaptation to the requirements of agri-business development, the impact of this transformation differed from one region to another, from one kind of production to another and, most importantly, from one farmer to another. Hence, this transformation produced two different typical situations (see figure 6).

a- In the regions located near urban industrial zones, the generalization of commodity exchange between agriculture and input and output markets and the favourable conditions of capital accumulation led to the development of agricultural units of production along the industrial-capitalist type. Farmers of these industrial-type units tended to behave like

6. Ibid., p.301.
entrepreneurs; they managed to concentrate the landed property and equipment and, thereby, the capacity to produce and to combine them with wage labour. They tended, therefore, to separate farm capital and farm labour and, thereby, between production and consumption. Hence, the nature of the relationship between family units and units of production was altered by the process of development of such industrial-capitalist-type units. Farmers of this type tended to utilize their farm products primarily for the purpose of expanding their units of production (capital accumulation).

The development of input and output industries encouraged this type of farmers since it provided them with the means necessary to raise their productivity and to secure outlets for their farm products.

b- In rural areas, although an increase in agricultural productivity took place as a result of the development of input and output markets and the decrease in the available labour power, it did not necessarily transform the conditions of family farms. The latter still maintained the same relationship between their family units and their units of production. Nevertheless, they were no longer considered as "peasants", which was a characteristic of subsistence farming, since they increased their commercial exchange with input and output markets at the expense of immediate consumption. Vienney explained:
In becoming producers, peasants are not re-identified as capitalist or wage labourers, and even if they carry two functions of entrepreneurs and wage labourers, they do not reason mainly in terms of the profitability of their capital, on the one hand, and of the remuneration of their labour, on the other.\footnote{7}

Vienney identified this category of farmers as entrepreneurs-labourers. According to him, they tended to behave like entrepreneurs since

The renewal of the labour power and the equipment of their productive combination depends on the prices of primary materials purchases and on the sales prices of farm products, and not on direct negotiation of their labour power with an entrepreneur-employer in terms of wages.\footnote{8}

On the other hand, Vienney considers them as labourers since they employ their own labour and the labour of their families as the main source of farm labour, avoiding thereby the use of wage labour. They stand, therefore, as labourers in relation to input and output industries as Vienney explains:

In fact, the structuration of agri-business firms places the agricultural producers, who do not employ wage labour, in a situation relatively similar to that of “piecemeal workers” of a decentralised workshop whose means of production are supplied by the enterprise which purchases their products, and who have to finance their operations, in part or whole, from the resources which come from their pure productive activity.\footnote{9}

---

\footnote{7}{Ibid., p.111}
\footnote{8}{Ibid., p.309.}
\footnote{9}{Ibid.}
C. The Limits to our Use of Vienney's Model

In order to facilitate the use of Vienney's model of agri-business development, we will summarize his findings in four major trends. The first two of these trends indicate the major changes that characterize the development (formation and transformation) of the agri-business sector. The remaining two deal with the implications of that process of development for agriculture in general and family farms in particular. These trends are the following:

First trend: Agri-business activities are formed as a result of the restructuring of farm activities and the transfer of input and output activities to the sector of industry.

Second trend: The development of specialised channels of agri-business activities necessitates the transition from diversified to specialised farming.

Third trend: The process of farm adaptation to the development of specialised channels of agri-business activities produces two types of farms in agriculture: capitalist and family-type farms.

Fourth trend: Agri-business development transforms the family farms into decentralised "workshops", and family
farmers into "piecemeal" labourers in relation to agri-business capital.

In this study, our aim is (1) to use the model of Vienney as a method for the study of the development (formation and transformation) of agri-business in Quebec, and (2) to establish a comparison between those trends of agri-business development and our findings on the Quebec situation.
CHAPTER III

THE DEVELOPMENT OF AGRI-BUSINESS IN RELATION TO QUEBEC AGRICULTURE 1939-1966

During the Second World War there was an increase in the national and, particularly, international demand for agricultural products. This increase came at a time when traditional farming was still dominant in Quebec agriculture (Chatillon, 1976; Morisset, 1982). According to Morisset, this type of farming was characterised by (1) the combination of different activities and products in the farms, (2) the use of unpaid family labour as the main source of farm labour, (3) the immediate consumption of a part of the farm produce, and (4) the commercialisation of the remaining part (Morisset, 1982: 21-27).

According to this traditional type of farming, farmers would divide their products into two parts. They would use one part for the satisfaction of their domestic needs (income in kind) and sell the other on the market (cash income) (see figure 7). Although cash income made up 70% of
the gross income realized by Quebec farms in 1939; farmers were still using this cash income for the reproduction of the traditional type of farming. They used a part of the cash income and the total income in kind for the reproduction of their family units and, consequently, their family labour. The remaining part of the cash income was utilized for the renewal of the conditions of the units of production, that is, for the purchase of primary materials which the farmers could not prepare in their farms and for the upkeep or replacement of the existing farm equipment. Under such conditions of farming, family units had total control over the units of production: the former were the owners of farm capital, suppliers of farm labour, and utilizes of the produce of the latter. Production and reproduction in such conditions of farming were inseparable activities, and farmers tended to adapt the units of production primarily to the needs of reproduction of their family units. Hence, the traditional type of farming showed no tendency toward large-scale production. In the case of milk production, for instance, the total volume of milk produced in Quebec increased only by 13.5% from 1921 to 1936, and the average number of dairy cows per farm

1. The realized gross income is the sum of cash income and income in kind. See AGRICULTURAL STATISTICS OF QUEBEC, Quebec Bureau of Statistics, the section on livestock and animal products, 1968.
increased from 6 to 8 cows during the same period. Thus, there was an insignificant increase in the average scale of production per farm in that type of farming. In fact, farmers tended to avoid any expansion of the scale of their production beyond the needs and the capabilities of their family units at that time. There are two major reasons for this tendency.

Firstly, such expansion would necessitate the use of wage labour and, thereby, would disrupt the reliance of farmers on family labour. It would also necessitate purchases of additional land, livestock and equipment and, consequently, a change in the allocation of cash income in favour of capital accumulation.

Secondly, since the consumed part of the farm produce was limited by the family size, such expansion would necessarily result in increases in the commercialised part of that produce. That would have occurred particularly at a time when local demand was generally limited, and other rural markets were inaccessible due to rural isolation and to the perishable nature of agricultural products. Even when allowances were made for such expansion,

2. In 1921 and 1936, 88 and 80% of Quebec farms, respectively, were raising dairy cows. See QUEBEC AGRICULTURAL STATISTICS, Quebec Bureau of Statistics, Livestock and Animal Products, 1968.
industrialisation of Quebec agriculture was made difficult by the isolation of rural areas and, most importantly, by the lack of capital in the hands of Quebec farmers (Ehrensaft and Marien, 1978).

Farmers were relatively autonomous vis-a-vis their industrial and commercial environment. In 1939, most Quebec farmers were still combining different activities in their farms in addition to the activity of actual production. Thus, the use of animal manure as a fertilizer, the preparation of animal feeds from crops (in the case of cattle) or from the refuse of other animals and crops (in the case of hogs and poultry) were among the common practices in Quebec farms. The combination of different kinds of production (dairy, livestock, poultry, crop, etc.) in the same farm enabled Quebec farmers to be self-sufficient in many of the input items needed for production (Lemelin, 1951). As to the machinery and instruments of labour, most of them came from local craftsmen whose activities depended on agricultural demand. According to Lemelin, ploughs, harrows, mowers, threshers, and cream separators were still of wide use in rural Quebec, and their maintenance was, in major part, provided by the farmers themselves (Lemelin, 1951:100-123). However, that situation was gradually changing as Quebec farmers tended to satisfy the growing national and international demand for agricultural products.
A. Formation of Agri-business Activities

In order to raise the level of productivity and the volume of production and take advantage of the increasing demand and farm prices during and after World War II, Quebec farmers were gradually turning to new technologies and techniques of production. Access to these technologies was made available by the boom of industrialisation which occurred during the Second World War, by the advent of electricity to the remote areas of Quebec, and by the improvement of the means of communication and transportation which brought the isolation of rural areas to an end. Furthermore, the federal and provincial authorities encouraged the farmers—through the loans of the Board of Quebec Agricultural Credit (1936) and the Agricultural Credit Society of Canada (1959)—to mechanise their farming operations in order to increase their productivity. As farmers responded to these incentives, they relied increasingly on the industrial sector for input supply. Thus, the postwar period witnessed an important increase in the percentage of farms dealing with input markets (see table 1). As table 1 indicates, the number of farms

reporting purchases of animal feeds increased from 25.2% in 1956 to 68% in 1966, and to 69% in 1981; those which reported buying machinery and equipment also increased from 17.1% in 1941 to 67.9% in 1966, and to 82.2% in 1981, and so on. Moreover, as the 1967 report of the Royal Commission on agricultural credit indicated, between 1939 and 1959, horses used for tilling and other farm work were gradually replaced by tractors. In 1966, according to the report, there were almost 81,674 tractors on Quebec farms: at least one tractor per farm.

In addition, farmers were buying more complex machines capable of mechanising feeding operations and, thereby, of increasing farm productivity in general. Meanwhile, the use of pesticides and fertilizers increased 500% and 300%, respectively. Added to that was the growing application of medical and biological sciences to the selection of breeds and control over the sanitary conditions of animals. In sum, Quebec agriculture was becoming an important outlet for input industries.

On the output side similar changes were occurring. Until the early thirties, Quebec farmers were still processing and consuming a part of the produce in their farms. They would sell the remaining part either to final consumers, directly, or to local merchants and processors. However, that situation changed completely over the last
three or four decades. In the case of milk (see table 2), the activity of processing milk into butter and cheese disappeared gradually from Quebec farms. In 1981, dairy farmers sold the total bulk of their milk as raw material to processing factories, directly or through local merchants. In the case of hogs (see table 3), the activities of slaughtering and/or processing also disappeared from farms by 1981. In 1941, Quebec farmers handled (i.e., slaughtered and processed) 31.7% of their total hog production in their farms. That share declined to only 1.7% in 1981. On the other hand, table 3 shows that (1) there was an increase in the number of hogs produced in general, (2) an increasing part of this production was sold alive by the farmers to slaughtering and processing factories; and (3) the share of local butchers to the activity of slaughtering declined drastically.

The same can be said in the case of poultry where there was an increase in the percentage of the total poultry production in Quebec shipped alive to slaughtering houses: from 61.4% in 1941 to 99.9% in 1981 (see table 4). In other words, by 1981 the activity of slaughtering disappeared almost completely from poultry farms.

---

4. The reason we focus on animal production in this thesis is that it has occupied a major place in Quebec agriculture. Almost 80% of Quebec agricultural revenues come from the sales of animals and animal products (see table 5).
From the aforementioned we can argue that a division of labour was taking place between agriculture and industry. According to this division of labour, farmers tended to abandon the preparation of input items (feeds and tools of labour) and the processing of their farm produce to industrialists. This division of labour brought about (a) the specialisation of farmers in the activity of pure production, (b) an increase in the volume of farm production, and (c) an increase in the commercial exchange between agriculture and industry. It played, therefore, an essential role in the formation of agri-business activities, on the one hand, and in the commercial orientation of farm production, on the other. We can also argue that by 1966 the division of labour reached a stage whereby only an insignificant part of Quebec farm production was still handled or consumed on the farms.

It is important to mention at this point that until the late forties, the increase in the commercial exchange between farms and input and output markets occurred in the context of favourable farm prices. However, since the end of World War II, the international demand for agricultural products began to decline and so did farm prices. It was not until the early fifties that Quebec farmers started to feel the effects of that decline. Since the prices of agricultural products favoured the expansion and the commercial orientation of agricultural production in Quebec.
from 1939 to 1951, the period from 1951 to 1966 encouraged the restructuring of agri-business industries. In fact, the industrial supply of input and the demand for agricultural products was still unorganised, due to the presence of an important number of animal feed manufacturers, small processors, and local butchers who were operating below their capacity and without any sanitary standards. This was a serious obstacle against the development of agri-business, since an important part of the industrial capacity lay idle, as the 1969 report of the Royal Commission indicated. Therefore, there was a need to organise input and output industries. This need created a tendency toward industrial concentration.

B. Concentration of Input and Output Industries

In the capitalist economy, in general, the term "concentration" refers to an increase in the capital of an enterprise by the process of accumulation. Accumulation is a process of conversion of surplus into capital (Sweezy, 1970). According to Sweezy, when the market demand is saturated, it becomes difficult for many enterprises to enter or stay in production, as they face tough competition. Concentration is, therefore, accompanied by a process of centralisation of capital. Sweezy explained that

Centralisation... means the combination of
capitals which are already in existence...it only presupposes a change in the distribution of capital already to hand and functioning....Capital grows in one place to a huge mass in a single hand because it has in another place been lost by many."

Hence, industrial concentration necessarily leads to the concentration of input activities (manufacturing and supply) and the demand for farm products by a smaller number of firms.

