# METHODS AND PROBLEMS OF BEGINNING FARMERS IN BECOMING ESTABLISHED IN FARMING

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by

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September 1961

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# METHODS AND PROBLEMS OF BEGINNING FARMERS BECOMING ESTABLISHED IN FARMING

Herbert Coleman Driver

University of Manitoba, 1961

This study was based on survey data obtained from 118 beginning farmers of the Russell, Brandon and Morris areas in Manitoba. The sample was composed of 63 farmers who had operating agreements with their parents and 55 farmers who operated farm units independently of their parents.

A basic assumption of this study was that family-size commercial farms, owned and operated by farm families, assured society of optimum conditions for economic growth as well as security of minimum standards of living in maximizing the total welfare of society.

The problematic situation of beginning farmers is characterized by problems of formulating satisfactory economic operating agreements and equitable transfer arrangements with their parents, of re-financing the family farm once each generation, and of low farm incomes. Associated with these problems are conflicting beliefs as to how beginning farmers are getting started and established in farming. For example, three processes have been postulated:

The Agricultural Ladder; The Intra-Family Farm Ladder; The Family Farm Cycle. The "agricultural ladder" has been the common belief. The rungs of the ladder, starting at the bottom and proceeding to the top are: (1) unpaid family labor, (2) hired man or non-farm employee, (3) tenant-operator, and (4) owner-operator. The existing problematic situation of beginning farmers suggests that the "agricultural ladder" is now non-functional. Consequently, agricultural policies designed to aid beginning farmers in climbing the ladder may be inconsistent with the actual problems of beginning farmers.

It follows that the problem of this study was to define the problem areas of beginning farmers as they progress toward the goal of establishing a family-sized commercial farm. To this end the central theme was to determine how beginning farmers were getting started and established in farming.

A conceptual framework, the farm family cycle, was developed to explain the processes followed by beginning farmers in becoming established. The cycle theory as well as the hypothesis implicit in it were verified through data obtained from beginning farmers. Cross-tabular analysis was used for testing the validity of hypotheses.

The significant findings of the study are summarized

as follows:

1. It was found that the major process of getting started and established in farming is by means of the farm family business. This process is the farm family cycle which is contrary to the popular belief of individual progress on an "agricultural ladder."

2. It was found that age classifications and interest rates, as stipulated by the Manitoba Agricultural Credit Corporation, were inconsistent with the needs of beginning farmers. It was indicated that preferences of credit institutions for land as collateral discriminate against beginning farmers who rent most of the land they farm.

3. It was found that the greater the number of years farming (independently of the farm parents) the larger was the amount of farm debt relative to the total amount of capital employed in the farm business. It was further found that some of these beginning farmers were operating their farm business units at marginal security for farm credit. In view of their vulnerability to farm foreclosure there appears to be a need for flexible repayment schedules on farm debt.

4. It was indicated that our traditional landlord-tenant leases (1/3 - 2/3 share) are now not equitable. The landlord-tenant lease was an integral part of many farm family operating agreements and transfer arrangements. Consequently, further research is needed to determine equitable (economic factors) and satisfactory (social and psychological factors) landlord-tenant leases.

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# CHAPTER I

## INTRODUCTION

This study, an analysis of the methods and problems of beginning farmers in getting started and established in farming, is designed to define the problem areas of beginning farmers as they progress toward the goal of establishing a family-sized commercial farm. To this end it lays the foundation for further studies in land tenure.

The closing frontier, during the first quarter of this century, ended the free land era in Canada. Farm business units could not now be developed by homesteading: they had to be purchased or rented from existing land owners. The methods of attaining owner-operatorship in agriculture had to change; they are changing today. The primary cause of these changes is a growing dependence of the farm industry on markets for purchases of resources or inputs, and for the sale of its products. This indicates a blending of the rural and urban resources to achieve greater total production through the economics of large scale operations.

In the last two decades there has been a tremendous surge in the rate at which new technology was applied on farms. The large as well as the middle sized family farms

have been substituting capital for labor, and enlarging the scale of operations around a given supply of labor. The small family farm units appear to have lost the pace: They have not been applying new technology as it has become available and they have not been enlarging the scale of their farming operations. Consequently, average farm size has been increasing in acres as well as total capital requirements and there has been an increasing disparity between farm sizes.

Due to the relatively constant supply of arable land, it follows that the number of farm business units have declined. Therefore the total opportunities for beginning farmers to rent or purchase land have correspondingly declined.

The continuous increases in the capital requirements of the family-sized commercial farm, during the last two decades, has been challenging its future existence. It has been estimated that somewhere between 30 to 40 thousand dollars is necessary to acquire a family-sized commercial farm: i.e. a farm business that will provide the farm family with a standard of living which is considered by society to be at least an acceptable minimum. It is conceivable that future farm operators may never completely own, at retirement, the farm business units they operate.