In our study, we are concerned with two issues of industrial concentration in Quebec; namely, the concentration of the capacities of input supply and of output processing and its relation to agriculture. Therefore, we need not go into detail about how industrial concentration took place in Quebec.

On the input side, the most remarkable phenomenon in the context of concentration of input industries was that of animal feed manufacturers. This process started in the early sixties. The fact that the costs of animal feeds


6. In the case of other input products, multinational companies such as Ford, Massey-Ferguson, and International Harvester (for machinery and equipment), C.I.L. Industries (for chemicals and fertilizers), Esso and Shell (for fuel and oil) and their distributors, established control over the prices of their input products all over North America as a result of their monopoly of the fabrication and supply of those products. See Diane Lessard, 1976, Pp.31-32.
absorbed a major share of farm expenses in Quebec (see table 6), made this branch of production an important field for competition and industrial concentration. As a result, the number of feed mills declined from 327 in 1963 to 315 in 1966, and to 198 in 1977. By then, only three major entreprises retained almost 41% of the total number of the remaining feed mills. They were Canada Packers Ltd., with 50 feed mills; Nutribec, with 16; and Ralston Purina, with 15 mills. Consequently, these companies concentrated an important share of feed production and supply capacity.

On the output side, the concentration of processing industries was even more significant. In the case of the dairy industry, the process of concentration started much earlier than any other food industry. The number of dairy processing plants reached a peak of 1170 in 1943. Thereafter, the number declined rapidly. By 1965, only 452 plants were still in operation; 37.8% of which were processing almost 65% of the total milk produced in Quebec. The 1967 provincial regulations speeded up the process of concentration by forcing all processing firms in Quebec to modernise their plants according to the official sanitary standards. Thus, by 1976, only 127 dairy plants were still

in operation; 4 of them were processing 65.5% of the total Quebec milk produce.

In the case of livestock, there were two major categories of slaughtering and processing plants in Quebec in 1960: (a) those which were certified by the federal or provincial authorities (their number declined from 127 in 1960 to 46 in 1966 and 38 in 1976) and (b) those which were under no official control. This latter category was made of local butchers and small processors whose number declined from 900 in 1960 to 550 in 1966 and to 400 in 1976. They were the most affected by the 1967 provincial regulations concerning the modernisation of processing plants. The Royal Commission of Inquiry on the marketing situation of livestock and poultry encouraged that move by the official authorities on the ground that it would curtail the surplus of slaughtering and processing capacity, which the Commission estimated at more than 25% in 1966.

During this period, the capacity was being concentrated by a small number of enterprises. In 1966, 10 enterprises were slaughtering and processing 55% of the total livestock production in Quebec; by 1976, only 6 enterprises were able to handle between 70 and 80% of the total Quebec production

of livestock. In the case of poultry, there were 36 poultry slaughtering and processing plants in 1963. Their number declined to 32 in 1966; eight of the remaining enterprises were handling 67% of the total poultry produce in Quebec by then. In 1976, of the 22 enterprises that were left, only seven were capable of slaughtering and processing 86.5% of the total produce. 

From the above-mentioned, we can argue that the concentration of major input and output industries in general in Quebec led to (1) a decline in the number of enterprises, and (2) the concentration of the capacities of input supply and output processing by a small number of enterprises. We can also argue that, by 1966, an important phase of this process of industrial concentration was achieved.

The restructuring of agri-business industries necessitated not only their concentration but also the separation of the different operations of processing and slaughtering, that is, specialisation. In the dairy industry, for instance, there was a tendency to specialise in the processing of milk into butter, cheese, or

---

pasteurized milk. In the case of the meat industry, there was also a tendency to separate the slaughtering of cattle, sheep, hogs, and poultry. This specialisation in one single processing or slaughtering operation was made necessary by (1) the increase in the volume of farm shipments to the processing and slaughtering plants, (2) the growing differences among the technologies and techniques of processing and slaughtering (technical specialisation), and (3) the pressure of the official authorities in Quebec on those industries to modernise their plants and, hence, to avoid combining different operations in the same plant for sanitary reasons.

In relation to agriculture, the concentration of the capacities of input supply and output processing meant the concentration of industrial supply of input products and the demand for agricultural products. By concentrating their demand, processing industries achieved a better position when dealing with Quebec farmers, especially at a time when these farmers lacked an effective organisation for collective bargaining that would protect them from the abuses of processors and merchants concerning the marketing conditions. In his study, Morisset pointed to a case where a major processing company tended to impose its marketing terms on the farmers of its area simply because it was the only one left by industrial concentration in that area (Morisset, 1982:297-299). On the other hand, although
agricultural supply was increasing (see table 7), it was still unorganised. During the decade of the 50s and the early 60s, processors of farm products were facing major difficulties in collecting, transporting, warehousing, and classifying the products of thousands of relatively small and distant producers. According to the 1967 report of the Royal Commission, this was largely due to the irregularities of farm production concerning the quantity, quality, and frequency of farm shipments. In order to reach the processors, farm products had to go through different channels of marketing. This involved a wide variety of merchants and dealers, and which incurred important expenses 10.

Such a chaotic production and marketing situation made it necessary for both processors and farmers to create some form of organisation, although for different purposes. For the processors such a form of marketing organisation was badly needed in order to secure a continuing source of supply of farm products and to reduce the share of middlemen. But the organisation of agricultural supply was not foreseeable without changes in the conditions of production in Quebec farms which would make production more responsive to the needs of the development of agri-business industries. In order to bring about such changes in the

cases of livestock and poultry farming, suppliers and processors developed a form of organisation of their own: vertical integration.

At the same time, farmers were looking forward to a form of organisation of production and marketing which would give them a bargaining power in dealing with the agri-business industries. Eventually, this was manifested in various forms of syndicalism.

Thus, the period from 1955 to 1966 witnessed the simultaneous development of two antagonistic phenomena in Quebec agriculture: those of vertical integration and syndicalism. By the time agricultural syndicalism became established as a bargaining power in the late sixties, vertical integration, became the dominant form of organisation of the production and marketing of livestock and poultry.

C. Vertical Integration and its Implications

In general, vertical integration is a process of combination of two or more successive stages of production and/or distribution of an input or an agricultural product under the ownership and/or control of one enterprise (Tremblay and Anderson, 1968:208).
In Quebec, vertical integration developed mainly in relation to livestock and poultry production. It took two major forms.

1- Integration by acquisition. This is the case when, for instance, an integrator (an input supplier, a processor, or a merchant) purchases a farm and hires wage labour. This form of integration enables the integrator to engage directly in agricultural production.

2- Integration by contract. It consists of agreements between farmers and integrators which specify one or more conditions of supply, production, and/or marketing of a particular product.

Contract integration takes different forms according to the contract conditions. We may distinguish two main forms.

(a) The finance form. This is the case when an integrator undertakes to finance the operations of the farmer in return for the latter's commitment to a particular source of input and/or to a particular marketing agency or processor. (b) The complete form of contract integration. This is the case when the integrator supplies the farmer with feeds and animals in return for the latter's facilities and labour. In most cases, the integrator disposes of the output and exerts a partial or total control over the conditions of production. The integrator may, for instance, determine the quantity and the quality of farm produce and thereby tend to adjust the farm supply to the market demand. On the other
hand, the farmer usually gets a piecemeal remuneration on each grown and fattened animal or bird.

1. Integration in the case of poultry production

During the fifties, Quebec poultry farmers were facing two major problems: the lack of capital and the absence of any form of marketing organisation. The increasing demand for poultry products (which came at a time when Quebec farmers were able to supply only 45.7% of the consumer demand for poultry (see table 7)) encouraged poultry farmers to seek out sources of credit in order to expand their operations. According to the 1969 report of the Royal Commission of Inquiry on integration, although the Board of Quebec Agricultural Credit was giving loans, these loans were not sufficient enough to cover all farmers and all kinds of production.

Therefore, poultry farmers turned for finance to animal feed manufacturers and suppliers as well as to poultry processors. Since feeds absorbed almost 80% of the poultry farming expenses in general, feed manufacturers and suppliers were, naturally, the major source of credit and,

-----

thus, constituted the majority of integrators.

On the other hand, as poultry farmers were seeking a source of credit, feed manufacturers, and suppliers and processors were also interested in a secure outlet for their feed produce and in a source of poultry supply.

In 1963, an average of 53% of the total poultry production in Quebec became integrated. The rate of integration varied from one branch of poultry to another. It ranged from 97% in the case of grill chicken down to 16% in the case of big turkeys (see table 8). By 1966, the average rate of integration for all poultry branches went up to 60%; 74% of the integrated production was in the complete form, and almost 70% of the complete form contracts were made primarily for finance reasons (see table 9). In other words, in most cases of integration the integrators did not only supply the farmers with feeds and/or birds but financed the farm installations as well. The rate of integration went up to 64% in 1978. However, by then, integration was taking place under different conditions as we will see in the next chapter.

2. Integration in the case of livestock production

In Quebec livestock production, integration developed mainly with respect to pork production and for the same
reasons we mentioned earlier in the case of poultry. By 1966, almost 70% of the pork production became integrated; 53.7% of this integrated part of the production was in the form of finance contracts, 33.5% in the form of complete integration, 11.2% in the form of integration by acquisition, and 1.6% in the form of management contracts. 

Once again, feed manufacturers and their distributors retained a major share of the integration contracts (see table 10). By 1980, at least 77% of the pork production became integrated; 82% of this integrated production was contracted by feed manufacturers and suppliers. By then, 60.5% of the integrated production was in the form of complete integration, 26.7% in the form of integration by acquisition, and the remaining 12.8% in the form of finance contracts (Perreault, 1982:115-129).

In a survey that was conducted on the contracts of integration in the cases of pork and poultry, the Royal Commission of Inquiry (1969) concluded that most of those contracts entailed the following terms:

- the farmer, who contracted his production to an

12. Rapport de la Commission Royale d'Enquête, "l'intégration au Québec", 1969, Pp.33-63. In the management form of contractual integration, the integrator participates directly in the management of the integrated farm, in addition to financing its operations. This form of contractual integration disappeared by the mid-seventies.
integrator, was to pay for the losses resulting from epidemics and accidents, even when animals or birds were the property of the integrator;

b- in instances where losses were insured, the farmer was charged with a prime rate;

c- the farmer's remuneration was based on market prices, and the mode of payment was determined by the integrator. This meant an unstable revenue to the farmer since market prices were fluctuating;

d- very often, in the contracts of integration, the quantity and quality and costs of input products and services supplied by the integrator were not specified. The farmer could not, therefore, adjust the costs of production to his revenues from the sales of farm products;

e- the farmer was obliged to accept new shipments of animals or birds on his farm from the integrator without being able to re-negotiate the contract terms;

f- the terms of most of the contracts were written in such a way as to give the integrator enough room for manoeuvring in the case of a conflict with the farmer;

g- the integrator reserved the right to delay the marketing of the farmer's products until the retail prices improved. On the other hand, the improvement in the retail prices seldom affected the farm prices; and

h- the farmer was not free to conclude any other contract with any other party while the original contract
was still in operation\(^{13}\).

It is clear that the terms of most of the contracts indicated that vertical integration was in favour of the integrators. Although livestock and poultry farmers obtained some short-term advantages from vertical integration, such as those we mentioned in table 9, the disadvantages were far more serious in the long run. Both the report of the Royal Commission (1969) and the study of Perreault (1982) indicated that contract integration, particularly the complete form, reduced the autonomy of the farmers as well as their bargaining power regarding input purchases and output sales. Even when the farmer was able to keep a relative economic autonomy vis-à-vis the integrator, he had to relinquish, in part or whole, decision-making concerning the process of production and utilization of products to the integrator. This, in fact, meant that the farmer was no longer free to increase, reduce, or sell his livestock or birds without the approval of the integrator.

By vertical integration, integrators were, therefore, able to adjust the conditions of farm production (in terms of the quantity, quality, and flow of products) to the

requirement of agri-business development. Such adjustment necessitated the restructuring of agricultural, industrial, and commercial activities into one sector of agri-business activities (see figure 8). In this sector, the activity of agricultural production became an important outlet for input industries and a source of supply of "raw material" to output ones. The adaptation of livestock and poultry productions to the requirements of agri-business development necessitated, therefore, major changes in these productions, and in Quebec agriculture in general.

D. Implications of Agri-business Development for Quebec Agriculture: 1939-1966

In general, during the 1939-1966 phase of agri-business development, the traditional type of farming in Quebec was gradually replaced by commercial farming. By 1966, farmers sold almost 94% of the milk, 95% of the pork, and 99% of the poultry they produced (see tables 2,3,&4). This transition from traditional to commercial farming was accompanied by a 52% decline in the number of farms from 1941 to 1966. By then, most of the remaining farms abandoned input and output activities, and confined their activity to pure production.

Although there was a tendency in the early sixties toward specialisation in one major production operation
(dairy, livestock, poultry, or crop), an important percentage of Quebec farms were still combining different kinds of production. For example, in 1966, 20.5% of the dairy cattle in Quebec was still raised in farms which tended to specialize in livestock, poultry, or crop production, that is, those which were making 51% or more of their agricultural revenues from the sales of one or the other kind of products (see table 11). In the case of livestock farms, 46% of them were still raising dairy cattle in 1966 (see table 12); whereas in the case of poultry, 59.8% of the farms still had dairy cows. Again, in poultry production (tables 11&12), 25.5% of the poultry birds in Quebec were placed in 37.5% of dairy farms and 21.2% of livestock farms. In the case of pork production, 42.5% of the hogs in Quebec were raised in 38.3% of dairy farms and 21.4% of poultry farms.

In comparison to 1961, we can make the following observations. Firstly, there was a decline in the percentage of farms combining other productions to their major production. In 1961, for instance, 53.5 and 56.8% of the dairy farms were raising hogs and poultry, respectively; in 1966, only 38.3% and 37.5% of the dairy farms were still combining pork and poultry, respectively, to their major dairy operation. The same can be said in the case of livestock and poultry farms.
Secondly, the decline was accompanied by the concentration of dairy cattle, hogs, and birds by dairy, livestock, and poultry farms, respectively. In 1966, dairy farms contained 79.5% of the dairy cattle in Quebec in comparison to 75.9% in 1961. In the case of livestock (pork) farms, they retained 57.5% of the hogs in 1966 in comparison to 37.4% in 1961. In the case of poultry, 74.5% of the poultry birds in Quebec were placed in poultry farms in 1966 in comparison to 59.2% in 1961.

In general, we can argue that during the sixties Quebec agriculture was entering a new phase of development: that of commercial mono-production (i.e., of farms specialised in one kind of production and oriented toward the market). This was, in fact, an indication of the beginning of a division of labour within agriculture.

The postwar changes in Quebec agriculture consisted of two major processes of division of labour. The first one occurred between agriculture and industry and was almost completed by 1966. We already discussed the process of this division of labour. The second one started within agriculture in the early sixties. We also discussed this second process in the preceding section. In this chapter, we will deal with the first division of labour in relation to Quebec farms in general and livestock and poultry producers in particular.
The separation of activities of input and output from Quebec farms meant a loss of activities to the farmers and, thereby, a loss of the possibility to create value by the use of family labour. Much of this labour was, therefore, no longer needed on the farms. Hence, the postwar period witnessed a decline in the percentage of unpaid family labour to total farm labour used by Quebec farms in general, including livestock and poultry farms (see table 13).

As table 13 illustrates, unpaid family labour declined by 83% between 1941 and 1966. That decline was accompanied by a relatively insignificant increase in the use of wage labour and by a 44% increase in the use of farmers' own labour which became the major source of farm labour. Farm operators were intensifying their own labour to make ends meet; thereby, they tended to avoid introducing wage labour in their farms, for this would have raised their costs of production and, consequently, reduced their net revenues.

Furthermore, by reducing their activity to pure production, Quebec farmers lost direct access to consumer markets and, thereby, to retail prices. As a result, the relation of exchange between them and the consumers was severed because they were no longer producing finished products.

According to the 1967 report of the Royal Commission,
such a loss of access to retail prices had a negative impact on farm prices: the more agents and activities were involved between farmers and consumers, the greater became the margin between farm and retail prices. According to the report, the reason was that farm prices were no longer determined by free competition and supply and demand interplay but by the agri-business agents involved between farmers and consumers. Thus, the period from 1949 to 1964 witnessed a decline of 29.4% in the rate of farm to retail prices in general, and a simultaneous increase of 195% in farm expenses.

In the case of pork, for instance, the margin between farm and retail prices was 50.05 cents in 1961 (see table 14). By 1965, this margin increased to 64.75 cents, a difference of 29%. Meanwhile, since farm prices of pork increased by 11.2% during that period, those of animal feeds, which absorbed a major share of pork farming expenses, increased by 17%. Hence, the prices paid to pork producers were increasing at a much slower rate than those paid to feed suppliers, processors, and retail distributors. The same thing can be said in the case of poultry as we will see in the next chapter.

Pork and poultry producers were, therefore, going

through a cost-price squeeze situation. As Lessard (1976) and Morisset (1982) indicated, that situation was generalized to all Quebec agriculture by the mid-sixties.

As a result of this cost-price squeeze situation, the share of Quebec farmers in each revenue dollar resulting from the sale of agricultural products to final consumers declined. In 1949, farmers retained almost 30% of each revenue dollar. The remaining 70% went to output industries (41.5%) and input manufacturers and suppliers (28.5%). By 1961, the share of Quebec farmers declined to 18.7% and that of input industries to 22.6%. Whereas, the share of output industries increased to 59.3%.15

The decline in the share of farmers in the revenue resulting from the retail sales of agricultural products helps explain the decline in the rate of the farm net income to the cash income by 49.1% from 1946 to 1966 (see table 15). Such a decline, according to Lessard (1976) and Morisset (1982), forced a great number of farmers out of production.

In the case of pork production (see table 16), the number of farms raising hogs declined by almost 65% from

15. Ibid., 1967, Pp. 72-73.
1951 to 1966. By then, only 15.8% of the 30,683 farms which were still raising pork retained 50% of the total hogs in Quebec. These farms were characterized by the tendency toward large-scale production and specialisation in pork production.

In the case of poultry (see table 17), the number of farms raising birds declined by almost 64% from 1951 to 1966. Furthermore, that decline was accompanied by the concentration of 66.7% of the total poultry birds in Quebec on only 4.7% commercial, large scale, specialised farms.

In sum, we can argue that the major postwar changes that took place in agriculture in general and in livestock and poultry productions in particular were: (1) the transition from traditional to commercial farming; (2) the decline in the number of farms; and (3) the tendency of the remaining farms to (a) abandon input and output activities, (b) enlarge their scale of production by retaining a major share of the livestock and poultry, and (c) specialise in one major production operation. The 94% of the commercial farms which were in operation in 1966, and which were still organised along the family form of production, managed to accommodate their conditions of production and utilisation of products to the requirements of agri-business development. This accommodation necessitated a decline in immediate consumption, an increase in the commercialised
part of farm production and, consequently, changes in the allocation of cash income: an increasing share of that income was allocated for the purpose of enlarging the scale of production.

In spite of these changes, the tendency toward production on larger scale did not affect the relationship that prevailed until 1966 between family and production units. Family units were still the major source of farm labour and, despite a change in the allocation of cash income, family farmers were still using the realized income (in kind and cash) mainly for the satisfaction of the needs of their family units. This relationship between family and production units persisted until 1966 because it remained consistent with the commercial orientation of farm production. Bernier (1980) considered labour-intensive farming and under-consumption to be the major aspects of such adaptation. However, the extent of this adaptation to the upcoming changes was put in question, especially in the continuing absence of an effective form of organization of production and marketing that would help them adapt further. The Royal Commission of Inquiry voiced that concern in its 1969 report on vertical integration when it recommended the following:

a) That the Quebec government encourage pork and poultry producers to form their own boards which would enable them to negotiate collectively for
the terms of marketing with agri-business industries;
- establish a system of prices of input and output products, in order to prevent any monopoly over the prices;
- increase and ameliorate the conditions of its loans to farmers; as well as the technical, administrative, hygienic, insurance, and information services;
- revise the orientation of the pork industry which favoured the division of labour between the stages of breeding, nursing, and fattening so as to encourage fattening farmers to nurse the piglets themselves; and

b) that agri-business industries
- make a major part of their purchases, particularly in the case of poultry, in the province of Quebec, instead of importing from the other Canadian provinces and the U.S.;
- assume an equitable share of the costs of production with the producers;
- replace piecemeal payment by a fixed remuneration adjusted to the costs of marketing the farm products; and
- adopt the mode of written contracts where the role and responsibility of each party would be specified, instead of verbal and unclear agreements and contracts.

The Royal Commission did not, therefore, suggest the abolition of vertical integration, since the latter proved to be an effective means to adjust farm production to market demand. This was especially at the time when the supply of poultry and pork products was closing the gap with the
consumer demand as we saw earlier in table 7. Instead, the Royal Commission asked the official authorities to play an active role in the organisation of farm production and marketing.

In fact, the Quebec government had already passed an act in 1964 (the Agricultural Marketing Act) which provided for a form of marketing of agricultural products: the joint plans. This Act was the result of more than one decade of lobbying by the Union Catholique des Cultivateurs (U.C.C.). The Act stipulated that only producers who would organise into specialised federations, syndicates, or boards were entitled to a joint plan, on the condition that the latter would be adopted by the majority of votes of each federation or syndicate.

A joint plan, in general, consists of a set of regulations which organize the production and marketing of agricultural products on the basis of quotas. The latter determine, among other issues, the quantity and the quality of the product a farmer is entitled to produce and sell. Through its organism, the Agricultural Marketing Board, the Quebec Ministry of Agriculture was charged with the responsibility of supervising the implementation of the joint plan regulations, along with the federations and syndicates of producers.
In general, the joint plan was planned in such a way as to give Quebec producers a bargaining ground in dealing with agri-business industries in terms of the quantity, quality, and most importantly, the prices of both input and farm products. In other words, the joint plan regulations were aimed at putting an end to the abuses of vertical integration.

On the other hand, input suppliers and processors started also to organise into boards of their own to face the mounting wave of syndicalism in agriculture. Hence, the 1966-1981 phase of agri-business development was characterised by a confrontation between agri-business capital, on the one hand, and farmers who started to organize into federations, on the other. The theme of our next chapter is therefore to see how agri-business capital articulated with the joint plan of poultry production, and the kind of relationship that developed consequently between that capital and poultry farmers.
CHAPTER IV


A. A Brief Review Of Poultry Production in Quebec

Until 1950 poultry production in Quebec was still considered to be a marginal operation in comparison to other animal productions. Moreover, poultry meat was still a by-product of the production of eggs. However, since then, the demand for poultry meat increased considerably as it became a relatively cheap substitute for cattle meat. Quebec farmers developed an interest in that production, and it soon came to occupy a third place in agriculture after dairy and pork production (see table 18).

On the other hand, agri-business industries also developed an interest in poultry production because it was best suited to vertical integration since (1) its cycle was shorter in comparison to other meat productions, (2) it was more adaptable to industrial methods of production and, thereby, to the penetration of industrial capital, and (3)
there was enough demand to encourage its expansion. Thus, as we saw earlier in the last chapter, vertical integration developed the most and the fastest in poultry and mainly with respect to the production of grill chicken.

Poultry production went through major changes in the last three decades. The volume of production increased considerably, and production became the specialty of a smaller number of farms. In 1951, 67% of Quebec farms were raising poultry (see table 17). By 1966, 40% still had poultry and the percentage went down to only 15% in 1981.

Along with these changes, there was a process of complete separation among poultry branches. Poultry production became divided into three main branches, each requiring different technologies and techniques of production; namely, the production of eggs for hatching or consumption, the production of chicken and turkey, and the production of other kinds of birds. Among those branches, the production of grill chicken and turkey made up 75% of the total poultry revenues, of which 83% came from the sales of grill chicken alone¹.

---

B. The Implementation of Joint Plans in Poultry Production

From 1964—the date when the Agricultural Marketing Act was introduced—to 1967, almost 61 joint plans came into operation throughout the province of Quebec (see table 19). In the case of poultry, egg producers were the first to adopt a joint plan. The most likely reasons were: (1) the rate of integration of egg production was weaker (35%) in comparison to poultry meat branches (i.e., the rate of penetration of agri-business capital was less significant), and (2) integration was mainly in the form of contracts between independent parties: egg farmers and feed suppliers. In many cases, egg farmers would arrange with integrators only for feed supply yet maintain control over the marketing of the eggs. As a result, egg farmers who were organised into a federation faced no major difficulties in voting for a joint plan in 1966.

In the case of poultry meat, the voting for such a plan came almost five years later (in 1971). In order to understand the reason for this delay, it is important to consider the 1971 situation of poultry meat farming. In 1971, among the 16,670 farms that were still raising poultry, 7.9% retained 82.7% of the total number of birds.

and realised 51% or more of their revenues from these poultry sales (see table 20). Almost 93% of these commercially-specialised poultry farms had contracted their production to integrators, in one form or another. The remaining 7% of these farms were owned by companies and societies, by acquisition (see tables 20 and 21). Thus, integrators (supply and/or processing companies) managed, by 1971, to control an important share of poultry production in Quebec, by contract or by acquisition (i.e., by engaging directly in farming).

Since these specialised farmers made up the majority of the members of the poultry meat federation, integrators had, therefore, an important influence on the decision-making process in the federation at the time the voting occurred. Naturally, in such circumstances, the implementation of the plan in the poultry meat production was not to threaten the interests of agri-business capital, the plan rather came to favour these interests as we will demonstrate in the following sections.

The 1971 joint plan: its objectives and regulations

As it was in the case of egg production, the major objectives of the poultry meat plan were: (a) to obtain the most advantageous marketing conditions for the farmers, (b) to find new markets, (c) to regulate the production by means
of quotas, (d) to regulate the marketing of farm products by the means of collective agreements with agri-business industries, and (e) to cooperate with any national or provincial organisations for the marketing of poultry products within and outside the province of Quebec.

The Federation of Poultry Producers was entitled accordingly to conclude any agreements or contracts and to negotiate the conditions of marketing with the buyers. One of the most important functions of the Federation was to organise poultry production in accordance with the requirements of regional, provincial, national, and international markets. In order to do that, the Federation was entitled to allocate poultry meat production on the basis of quotas.

Among the important quota regulations we may distinguish the following:
1- All poultry farmers had to hold a quota (provision 2);
2- all poultry farmers, who were currently active, were eligible to obtain a quota. Once a producer ceased definitely to produce, his quota was to be annulled (provisions 3, 4, 45);
3- the size of a quota allocated to each farmer was to be

3. The Quebec Official Gazette, March 19, 1966 (joint plan of egg production); and February 13, 1971 (joint plan of poultry meat production).
fixed proportionally to the size of his poultry farm in terms of square feet (provisions 6, 7, & 9);

4- quota holders were allowed to transfer their quota, in whole or in part, according to the following conditions:

(a) If the holder is the owner, the quota must be transferred with the poultry farm;
(b) If the holder is the owner of more than one chicken house, the quota may be transferred in part if the corresponding chicken houses are transferred at the same time;
(c) If the holder is a lessee, the quota may be transferred to another person provided he continues to raise poultry in the same poultry-farm;
(d) No transfer of quota may have the effect of giving to poultry-farmer the possibility of cumulating quotas for an area superior to 100,000 square feet, for all the productions;
(e) In the case of a complete transfer of the poultry-farm to a new poultry-farmer, the quota may be transferred in whole even if it is superior to 100,000 square feet.4

5- the transfer of a quota between a seller and a buyer must be made through and by the approval of the Federation of Poultry Producers.

In sum, the 1971 joint plan of poultry established poultry meat production on a quota basis and in proportion to the farm size. Most importantly, the plan tied the transfer of quotas from one person to another to the transfer of farm property on which the poultry was raised.

--------
4.Ibid., the 1971 joint plan, provision 16.
C. Articulation of Agri-business Capital with the Joint Plan of Poultry Meat Production

The joint plan of poultry meat production came at a time when more than 41% of the agri-business integrators had their own poultry farms\(^5\). They, therefore, automatically acquired quotas, since they were considered to be producers according to Provision "1" of the quota regulations. This provision defined a poultry producer as "any producer who raises, in a poultry farm of which he is the owner or the lessee, one or many of the productions on his own or somebody else's account." A year later, in June 1972, the quota regulations were amended in order to prevent any society or corporation owning 75000 square feet quota or their shareholders from acquiring additional quotas by the means of quota transfer\(^6\).

Meanwhile, poultry farming in Quebec was going through a serious crisis of surpluses. The latter accumulated as a result of two factors. First, there was an absolute increase in the farm supply over the consumer demand. For example, the degree of self-sufficiency in poultry meat reached 106.8% in 1971 (see table 7). Second, poultry


\(^6\) The Quebec Official Gazette, June 30, 1972.
importations from the other provinces and the United States reached high levels. In fact, until 1972, there was no national quota of poultry production and marketing which would regulate interprovincial exchanges, nor were there measures against importations from the United States. Consequently, the accumulation of poultry meat surpluses and the absence of any federal organism which would buy those surpluses affected farm prices badly (see table 22).

As table 22 shows, farm prices declined between 1966 and 1973. The same trend was observed by Proulx and St-louis (1980) in the cases of eggs and turkey. However, the latter's farm prices were stabilized thereafter, as a result of the implementation of national joint plans in 1972 and 1973 respectively, and the imposition of quotas on importations (Proulx and St-louis, 1980:67-68). In the case of grill chicken, such a national plan was obtained only in 1978.

Meanwhile, in order to stabilize the grill chicken prices apart from negotiating a bilateral agreement with Ontario, the provincial authorities of Quebec amended the quota regulations again in 1973. They introduced new measures which were aimed at reducing the volume of production and, most importantly, at restricting the
transfer of quotas. Those measures could not, however, help stop the volume of Quebec poultry meat from increasing the following year, as Table 22 shows.

The Federation of Poultry Producers had, therefore, to reduce the number of quotas in 1974, and amended the quota regulations in order to permit the free transfer of quotas. The new provision concerning the quota transfer read as follows: "the holder of a total quota may transfer it in whole or in part, with or without the poultry farm which corresponds thereto." These measures brought about major changes in the poultry farming situation. Firstly, the total volume of poultry meat production was cut down sharply by 17.5% in only one year, from 1974 to 1975. Although the volume of production picked up thereafter, it was not until 1979 that it reached a higher level than that of 1974.

This increase came after two important accomplishments: (a) the creation of a national joint plan in 1978 which brought in a federal agency (the Canadian Poultry Marketing Board), and (b) the relative stabilization of farm prices. Thus, as we notice in Table 22, farm prices reached a higher percentage in 1973 than in 1966. From that point, farm prices increased steadily, though with a slight drop in

8. Ibid., July 23, 1974, provision 40.
1977.

Secondly, the change in the volume of poultry production reflected a similar trend in the quota situation. The total size of poultry meat quotas was cut down, though slightly, in 1975. Although it picked up later it never reached the 1974 level until 1980 (see table 23). In the case of grill chicken, the total size of quotas increased steadily in both absolute and relative terms, particularly from 1974 to 1980. This was due to an increase in the movement of quota transfer among poultry meat branches, as the Federation stopped issuing new quotas and permitted the freedom of transfer for the existing ones.

Thirdly, the most important change in the poultry farming situation which followed from the 1974 amendment of the quota regulations was the concentration of production quotas.

Concentration of poultry meat quotas

Since no new quotas were issued, the existing ones tended to acquire a market value, especially because their transfer was no longer tied to the farm property. In 1978, the market value of a grill chicken quota reached $6.25 per bird in Quebec, and 25 to 40 cents per square foot in terms
of rent. In 1979, the cost of purchasing a quota of 40,000 grill chicken amounted to $300,000. Consequently, quota purchases, either for the reason of entering in or expanding production, became a privilege and an opportunity to large scale producers, feed manufacturers and suppliers, and processors who were already engaged in production. In 1978, 36.5% of grill chicken quotas were owned by integrators such as private feed mills (18%), cooperatives (7.2%), private slaughter houses (5.8%), hatcheries (3.3%), and others (1.9%). These integrators managed also to control 27.3% of the remaining quotas by the means of contract integration with poultry farmers.

This process of concentration of poultry quotas reflected, in fact, a change in the distribution of quotas in Quebec farms. In 1974, only 8.8% of grill chicken farmers held a quota of more than 50,000 square feet and held 33.1% of the quotas (see table 21). In 1980, that category of farmers concentrated 46% of the total grill chicken quotas and made up 16.6% of the remaining farmers. This indicates a tendency among poultry farmers to enlarge the scale of production by acquiring additional quotas.

11. Ibid., 1979, pp. 60-61.
The concentration of the grill chicken quotas by large-scale producers was accelerated by the continuing process of industrial concentration. In 1976, only 7 of the 22 remaining poultry slaughtering and processing enterprises were handling 86.5% of the total farm production of poultry meat in Quebec. All these enterprises were still practicing integration in one form or the other, directly or indirectly through their local merchants. Moreover, they adapted contract integration to the new quota situation: integrators were not only financing the purchases of feeds, birds, and/or installations but the quota purchases as well.

According to the report of the Canadian Federation of Agriculture, many producers of grill chicken, whose quotas were registered under their own name were financed by feed suppliers and/or processors. Such contract integration, the Federation explained: "placed them [the farmers] in a position of dependency vis-à-vis the latter [the integrators]." 12

In sum, the 1966-1981 phase of development of agri-business with respect to poultry meat production was characterized by a general increase in the rate of integration from 60% of the total poultry meat production to

---

63.8%, and by a decline in the share of contract integration in favour of integration by acquisition. In 1966, integrators (companies and cooperatives) produced less than 24% of the integrated poultry in their own farms; by 1978, this share increased to 57%. This means that integrators were inclined toward engaging directly in the activity of actual production by acquiring poultry quotas.

The process of articulation of agri-business capital with the joint plan of poultry meat farming was characterized by the tendency by agri-business capital to concentrate a major share of the production, directly by acquiring quotas or indirectly by contracting the production of an important percentage of poultry farmers. The question we face at this point is, "What were the implications of such a process of articulation for agri-business development in general and poultry producers in particular?"

D. Implications of the Process of Articulation for Agri-business and Poultry Farmers

Many of the trends that started earlier in the first phase of development of agri-business continued to grow in the 1966-1981 phase. Thus, as table 4 illustrates, the commercial orientation of poultry production continued to grow throughout the seventies. By 1981, poultry farmers
sold almost their total production. Moreover, the number of farms raising poultry also continued to decline from 31,908 in 1966 to 9,063 in 1976: a decline of 61.6% (see table 20). Only 12.2% (1,103) of the remaining farms were commercially oriented in 1976; and 90.3% of these commercial farms became specialised in poultry production.

These commercially oriented and specialised poultry farms managed until 1976 to retain 83.2% of the total poultry birds in Quebec. This was an indication of the continuity of two major trends: specialisation and concentration of poultry production. If we compare the 1966 and 1976 years in tables 12 and 26, we can see that the number of farms which were combining dairy, cattle or livestock with their major poultry operation declined respectively from 59.8% and 21.4% of the total number of commercial poultry farms in 1966 to 23.4% and 10.3% in 1976. The same trend is observed in the cases of dairy and livestock farms.

By comparing tables 11 and 25, we find that 25.5% of the poultry birds were raised on non-poultry farms in 1966; these farms retained only 11.9% of the total number of birds in Quebec in 1976, and the remaining 88.1% of the birds were raised on commercial poultry farms. This indicates that there was a tendency among Quebec farmers to specialise in one production operation while gradually dropping the other.
operations. Therefore, a division of labour was taking place within Quebec agriculture during the 1966-1981 phase.

This division of labour did not stop at a separation of dairy, pork, poultry and crop producers; it continued within each of these productions. Poultry producers tended to specialise in one branch of that production: hatching, consumer eggs, or poultry meat. This is what Morisset (1982) considered to be a process of "complete specialisation".

With such a division of labour within agriculture, the agri-business sector entered a new phase of development: that of specialised channels of agri-business activities. Poultry farmers became an integral part of an agro-industrial-commercial channel of activities specialised in poultry products (see figure 9). The structuring of agri-business activities along such a specialised channel necessitated, therefore, two major processes of division of labour. In the preceding chapter, we discussed the impact of the first division of labour (between agriculture and industry) on Quebec farms in general and livestock and poultry farmers in particular. In this chapter, we will examine the implications of the second division of labour (within agriculture) for poultry meat producers.

Previously, by combining different production
operations on Quebec farms, farmers were able to compensate any loss in one product by their profits from the other products. With specialisation in one product, the possibility of equalizing losses with profits was gradually eliminated. Farmers had, therefore, to depend on one source of revenue. Moreover, since they lost direct access to consumer markets as a result of their specialisation in the production of semi-finished products, they became totally dependent on merchants and processors for the sale of their produce. Contractual integration became the only means for poultry producers to overcome the effects of both processes of specialisation in one single activity and one single product. As a result, the development of a relationship of dependency between poultry farmers and integrators has been one of the major consequences of the development of a channel of agri-business activities specialised in poultry products during the 1966-1981 phase. In his study in the case of pork, Perreault (1982) also indicated the development of such a relationship of dependency between pork producers and integrators (Perreault, 1982: 126-127).

With dependency on feed suppliers and processors, poultry farmers had no ground for bargaining, particularly because the quota situation was not in their favour as we discussed earlier. Their farm prices continued, therefore, to decline vis-a-vis wholesale and retail prices during the seventies (see table 27). In 1971, the margin between farm
and wholesale prices stood at 19.8 cents a kilogram. This margin increased to 52 cents/kg over a period of seven years (i.e., by 162%).

In comparison to retail prices, the margin between farm and retail prices increased from 52.5 cents/kg in 1974 to 56.6% cents/kg in 1978 (i.e., by 7.8%). On the other hand, in 1978, the costs of producing one kilogram of grill chicken absorbed 65.02% of each revenue dollar resulting from the farm sale of that kilogram: animal feeds alone absorbed 40.36%, chicks 12.54%, installations 5.79%, heating 3.38%, and other supplies 2.95% of each revenue dollar. Grill chicken farmer was, therefore, left with a gross margin of 34.98% of each revenue dollar, and part of this gross margin was to cover other expenses incurred by losses in stock, repairs, taxes, wage labour, and interest.

It is important to mention at this point that by 1978 more than 70% of poultry farmers were indebted and that almost 50% were employing wage labour (see table 28).

From what we have just presented, we can argue that the cost-price squeeze situation continued throughout the second phase of agri-business development.

---

Until 1966, poultry farmers had managed to avoid employing or increasing wage labour on their farms by intensifying their own labour. That trend was reversed in the second phase: more farms tended to employ wage labour. The question is, therefore, "What kind of changes led to an increase in the number of farms using wage labour in the second phase?"

If we examine table 24, we realize that there was a tendency among poultry farmers to enlarge their scale of production. In 1974, 21.2% of poultry producers had quotas of more than 30000 square feet and held 55.7% of the total poultry quotas. By 1980, this category of farmers increased to 32.6% of the total poultry farmers and retained 67.8% of the total quotas. Meanwhile, the average quota size per farm increased by 34.6%. This means that a large percentage of poultry farmers tended to enlarge the scale of their units of production to the point where these units became inconsistent with the size of the corresponding family units. In his study, Morisset (1982) indicated that according to the family form of organization, the family unit tends to adapt the unit of production to its size and to the availability of family labour (Morisset, 1982:512). Hence, according to him, any enlargement of the scale of production beyond these limits of the family unit would necessitate a change in the relationship between the unit of production and the corresponding family unit, that is, the
separation between farm capital and farm labour. "The traditional form of property [meaning the family form]," Morisset explained, "enters more and more in contradiction with the necessities of enlarged reproduction, thereby producing a new form of property." (Morisset, 1982: 514).

In our case, this new form of organisation was the company or society. In 1981, 17.2% of Quebec poultry farms were constituted in the form of companies and societies (see table 21). A major number of these companies and societies were initiated by feed suppliers and poultry processors who engaged in poultry production by acquiring quotas, as we noted earlier. This new form of organisation was based on large-scale and specialised production, and on the use of wage labour. Hence, the emergence of this new form of organization introduced a new type of production unit in poultry: that of the industrial-capitalist type.

This type of unit did not emerge from within agriculture, that is, from the conditions of family farming, but as a result of the direct engagement of agri-business capital in poultry production. Furthermore, the development of industrial-capitalist type units had major implications for family farming. In the case of poultry, it produced two categories of family farmers.

Firstly, there are those farmers who tended to model
their farm organisation on the industrial-type units; they enlarged their scale of production, tended to specialise in poultry, and employed wage labour. This category of farmers made up 42.4% of all family farmers who were engaged in poultry farming in 1981. They tended to adapt the conditions of production and their utilization of products to the needs of agri-business capital.

Although they managed to transform their units of production into industrial-type units, their dependency on agri-business capital prevented them from becoming capitalist. These farmers stand as entrepreneurs in relation to their own units of production and as labourers in relation to agri-business capital. In this case, the lack of access to wholesale prices (on the input side) and retail prices (on the output side) appears to be a major obstacle to the development of capitalist farming within agriculture. In fact, the tendency of this category of farmers to enlarge their scale and employ wage labour is, in major part, explained as a means to counter or mitigate the effects of dependency (Bernier, 1980).

Secondly, there were those family farmers who maintained relatively the same scale of production and who still relied heavily on family labour. They made up 57.6% of all family farms engaged in poultry, and 47.9% of all poultry farms in 1981. Instead of enlarging their scale and
employing wage labour, this category of farmer tended to mitigate the effects of dependency by intensifying their family labour. The development of capitalist farming in poultry reduced this category of farmer to the status of "piecemeal labourers" in relation to agri-business capital.

It is apparent from the discussion above that the second phase of agri-business development in poultry production created a major challenge to the survival of family farms in this branch of farming. The importance of the challenge may be inferred from the measures introduced by the Quebec government regarding the quota regulations in September 1978. Among these measures, we can identify the following:

58. No one can acquire a quota issued by the Federation [of poultry producers] but the agricultural producer, the society or the corporation which is, in major part, controlled by one or several agricultural producers:
   i) who is or are proprietor(s) or tenant(s) of the farm;
   ii) who, in majority, draw their revenues mainly from the farm;
   iii) whom everyone's or one's immediate family work mainly on the farm.14

These measures came too late. This situation was acknowledged by a commentary of the Federation of Canadian Agriculture: "However, a regulation such as the one of Quebec [meaning the one we mentioned above] can only slow

down but not eliminate vertical integration. 15

In this chapter, we have identified two major trends which occurred in poultry farming in connection with the 1966-1981 period of agri-business development. The first one is the development of a capital/labour relationship between agri-business capital and poultry farmers in general. This relationship is characterized by vertical integration, specialisation, dependency and the appropriation of agricultural surplus produce by means of the cost-price squeeze. The second trend is the development of capitalist farming in poultry. This development is the result of the direct engagement of agri-business capital in the activity of production.

Having outlined in chapters III and IV the trends that took place in Quebec agriculture in general and poultry production in particular from 1939 to 1981, our task, in the next two chapters, consists of comparing these trends to those of Vienney's model, and of outlining our answers to the questions we raised in the introduction.

---

15 Federation Canadienne de l'Agriculture, "Analyse", 1979, p.44.
CHAPTER V

ANALYSIS OF THE FINDINGS

A. Similarities and Differences with the Model of Vienney

Before we underline the similarities and differences between our findings and those of Vienney, it is important to establish a comparison between what Vienney considered as "subsistence" farming and what we defined as traditional farming. With respect to the conditions of production, both types of farming combined different activities and products and used family labour as the major source of farm labour. Concerning the utilisation of products, both types showed the same pattern of reproduction of family units (see figures 3 and 7), and of the renewal of the material conditions of production units, that is, purchases of primary materials and equipment. In both cases, production and utilisation of products were aimed primarily at satisfying the needs of the family farm (immediate consumption and consumption of purchased goods). Hence, in both conditions of farming, there was no tendency toward capital accumulation and, consequently, toward large-scale production (Vienney, 1980:105; and our introduction of
chapter III). In sum, we can argue that what Vienney meant by subsistence farming is similar to our traditional type:

Having established a similarity between the two types of farming that existed in both cases before 1939, our task is, henceforth, to compare the trends of changes those two types went through in the process of their adaptation to the requirements of agri-business development. But before we do that, it is necessary to compare, in both cases, the trends that characterized the formation and transformation of agri-business activities.

1. Formation of an agri-business sector

We have seen in Vienney's case that agri-business activities developed as a result of a process of restructuring farm and rural activities in general. It consisted of the transfer of input and output activities from farms to urban industrial units of production. The same process took place in our case, as we discussed in chapter III. We considered this process as a division of labour between industry and agriculture. In both cases of study, such restructuring of farm and rural activities led to the formation of a sector of agri-business activities. The development of such a sector ended the relative autonomy of the agricultural sector and assigned a new role to it: that of a supplier of raw material to output industries.
(figures 4 and 8).

Hence, we can argue that in comparison to the first trend of Vienney's model, we observe the same trend of change in farm and rural activities and the same process of formation of an agri-business sector.

2. Development of specialised channels of agri-business

Vienney attributed the development of channels of agri-business activities to specialisation. According to him, the growing differentiation between the kinds of technologies (means of production) used in the production and processing of different agricultural products necessitated a division among those products in agriculture (figure 5). In our study, we identified this process of technological specialisation, which accompanied the concentration of agri-business industries in Quebec (see chapter III, the section on industrial concentration). We have also indicated the orientation of Quebec farms toward specialisation in one production. In both cases we can, therefore, observe the development of channels of agri-business activities on the basis of specialisation of all the actors involved in the agri-business sector and particularly the farmers (figure 9).

Nevertheless, in the Quebec case, vertical integration
played a major role in bringing about specialisation of livestock and poultry producers; whereas in Vienney's case, although he made reference to integration (1980:22), such a process did not develop in relation to the French agriculture to the extent it did in Quebec. According to him, the early intervention of the state, through legislations and regulation, prevented the generalisation of this process by organizing internal and external agricultural markets (Vienney, 1980:296-297). In our case, we saw that such intervention by the official authorities came only after vertical integration had become the dominant form of production and marketing organisation with respect to livestock and poultry. The difference between the two cases shows to what extent state intervention can influence the course of development of agriculture.

In sum, both cases indicate that the development of these channels necessitated the transition from diversified to specialised farming.

3. Implications of agri-business development for agriculture in general

Vienney argued that agriculture in France went through major changes as a result of its adaptation to the needs of agri-business development. Among those changes, he distinguished the following. (1) There was an increase in
productivity and volume of production in general, and (2) this increase was accompanied by a two-dimensional process of specialisation in one activity and one kind of production. According to him, farmers were not the only beneficiaries from such an increase in productivity and volume of production.

In our study we have seen all of these trends take place in Quebec agriculture. There was an increase in productivity and volume of production, as well as specialisation in one activity and one production. In Chapter III and IV, we indicated also how the share of agricultural activity to the value of finished products declined and how this decline badly affected farm prices of pork and poultry in comparison to wholesale and retail prices.

However, Vienney's major argument in the context of the impact of agri-business development on agriculture was that those trends in agriculture did not affect all farmers in the same manner.

4. Impact of agri-business development on family farmers

Vienney argued that the development of agri-business in agriculture brought about the emergence of capitalist-type farmers. According to him, there was a category of farmers
who managed by concentration to enlarge their scale of production and engage wage labour. They converted their farms into industrial capitalist-type units. The remaining farmers, those who maintained relatively the same scale of operation and were still relying mainly on family labour, were reduced to a status of "piecemeal labourers" in relation to agri-business capital.

Hence, Vienney did not consider the development of a capital/labour relationship between agri-business capital, on the one hand, and all farmers, on the other. According to him, such a relationship developed only in connection to the family farmers who did not engage wage labour in their farms.

Our findings enable us to draw a conclusion different from that of Vienney. First, in our case all poultry farmers alike entered into a capital/labour relationship with agri-business firms, including those who enlarged their scale and employed wage labour. Second, capitalist farming emerged in our case as a result of direct engagement of agri-business firms in poultry production. It was not the outcome of the process of differentiation among farmers, as was the case with Vienney's model.

B. Comparison of Our Findings with the Literature
In response to the three questions we raised in the chapter of introduction, our findings enable us to give the following answers.

1. The question regarding the development of a capital/labour relationship

In our examination of the case of poultry, we have explained how vertical integration developed and led to the specialisation of poultry farmers. We have also outlined the development of a relationship of dependency and, consequently, of appropriation of surplus of poultry farmers by agri-business capital. We have explained how the cost-price squeeze caused an important number of farmers to drop out of poultry, and how the ones who remained in operation were gradually reduced to the status of labourers vis-a-vis that capital. Therefore, we can argue that in the case of poultry farming the period from 1966 to 1981 witnessed the development of a capital/labour relationship between agri-business capital and poultry farmers in general, according to Model "1" which we presented in the chapter of introduction.

2. The question regarding the family farm

In general, we can argue that the family farm was still the dominant form of organisation in poultry production.
However, it went through major changes. During the process of its adaptation to agri-business demands, it was transformed into an industrial-type enterprise, based on the separation between capital and labour and, consequently, between production and reproduction. We, therefore, agree with Morisset on the ability of the family farm to adapt to the conditions of appropriation of its surplus that followed from its dependency on agri-business capital.

However, unlike the case of dairy, where Morisset and the other authors drew most of their conclusions, the penetration of agri-business capital in poultry (through vertical integration) culminated in the development of capitalist farms. These farms did not develop as a result of the process of polarisation among family farmers within agriculture as was the case with Lessard's study. Although capital penetration created a process of concentration in poultry production and a tendency toward large-scale farming and wage labour (as we saw in chapter IV), agri-business capital did not allow this tendency to undermine the capital/labour relationship which it maintained with poultry farmers in general.

The uniqueness of the poultry situation is that poultry production is more suited to industrial methods than any other animal or crop production. Hence, agri-business capital would not hesitate to engage directly in production.
if the family farm fails to respond to its demands. This, in fact, explains why 41% of the feed suppliers and poultry processors were already engaged in poultry farming by 1971.

In order to survive, the family farm engaged in poultry had to adapt to the conditions of exploitation by agri-business capital, even if this meant the restructuring of its conditions of production and reproduction along the company form.

However, if the family farm has survived so far, that does not necessarily imply that it will be able to do so in the future. One of the major contradictions which characterize the relationship between agri-business capital and agriculture is that capital tends to undermine the very basis from which it draws its profits. In other words, by putting restraints on the family form of organisation, agri-business capital has brought about its gradual disappearance. In contrast to Bernier's argument, this decline may well be replaced by the capitalist form of organisation in poultry production and, to some extent, in pork farming. It will not necessarily occur in dairy production.

In sum, the similarities and differences between our findings and those of the references we have reviewed are the following.
We agree with Lessard regarding the development of capitalist farming in general. However, we differ with respect to the origins of this development. In our case, capitalist farming is the outcome of the engagement of agri-business capital in the production of poultry. In Lessard's case, capitalist farming developed as a result of a process of polarisation among Quebec farms. In this respect, Lessard's position is similar to that of Vienney.

Our findings came to support the position of Ehreshaft and Marien, Bernier, and Morisset concerning the development of a capital/labour relationship between agri-business capital and Quebec farmers. However, in our case there is every possibility that capitalist farming may replace family farming in poultry. Our difference with these authors stems from the fact that our study investigated a kind of production (poultry) different from what they examined. Again, this difference supports Ehreshaft and Marien's argument that the family form of organisation more or less adapted from one kind of production to another.
CHAPTER VI

CONCLUSION

In our thesis, we have dealt with two major phases of agri-business development, and their impact on agriculture in general and poultry farming in particular. The first phase which stretched from 1939 to 1966 was characterized by the engagement of agri-business capital in the input and output activities of Quebec farms. This capital penetration played an important role in the commercial orientation of agricultural production in Quebec.

The 1966-1981 phase of agri-business development was characterized by the direct engagement of agri-business capital in the activity of agricultural production by acquiring quotas. The effect of such engagement in poultry farming was the launching of a process of concentration of production and of a tendency toward large-scale farming, based on the use of wage labour. These changes in agriculture indicated the beginning of a new phase of agri-business development: that of capitalist farming.

In his study, Bernier (1980) indicated that the
majority of farmers who were displaced by agri-business development until the late sixties were marginal. In the decade of the seventies, he argued, an important number of large and medium-scale farmers dropped out after selling their farms.

The joint plan implemented in poultry neither halted the number of farmers dropping out nor helped the family farm engaged in that production overcome the changes that were taking place in the second phase of agri-business development. On the contrary, the joint plan and the way it was implemented enabled agri-business capital to establish control over the production and marketing quotas and enhanced the trends of changes that started earlier in the first phase.

There is enough reason to believe that if the trends of concentration, large-scale production, and specialisation continue throughout the eighties, the production of poultry may become the profession of a small number of farmers. The same can be said in the case of pork farming which, together with poultry, exhibits the highest rates of penetration by agri-business capital. Although dairy farming, the number one farming operation in Quebec, has been relatively protected from such a penetration, we can argue that agriculture in general in Quebec is heading toward a situation whereby only a small number of large-scale
specialised farmers will be able to feed the entire population of Quebec.

As a result, the decline in rural population is expected to continue along with the decline in the number of farmers. In addition, rural areas will be deprived of an important factor of economic development especially since large-scale farms tend to be located near urban centres.

It seems that no official policy is able to reverse the direction of agricultural development. On the contrary, such trends of concentration and specialisation have been strongly encouraged by official policies.

Furthermore, the development of an agri-business sector has benefited urban areas at the expense of rural ones. In this way, the transfer of input and output activities and of rural labour to urban industries, the elimination of small local processors, the exhaustion of the soil by the excessive use of chemicals are indications of the price rural areas have paid for the development of agri-business.

Today, food processing occupies the first place in the Quebec industrial sector insofar as employment and the Gross Domestic Product are concerned (Ehrensaft and Marien, 1978). The agri-business sector includes a wide variety of dealers and economic activities between the farm and the kitchen.
table. This has tended to inflate the prices of food despite its abundance. Ehrensaft and Marien (1978) referred to this phenomenon as "foodflation". The question of food prices lies, in major part, in the hands of a small number of agri-business companies which retain a major share of Quebec farm shipments, on the one hand, and control the distribution of food, on the other. This provides one more example of the close link between the concentration of agricultural production and that of output industries which we discussed in chapter III.
Table 1: Percentage of total farms reporting input purchases, Quebec, 1941, 1951, 1956, 1966 & 1981

<table>
<thead>
<tr>
<th>Input item</th>
<th>1941</th>
<th>1951</th>
<th>1956</th>
<th>1966</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal feeds</td>
<td>--</td>
<td>--</td>
<td>25.2</td>
<td>68.0</td>
<td>69.0</td>
</tr>
<tr>
<td>Machinery &amp; equip.</td>
<td>17.1</td>
<td>38.1</td>
<td>--</td>
<td>67.9</td>
<td>82.2</td>
</tr>
<tr>
<td>Build. &amp; materials</td>
<td>--</td>
<td>23.8</td>
<td>--</td>
<td>52.9</td>
<td>76.0</td>
</tr>
<tr>
<td>Fuel &amp; oil</td>
<td>--</td>
<td>35.9</td>
<td>--</td>
<td>--</td>
<td>87.0</td>
</tr>
<tr>
<td>Electric motors</td>
<td>3.4</td>
<td>19.2</td>
<td>--</td>
<td>69.9</td>
<td>83.4</td>
</tr>
</tbody>
</table>

-- Not available.

Table 2: Total milk production and farm use, Quebec, 1931, 1951, 1966 & 1981

<table>
<thead>
<tr>
<th>Year</th>
<th>1931</th>
<th>1951</th>
<th>1966</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production ('000lbs)</td>
<td>3,734,818</td>
<td>4,528,212</td>
<td>6,416,537</td>
<td>6,581,150</td>
</tr>
<tr>
<td>% used on farms</td>
<td>23.1</td>
<td>11.2</td>
<td>6.2</td>
<td>0.0</td>
</tr>
<tr>
<td>% sold for fluid use*</td>
<td>24.7</td>
<td>28.3</td>
<td>22.8</td>
<td>21.7</td>
</tr>
<tr>
<td>% sold to factories**</td>
<td>52.2</td>
<td>60.5</td>
<td>70.9</td>
<td>78.3</td>
</tr>
</tbody>
</table>

* For pasteurisation.
** For butter, cheese, etc.

Sources:– Quebec Agricultural Statistics, 1968, table 46.
Table 3: Total pork production and farm use, Quebec, 1941, 1951, 1966 & 1981

<table>
<thead>
<tr>
<th>Year</th>
<th>1941</th>
<th>1951</th>
<th>1966</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production (’000 heads)</td>
<td>1183</td>
<td>1525</td>
<td>1801</td>
<td>4879</td>
</tr>
<tr>
<td>Slaughtered on farms:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of own use</td>
<td>14.4</td>
<td>6.6</td>
<td>3.0</td>
<td>0.8</td>
</tr>
<tr>
<td>% sold</td>
<td>17.3</td>
<td>12.3</td>
<td>2.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Sold alive to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>factories (%)</td>
<td>38.1</td>
<td>59.1</td>
<td>88.4</td>
<td>97.2</td>
</tr>
<tr>
<td>others* (%)</td>
<td>30.3</td>
<td>11.9</td>
<td>6.4</td>
<td>1.1</td>
</tr>
</tbody>
</table>

* Uncertified small butchers and processors.

Sources: - Quebec Agricultural Statistics, 1968, table 19
Table 4: Total poultry production and farm use, Quebec, 1941, 1951, 1966 & 1981

<table>
<thead>
<tr>
<th>Year</th>
<th>1941</th>
<th>1951</th>
<th>1966</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production ('000 birds)</td>
<td>5672</td>
<td>8506</td>
<td>63399</td>
<td>95644</td>
</tr>
<tr>
<td>% of own use</td>
<td>32.2</td>
<td>11.9</td>
<td>1.1</td>
<td>0.1</td>
</tr>
<tr>
<td>% sold alive</td>
<td>61.4</td>
<td>85.2</td>
<td>98.9</td>
<td>99.9</td>
</tr>
<tr>
<td>% of other use*</td>
<td>6.4</td>
<td>2.9</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

* There is no mentioning to the kind of that use.

Sources: Quebec Agricultural Statistics, 1968, Table 42.
Statistiques de l'Agriculture, des Peches et de l'Alimentation, 1983, Table 35.
Table 5: Relative importance of each kind of products,

<table>
<thead>
<tr>
<th>Year</th>
<th>1951</th>
<th>1961</th>
<th>1971</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agri.receipts $000</td>
<td>376205</td>
<td>417740</td>
<td>690125</td>
<td>2747808</td>
</tr>
<tr>
<td>% of dairy sales</td>
<td>31.0</td>
<td>39.8</td>
<td>45.5</td>
<td>38.6</td>
</tr>
<tr>
<td>% of livestock sales</td>
<td>42.7</td>
<td>30.3</td>
<td>26.8</td>
<td>33.6</td>
</tr>
<tr>
<td>% of poultry sales</td>
<td>10.7</td>
<td>14.4</td>
<td>15.7</td>
<td>11.0</td>
</tr>
<tr>
<td>% of other sales*</td>
<td>15.4</td>
<td>15.5</td>
<td>12.0</td>
<td>16.8</td>
</tr>
</tbody>
</table>

* Including sales of crops, forest and maple products.


Table 6: Farm expenditures by type of input product, Quebec, 1951, 1961, 1971 & 1981

<table>
<thead>
<tr>
<th>Year</th>
<th>1951</th>
<th>1961</th>
<th>1971</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>$000</td>
<td>215244</td>
<td>339787</td>
<td>501490</td>
<td>2136780</td>
</tr>
<tr>
<td>% of animal feeds</td>
<td>39.4</td>
<td>32.6</td>
<td>29.8</td>
<td>31.8</td>
</tr>
<tr>
<td>% of fertilizers</td>
<td>3.8</td>
<td>4.6</td>
<td>5.1</td>
<td>6.2</td>
</tr>
<tr>
<td>% of fuel &amp; soil</td>
<td>4.7</td>
<td>5.4</td>
<td>4.9</td>
<td>--</td>
</tr>
<tr>
<td>% of machinery</td>
<td>15.7</td>
<td>19.6</td>
<td>19.0</td>
<td>8.9</td>
</tr>
<tr>
<td>% of buildings</td>
<td>6.3</td>
<td>5.3</td>
<td>3.2</td>
<td>2.4</td>
</tr>
<tr>
<td>% of wages</td>
<td>6.9</td>
<td>8.2</td>
<td>7.7</td>
<td>7.2</td>
</tr>
<tr>
<td>% of interests</td>
<td>3.7</td>
<td>5.0</td>
<td>6.7</td>
<td>13.2</td>
</tr>
<tr>
<td>% of ground rent</td>
<td>0.6</td>
<td>0.5</td>
<td>1.0</td>
<td>0.7</td>
</tr>
<tr>
<td>% of taxes</td>
<td>5.0</td>
<td>4.5</td>
<td>3.2</td>
<td>1.5</td>
</tr>
<tr>
<td>% of depreciation</td>
<td>13.4</td>
<td>13.5</td>
<td>11.9</td>
<td>11.4</td>
</tr>
<tr>
<td>% of other expenses</td>
<td>0.5</td>
<td>0.8</td>
<td>7.5</td>
<td>--</td>
</tr>
</tbody>
</table>

-- Not available.

Table 7: Degree of self-sufficiency in food, Quebec, 1953, 1965, 1971 & 1976

<table>
<thead>
<tr>
<th>Year</th>
<th>1953</th>
<th>1965</th>
<th>1971</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy products</td>
<td>102.4</td>
<td>112.0</td>
<td>118.7</td>
<td>122.0</td>
</tr>
<tr>
<td>Livestock products</td>
<td>49.5</td>
<td>44.9</td>
<td>43.8</td>
<td>43.3</td>
</tr>
<tr>
<td>Pork</td>
<td>73.8</td>
<td>75.1</td>
<td>80.0</td>
<td>82.5</td>
</tr>
<tr>
<td>Poultry products</td>
<td>45.7</td>
<td>86.7</td>
<td>89.5</td>
<td>95.4</td>
</tr>
<tr>
<td>Chicken &amp; hens</td>
<td>43.5</td>
<td>98.9</td>
<td>106.8</td>
<td>115.1</td>
</tr>
</tbody>
</table>

Table 8: Rate of integration by branch of poultry, Quebec, 1963

<table>
<thead>
<tr>
<th>Branch of production</th>
<th>% of integrated production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grill chicken</td>
<td>97.0</td>
</tr>
<tr>
<td>Chicks (hatching)</td>
<td>67.0</td>
</tr>
<tr>
<td>Grill turkey</td>
<td>59.0</td>
</tr>
<tr>
<td>Big roosters</td>
<td>43.0</td>
</tr>
<tr>
<td>Hens (eggs)</td>
<td>35.0</td>
</tr>
<tr>
<td>Big turkey</td>
<td>16.0</td>
</tr>
<tr>
<td>Average rate of integration for total poultry</td>
<td>53.0</td>
</tr>
</tbody>
</table>

Table 9: % of poultry producers reporting farming contracts for different reasons, 1966

<table>
<thead>
<tr>
<th>Reason of contract</th>
<th>% of poultry producers</th>
</tr>
</thead>
<tbody>
<tr>
<td>To finance farming operations</td>
<td>70.0</td>
</tr>
<tr>
<td>To secure a stable revenue</td>
<td>67.14</td>
</tr>
<tr>
<td>To sell the produce</td>
<td>64.28</td>
</tr>
<tr>
<td>To increase the flock of birds</td>
<td>50.0</td>
</tr>
<tr>
<td>To increase the revenue</td>
<td>48.57</td>
</tr>
<tr>
<td>To finance the installations</td>
<td>20.0</td>
</tr>
</tbody>
</table>

Table 10: % of integrated pork production by type of integrators, Quebec, 1966

<table>
<thead>
<tr>
<th>Type of integrators</th>
<th>% of integrated production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturers of feeds*</td>
<td>28.88</td>
</tr>
<tr>
<td>Feeds distributors</td>
<td>14.25</td>
</tr>
<tr>
<td>Feed mills**</td>
<td>43.93</td>
</tr>
<tr>
<td>Slaughter houses</td>
<td>7.23</td>
</tr>
<tr>
<td>Others***</td>
<td>5.71</td>
</tr>
</tbody>
</table>

* Some of those manufacturers operated their own slaughtering houses.

** Including independent and cooperative mills.

*** Integrators who neither produced feeds, nor had butcher shops (merchants).

Table 11: Number and percentage of animals and birds raised in commercial farms by kind of product, Quebec, 1961 and 1966

<table>
<thead>
<tr>
<th>Type</th>
<th>Ttl. n. on</th>
<th>% on commercial</th>
<th>% on dairy</th>
<th>% on livestock</th>
<th>% on poultry</th>
<th>% on other</th>
<th>farms</th>
<th>farms</th>
<th>farms**</th>
<th>farms***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>871</td>
<td>773</td>
<td>75.9</td>
<td>79.5</td>
<td>9.0</td>
<td>10.2</td>
<td>1.7</td>
<td>1.5</td>
<td>13.4</td>
<td>8.8</td>
</tr>
<tr>
<td>Hogs</td>
<td>820</td>
<td>2022</td>
<td>41.8</td>
<td>27.9</td>
<td>37.4</td>
<td>57.5</td>
<td>2.2</td>
<td>2.2</td>
<td>18.6</td>
<td>12.4</td>
</tr>
<tr>
<td>Birds</td>
<td>11776</td>
<td>16478</td>
<td>20.2</td>
<td>11.2</td>
<td>5.4</td>
<td>5.6</td>
<td>59.2</td>
<td>74.5</td>
<td>15.2</td>
<td>8.7</td>
</tr>
</tbody>
</table>

* The 1966 census defined commercial farms as every farm which made $2500 or more on farm sales.
** Including farms which were raising cattle, hogs, sheep, etc. for meat purposes.
*** Including crop and forestry farms and those which were combining different livestock or crops or both.
+ Dairy cattle.

Source: Census of Canada, Agriculture, Quebec, 1961 (table 37) and 1966 (table 30).
Table 12: Number and percentage of commercial farms raising animals or birds by type of farms, Quebec, 1961 and 1966

<table>
<thead>
<tr>
<th>Type</th>
<th>n.of farms</th>
<th>%raising dairy 1961</th>
<th>%raising dairy 1966</th>
<th>%raising hogs 1961</th>
<th>%raising hogs 1966</th>
<th>%raising birds 1961</th>
<th>%raising birds 1966</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy</td>
<td>39528</td>
<td>100</td>
<td>100</td>
<td>53.5</td>
<td>38.3</td>
<td>56.8</td>
<td>37.5</td>
</tr>
<tr>
<td>Livestck*</td>
<td>12200</td>
<td>48.9</td>
<td>46.0</td>
<td>46.3</td>
<td>48.4</td>
<td>31.0</td>
<td>21.2</td>
</tr>
<tr>
<td>Poultry</td>
<td>1491</td>
<td>72.8</td>
<td>59.8</td>
<td>32.9</td>
<td>21.4</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

* Livestock: including farms raising cattle, hogs, sheep etc. for meat purposes only.

Source: Census of Canada, Agriculture, Quebec, 1961 (table 37) and 1966 (table 30).
Table 13: % of farm labour by category of labour, Quebec, 1941, 1951, 1961 & 1966

<table>
<thead>
<tr>
<th>Year</th>
<th>Farm operator's labour</th>
<th>Unpaid family labour</th>
<th>Wage labour</th>
<th>Total farm labour</th>
</tr>
</thead>
<tbody>
<tr>
<td>1941</td>
<td>52.5</td>
<td>37.0</td>
<td>10.6</td>
<td>100</td>
</tr>
<tr>
<td>1951</td>
<td>58.0</td>
<td>30.3</td>
<td>11.7</td>
<td>100</td>
</tr>
<tr>
<td>1961</td>
<td>69.4</td>
<td>17.5</td>
<td>13.0</td>
<td>100</td>
</tr>
<tr>
<td>1966</td>
<td>75.7</td>
<td>6.3</td>
<td>17.9</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 14: Farm, wholesale, and retail prices of pork, Quebec, 1961-1965

<table>
<thead>
<tr>
<th>Year</th>
<th>Farm prices* $/100lb</th>
<th>Wholesale prices** $/100lb</th>
<th>Retail prices*** $/100lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>27.65</td>
<td>51.2</td>
<td>77.7</td>
</tr>
<tr>
<td>1962</td>
<td>28.15</td>
<td>51.8</td>
<td>79.6</td>
</tr>
<tr>
<td>1963</td>
<td>26.40</td>
<td>50.0</td>
<td>80.8</td>
</tr>
<tr>
<td>1964</td>
<td>25.80</td>
<td>.50.1</td>
<td>82.3</td>
</tr>
<tr>
<td>1965</td>
<td>30.75</td>
<td>58.4</td>
<td>95.5</td>
</tr>
</tbody>
</table>

* Prices paid to farmers.

** Prices paid to wholesale merchants or processors.

*** Prices paid to retail distributors by final consumers.

<table>
<thead>
<tr>
<th>Year</th>
<th>Ttl.cash $000</th>
<th>Ttl.net income $000</th>
<th>% of net/cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946</td>
<td>222931</td>
<td>148558</td>
<td>66.6</td>
</tr>
<tr>
<td>1951</td>
<td>376205</td>
<td>248353</td>
<td>66.0</td>
</tr>
<tr>
<td>1961</td>
<td>417740</td>
<td>152140</td>
<td>36.4</td>
</tr>
<tr>
<td>1966</td>
<td>618169</td>
<td>209522</td>
<td>33.9</td>
</tr>
</tbody>
</table>

Source: Quebec Agricultural Statistics, Quebec
Table 16: Distribution of farms raising hogs by number of hogs, Quebec, 1951, 1966 & 1981

<table>
<thead>
<tr>
<th>N. of hogs</th>
<th>1951</th>
<th>%</th>
<th>1966</th>
<th>%</th>
<th>1981</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-32</td>
<td>81628</td>
<td>92.2</td>
<td>22093</td>
<td>72.0</td>
<td>2593</td>
<td>32.4</td>
</tr>
<tr>
<td>33-62</td>
<td>5484</td>
<td>6.2</td>
<td>4007</td>
<td>13.0</td>
<td>696</td>
<td>8.7</td>
</tr>
<tr>
<td>63-122</td>
<td>1169</td>
<td>1.4</td>
<td>2501</td>
<td>8.2</td>
<td>838</td>
<td>10.5</td>
</tr>
<tr>
<td>123 or more</td>
<td>277</td>
<td>0.3</td>
<td>2082</td>
<td>6.8</td>
<td>3866</td>
<td>48.4</td>
</tr>
</tbody>
</table>

| N. of farms | 88558 | 100 | 30683 | 100 | 7993 | 100 |
| N. of hogs'000 | 1108 | 1174 | 3441 |
| Average/farm | 1.2 | 38  | 430  |
| (a) N. of pork farms* | 4859 | 3331 |
| % of (a) to total farms** | 15.8 | 41.7 |
| % of hogs on (a) farms | 50.0 | 86.4 |

* Farms specialised in pork production; i.e., farms which make 51% or more of their revenues from pork sales.

** All farms raising hogs in Quebec.

Table 17: Distribution of farms raising poultry by number of birds, Quebec, 1951, 1961 & 1966

<table>
<thead>
<tr>
<th>Number of farms</th>
<th>N. of birds 1951</th>
<th>% 1951</th>
<th>N. of birds 1961</th>
<th>% 1961</th>
<th>N. of birds 1966</th>
<th>% 1966</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-47</td>
<td>55067</td>
<td>61.5</td>
<td>32276</td>
<td>61.6</td>
<td>20036</td>
<td>62.9</td>
</tr>
<tr>
<td>48-122</td>
<td>15643</td>
<td>17.5</td>
<td>9687</td>
<td>18.5</td>
<td>5647</td>
<td>17.7</td>
</tr>
<tr>
<td>123-272</td>
<td>9345</td>
<td>10.4</td>
<td>4337</td>
<td>8.3</td>
<td>2131</td>
<td>6.6</td>
</tr>
<tr>
<td>273-972</td>
<td>8135</td>
<td>9.1</td>
<td>3830</td>
<td>7.3</td>
<td>1622</td>
<td>5.1</td>
</tr>
<tr>
<td>973-2027</td>
<td>1035</td>
<td>1.2</td>
<td>1195</td>
<td>2.3</td>
<td>844</td>
<td>2.6</td>
</tr>
<tr>
<td>2028 or more</td>
<td>281</td>
<td>0.3</td>
<td>1057</td>
<td>2.0</td>
<td>1628</td>
<td>5.1</td>
</tr>
</tbody>
</table>

| N. of farms     | 89506            | 100    | 52382            | 100    | 31908            | 100    |
| N. of birds     | 10090            | 12935  | 18399            |        |
| Average/farm    | 112              | 247    | 576              |        |
| (a) N. of poultry farms* | --   | 1491   |
| % of (a) to total farms** | --   | 4.7    |
| % of birds on (a) farms | -- | 66.7   |

* Farms specialised in poultry; i.e., farms which make 51% or more of their revenues from poultry sales.

** To total number of farms raising poultry.

Table 18: Total revenue from farm sales by kind of products, Quebec, 1978

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cash receipts ($000)</td>
<td>1716886</td>
</tr>
<tr>
<td>% of dairy sales</td>
<td>36.2</td>
</tr>
<tr>
<td>% of pork sales</td>
<td>21.6</td>
</tr>
<tr>
<td>% of poultry (meat and eggs) sales</td>
<td>12.5</td>
</tr>
<tr>
<td>% of sales of other livestock*</td>
<td>10.9</td>
</tr>
<tr>
<td>% of all crop sales</td>
<td>9.0</td>
</tr>
<tr>
<td>% of sales of maple and forestry</td>
<td>2.3</td>
</tr>
<tr>
<td>% of supplementary payments**</td>
<td>7.5</td>
</tr>
</tbody>
</table>

* Including cattle and sheep raised for meat purposes.

** Mostly to dairy farming.

Table 19: Number of joint plans by kind of product, Quebec, 1967

<table>
<thead>
<tr>
<th>Type of production</th>
<th>N. of joint plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid milk</td>
<td>32</td>
</tr>
<tr>
<td>Industrial milk*</td>
<td>4</td>
</tr>
<tr>
<td>Pulp</td>
<td>19</td>
</tr>
<tr>
<td>Tobacco</td>
<td>2</td>
</tr>
<tr>
<td>Maple syrup</td>
<td>1</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>1</td>
</tr>
<tr>
<td>Blueberry</td>
<td>1</td>
</tr>
<tr>
<td>Eggs</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
</tr>
</tbody>
</table>

* Milk used for butter and cheese purposes.


<table>
<thead>
<tr>
<th>Value of poultry products sold ($)</th>
<th>Number of farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>2500-4999</td>
<td>1257</td>
</tr>
<tr>
<td>5000-9999</td>
<td>330</td>
</tr>
<tr>
<td>10000-24999</td>
<td>579</td>
</tr>
<tr>
<td>25000-49000</td>
<td>548</td>
</tr>
<tr>
<td>50000-99999</td>
<td>419</td>
</tr>
<tr>
<td>100000 or more</td>
<td></td>
</tr>
</tbody>
</table>

N. of commercial farms: 1714 1561 1103 1121
N. of farms raising birds: 31908 16670 9063 9170
% of commercial farms*: 5.4 9.4 12.2 12.2
N. of specialised farms: 1491 1318 996 1010
% of specialised farms*: 4.7 7.9 10.9 11.0
% birds on specialised farms: 66.7 82.7 83.2 98.0

* Based on the number of farms raising poultry.

Table 21: Number of commercial specialised poultry farms* by type of organization, Quebec, 1971, 1976 & 1981

<table>
<thead>
<tr>
<th>Type of organization</th>
<th>N. of farms 1971</th>
<th>N. of farms 1976</th>
<th>N. of farms 1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>1463</td>
<td>953</td>
<td>922</td>
</tr>
<tr>
<td>Partnership**</td>
<td>29</td>
<td>28</td>
<td>52</td>
</tr>
<tr>
<td>Company</td>
<td>69</td>
<td>121</td>
<td>141</td>
</tr>
<tr>
<td>Other type</td>
<td>--</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

| Ttl. n. of farms     | 1561             | 1103             | 1121             |

* Farms which made $2500 or more worth of agricultural sales and which realised 51% or more of their revenues from the sales of poultry products.

** Societies and cooperatives.

Table 22: Farm production and prices of poultry,
Quebec, 1966-1981

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (metric tons of meat)</th>
<th>Prices ($/100 kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>107240</td>
<td>67.0</td>
</tr>
<tr>
<td>1967</td>
<td>114751</td>
<td>60.0</td>
</tr>
<tr>
<td>1968</td>
<td>117376</td>
<td>61.6</td>
</tr>
<tr>
<td>1969</td>
<td>136376</td>
<td>59.0</td>
</tr>
<tr>
<td>1970</td>
<td>150103</td>
<td>55.5</td>
</tr>
<tr>
<td>1971</td>
<td>135498</td>
<td>57.9</td>
</tr>
<tr>
<td>1972</td>
<td>140870</td>
<td>65.5</td>
</tr>
<tr>
<td>1973</td>
<td>145509</td>
<td>89.6</td>
</tr>
<tr>
<td>1974</td>
<td>148301</td>
<td>97.9</td>
</tr>
<tr>
<td>1975</td>
<td>122304</td>
<td>101.7</td>
</tr>
<tr>
<td>1976</td>
<td>135764</td>
<td>103.6</td>
</tr>
<tr>
<td>1977</td>
<td>143575</td>
<td>103.2</td>
</tr>
<tr>
<td>1978</td>
<td>143981</td>
<td>111.6</td>
</tr>
<tr>
<td>1979</td>
<td>156857</td>
<td>120.1</td>
</tr>
<tr>
<td>1980</td>
<td>158650</td>
<td>125.0</td>
</tr>
<tr>
<td>1981</td>
<td>158744</td>
<td>144.6</td>
</tr>
</tbody>
</table>

Table 23: Total size of poultry meat and grill chicken quotas, Quebec, 1971-1980

<table>
<thead>
<tr>
<th>Year</th>
<th>(1) Size of all poultry meat quotas ('000 sq. feet)</th>
<th>(2) Size of grill chicken quotas ('000 sq. feet)</th>
<th>% of 2/1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>31230</td>
<td>18979</td>
<td>60.8</td>
</tr>
<tr>
<td>1972</td>
<td>32495</td>
<td>18812</td>
<td>57.9</td>
</tr>
<tr>
<td>1973</td>
<td>32676</td>
<td>19120</td>
<td>58.5</td>
</tr>
<tr>
<td>1974</td>
<td>32741</td>
<td>19075</td>
<td>58.3</td>
</tr>
<tr>
<td>1975</td>
<td>32573</td>
<td>19588</td>
<td>60.1</td>
</tr>
<tr>
<td>1976</td>
<td>32582</td>
<td>20067</td>
<td>61.6</td>
</tr>
<tr>
<td>1977</td>
<td>32624</td>
<td>20099</td>
<td>61.6</td>
</tr>
<tr>
<td>1978</td>
<td>32627</td>
<td>20395</td>
<td>62.5</td>
</tr>
<tr>
<td>1979</td>
<td>32611</td>
<td>20394</td>
<td>62.5</td>
</tr>
<tr>
<td>1980</td>
<td>32734</td>
<td>20449</td>
<td>62.5</td>
</tr>
</tbody>
</table>

Rate of (+) or (-)
from 1974
to 1980 -0.0002 +7.2

<table>
<thead>
<tr>
<th>Size of farm (sq. feet)</th>
<th>1974</th>
<th>1980</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N. of farms</td>
<td>% of quotas</td>
</tr>
<tr>
<td>Less than 5000</td>
<td>142</td>
<td>2.5</td>
</tr>
<tr>
<td>5001-10000</td>
<td>211</td>
<td>8.2</td>
</tr>
<tr>
<td>10001-15000</td>
<td>148</td>
<td>9.5</td>
</tr>
<tr>
<td>15001-20000</td>
<td>98</td>
<td>9.0</td>
</tr>
<tr>
<td>20001-30000</td>
<td>116</td>
<td>15.0</td>
</tr>
<tr>
<td>30001-40000</td>
<td>67</td>
<td>11.8</td>
</tr>
<tr>
<td>40001-50000</td>
<td>46</td>
<td>10.8</td>
</tr>
<tr>
<td>50001-75000</td>
<td>55</td>
<td>17.4</td>
</tr>
<tr>
<td>75001-100000</td>
<td>12</td>
<td>5.5</td>
</tr>
<tr>
<td>100000 or more</td>
<td>13</td>
<td>10.2</td>
</tr>
</tbody>
</table>

Total 908 100 720 100
Average farm size (sq. feet) 21095 28394

Table 25: Number and percentage of animals and birds raised in commercial farms by kind of product, Quebec, 1976 & 1981

<table>
<thead>
<tr>
<th>Type of product</th>
<th>farms</th>
<th>farms</th>
<th>farms*</th>
<th>farms</th>
<th>farms</th>
<th>farms</th>
<th>farms</th>
<th>farms</th>
<th>farms</th>
<th>farms</th>
<th>farms</th>
<th>farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle*</td>
<td>803</td>
<td>694</td>
<td>95.0</td>
<td>96.0</td>
<td>2.6</td>
<td>2.3</td>
<td>2.6</td>
<td>3.0</td>
<td>2.6</td>
<td>2.3</td>
<td>2.6</td>
<td>3.0</td>
</tr>
<tr>
<td>Hogs</td>
<td>1569</td>
<td>3378</td>
<td>8.5</td>
<td>6.2</td>
<td>85.6</td>
<td>88.3</td>
<td>2.6</td>
<td>2.6</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Birds</td>
<td>21588</td>
<td>21829</td>
<td>3.1</td>
<td>2.1</td>
<td>5.7</td>
<td>3.4</td>
<td>88.1</td>
<td>91.7</td>
<td>3.1</td>
<td>3.1</td>
<td>2.7</td>
<td>2.7</td>
</tr>
</tbody>
</table>

* Including beef cattle and pork farms.
** Dairy cattle.

Source: Census of Canada, Agriculture, Quebec, 1976 (table 31) and 1981 (table 30).
<table>
<thead>
<tr>
<th>Type of farm</th>
<th>N. of farms 1976</th>
<th>% raising dairy 1976</th>
<th>% raising hogs 1976</th>
<th>% raising poultry 1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy</td>
<td>24072</td>
<td>100</td>
<td>100</td>
<td>14.8</td>
</tr>
<tr>
<td></td>
<td>19161</td>
<td>100</td>
<td>100</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>1976</td>
<td></td>
<td>19.3</td>
<td>15.6</td>
</tr>
<tr>
<td>Pork</td>
<td>2728</td>
<td>34.2</td>
<td>18.2</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>3331</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>1976</td>
<td></td>
<td>15.5</td>
<td>11.6</td>
</tr>
<tr>
<td>Poultry</td>
<td>996</td>
<td>23.4</td>
<td>15.3</td>
<td>10.3</td>
</tr>
<tr>
<td></td>
<td>1010</td>
<td>23.4</td>
<td>15.3</td>
<td>13.1</td>
</tr>
<tr>
<td></td>
<td>1976</td>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>1981</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Census of Canada, Agriculture, Quebec, 1976 (table 31) and 1981 (table 30).
Table 27: Evolution of the gross margin of grill chicken, Quebec, 1971-1978.

<table>
<thead>
<tr>
<th>Year</th>
<th>Farm prices c/kg*</th>
<th>Wholesale prices c/kg</th>
<th>Retail prices c/kg</th>
<th>(2-1) c/kg</th>
<th>(3-1) c/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>53.8</td>
<td>73.6</td>
<td>--</td>
<td>19.8</td>
<td>--</td>
</tr>
<tr>
<td>1972</td>
<td>62.6</td>
<td>85.8</td>
<td>--</td>
<td>23.1</td>
<td>--</td>
</tr>
<tr>
<td>1973</td>
<td>86.4</td>
<td>118.2</td>
<td>--</td>
<td>31.7</td>
<td>--</td>
</tr>
<tr>
<td>1974</td>
<td>94.1</td>
<td>127.2</td>
<td>179.7</td>
<td>33.1</td>
<td>52.5</td>
</tr>
<tr>
<td>1975</td>
<td>99.6</td>
<td>145.5</td>
<td>198.1</td>
<td>45.9</td>
<td>52.6</td>
</tr>
<tr>
<td>1976</td>
<td>95.9</td>
<td>141.5</td>
<td>186.3</td>
<td>45.6</td>
<td>44.8</td>
</tr>
<tr>
<td>1977</td>
<td>98.8</td>
<td>139.1</td>
<td>189.4</td>
<td>40.3</td>
<td>50.3</td>
</tr>
<tr>
<td>1978</td>
<td>106.9</td>
<td>159.0</td>
<td>215.6</td>
<td>52.0</td>
<td>56.6</td>
</tr>
</tbody>
</table>

* Cents by kilogram.

Source: Agro-alimentaire, "la Volaille et Autres Petits Animaux d'Elevage," 1979, tables 16 and 18, Pp. 82 and 94.
Table 28: Number and percentage of poultry farms reporting wage labour, Quebec, 1966, 1976 and 1981

<table>
<thead>
<tr>
<th>Year</th>
<th>N. of poultry farms using wage labour</th>
<th>% to total poultry farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>374</td>
<td>21.8</td>
</tr>
<tr>
<td>1976</td>
<td>478</td>
<td>43.3</td>
</tr>
<tr>
<td>1981</td>
<td>584</td>
<td>52.1</td>
</tr>
</tbody>
</table>

Figure 1

Activities of Production and Utilisation of Products in Socio-economic Systems

Renewal of Labour Power

Labour Power (LP) → Primary Materials (PM) → Productive Combination (PC) → Products (P)

Renewal of Equipment

Renewal of Primary Materials

Source: Vienney, 1980, p. 64
Figure 2

Utilisation of Products by the Actors

Activities of Production

Actors → PM → PC → P → Products

Patterns of Behavior

Return of the Products to the Actors

Source: Vienney, 1980, p.65

129
Figure 3

The Family Form of Organisation
According to Vienney

Source: Vienney, 1980, p. 258
Figure 4
-----
The Position of Agricultural Production vis-a-vis Industrial Activities

Activities of Supply

Activities of Marketing and Processing

Activities of Agricultural Production

Urban Industrial Activities

Source: Vienney, 1980, p. 299

--------------------------------------------------------
Figure 5

Specialised Channels of Agri-business

<table>
<thead>
<tr>
<th>Specialised Means of Production</th>
<th>Agricultural Combinations</th>
<th>Processing of products</th>
</tr>
</thead>
<tbody>
<tr>
<td>-----&gt;</td>
<td>-----&gt;</td>
<td>Dairy</td>
</tr>
<tr>
<td>-----&gt;</td>
<td>-----&gt;</td>
<td>Meat</td>
</tr>
<tr>
<td>-----&gt;</td>
<td>-----&gt;</td>
<td>Cereals</td>
</tr>
<tr>
<td>-----&gt;</td>
<td>-----&gt;</td>
<td>Fruits</td>
</tr>
<tr>
<td>etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Vienney, 1980, p. 302
Figure 6

Family and Capitalist-type Farmers

Family Unit ↔ Family-Type Farmer

Unit of Production

Input Market → PM → PC → P → Output Market

Land

Enterprise Unit ↔ Capitalist-Type Farmer

Source: Vienney, 1980, p.104
Figure 7

The Family Form of Organisation in Subsistence Farming

purchase of consumer goods

family unit

cash income

immediate consumption or income in kind

unit of production

P

output markets

flow of products

flow of money
**Figure 8:**

Activities of the Agri-business Sector

<table>
<thead>
<tr>
<th>Input Activities</th>
<th>Activity of Farming</th>
<th>Output Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufact.**</td>
<td>Supply</td>
<td>Production</td>
</tr>
<tr>
<td></td>
<td>Marketing</td>
<td>Processing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Distr.*</td>
</tr>
</tbody>
</table>

* Distribution ** Manufacturing
Explanation of Terms

*Distribution: Wholesale and retail activities.
*Integrators: Feeds suppliers and/or poultry processors.
*Processing: Including slaughtering and processing of birds, and processing of eggs.
*Input supply: Supply of feeds, installations, and/or animals depending on the contract terms.
*Contract: Agreement between farmer and integrator.
*Marketing: Including collecting, transporting, warehousing, etc. the products of the farm.
SELECTED BIBLIOGRAPHY

Books


Seguin, Normand, ed. AGRICULTURE ET COLONISATION AU QUEBEC. Quebec: Editions de-Boreal Express, 1980.


Articles and Periodicals


Official Publications

Les Conferences Socio-economiques du Quebec, Ministere de l'Agriculture et de l'Alimentation du Quebec et Ministere d'Etat au Developpement Economique:


Rapport de la Commission Royale d'Enquete sur l'Agriculture au Quebec, Gouvernement du Quebec:


5. L'INTEGRATION EN AGRICULTURE AU QUEBEC. 1969.

Miscellaneous Publications


Unpublished Material