## Nature and scope of the study

The problematic situation of beginning farmers is characterized by the difficulties of formulating satisfactory economic farm family operating agreements and equitable transfer arrangements, of re-financing the family farm once each generation, and of low farm incomes. Associated with these problems are the conflicting beliefs as to how beginning farmers are getting started and established in farming. For example, three processes have been postulated: The Agricultural Ladder; The Intra-Family Farm Ladder; The Family Farm Cycle. As a result it is impossible to develop consistent agricultural policies. Thus, the major objective of this study is to determine the processes beginning farmers follow in getting started and established in farming.

The scope of this study is limited to defining the problem areas of beginning farmers.

## Statement of Premises

The following premises are important to the development of this present study:

1. The family farm, owned and operated by the farm family, is a basic institution in agriculture.
2. The family-sized commercial farm is a standard which allows optimum combinations of economic growth and security in maximizing the total welfare of society.
3. The supply of farm products is increasing at a

faster rate than the demand for farm products. The demand for agricultural products is relatively inelastic, whereas the demand for non-agricultural products is relatively elastic. Therefore, the total revenue received by agriculture declines relative to the total revenue received by non-agricultural industries. Since capital resources are relatively immobile in agriculture (For example, farm land and machinery have little value outside the agriculture industry), then labor must move out of the industry or accept monetary rewards which are lower relative to the monetary rewards they would receive if employed in other industries.

4. The aggregate supply function for land is almost perfectly inelastic.

## The Problem

The problematic situation of this study was characterized by hardships, failures, or successes of young farmers becoming established in farming. Those who started farming by working within the boundaries of their parents' farms seem to have had considerably more success in becoming established than those who started farming outside their boundaries. This raises doubt as to the validity of our common belief that the process of becoming an owner-operator of a family farm is by individual progress on "the agricultural ladder." The rungs of the ladder, starting at the bottom and proceeding to the top, are: (1) unpaid family labor, (2) hired man or non-farm employee, (3) tenant-operator, and (4) owner-operator.

If most beginning farmers are getting started in

farming by means of their parents' farms, then it follows that the agricultural ladder has ceased to represent the major process by which a young man interested in farming can eventually climb to ownership in agriculture. And, if this is valid, then some agricultural policies designed to aid beginning farmers in climbing the agricultural ladder are inconsistent with the actual problems of beginning farmers. Therefore, the problem of this study is to define the problem areas of beginning farmers as they progress toward the goal of establishing a family-sized commercial farm.

## Objectives of the Study

The central theme of this study is to determine how beginning farmers are getting started and established in farming. Other objectives are associated with the following minor hypotheses:

1. It was anticipated that beginning farmers are not using as much credit as it is possible for them to obtain. It was also anticipated that beginning farmers are obtaining from relatives large amounts of credit on easy terms (Flexible repayment schedules and below normal interest rates). It was further anticipated that beginning farmers have a preference for obtaining credit from non-relatives. In view of this it is hypothesized that some of the terms of institutional credit are unsatisfactory for beginning farmers. For example, it is anticipated that age classifications, and interest rates, as stipulated by the Manitoba Agricultural Credit Corporation, are inconsistent with the needs of beginning farmers.

2. It was anticipated that the capital requirements of the family-sized commercial farm are increasing beyond the possibility of re-financing it once each generation. In view of this it is hypothesized that: the greater the number of years farming (beginning farmers) the lower will be the net worth to farm debt ratio of the farm business. As the net worth to farm debt ratio declines the farm family become increasingly vulnerable to loss of equity farm capital as well as loss of farm income, if the farm operator should become a victim of adverse circumstances. Accordingly, it was anticipated that beginning farmers attempt to provide a greater degree of security for their families. For example, increasing their purchases of life insurance.

3. Tenancy is an important stage for beginning farmers in their progress toward the goal of owner-operatorship. The operating expenses of the farm business have been increasing at a higher rate than the fixed capital requirements. In view of this it is hypothesized that our traditional landlord-tenant leases (1/3 - 2/3 share) are now not equitable.

The following chapter is essentially a "review of the literature" associated with the nature and scope of this study.

# CHAPTER II

## THE AGRICULTURE LADDER

The goal of our traditional land tenure policy is private ownership of land, i.e. the owner-operated family farm; it is the top rung of the agricultural ladder. The owner-operator was permitted freedom to use, sell, mortgage, sub-divide and otherwise convey land. Only two general rules had to be heeded:

1. The control of land was limited largely to the lifetime of the owner. This prevents tying up ownership of land into future generations as was done in the feudal system.

2. In general, owners disposing of property by will were not permitted to defeat the rights of widows, widowers, and minors.

The distribution of land in small parcels, owner-operated family farms, was believed consistent with (1) the democratic principle and (2) the traditional concept of free-enterprise. It was believed that a wide distribution of land would provide incomes for an adequate standard of living to a greater number of people, security of tenure, and democratic spirit in community life. The free market, it was thought, would allow adjustment in farm size and the kinds of production to meet new demands and demand patterns for the food and fibres of agriculture.

It was also thought by agricultural and political

leaders of the time, that this system would function automatically. The agricultural ladder as originally conceived was a direct result of this system. It follows that if young farmers are getting started and established in farming by means of the farm family business, then revision of the general rules may be necessary.

## The Traditional Ladder

The demand for arable land has exceeded the supply since the era of "free land" ended. The land market became highly competitive and land values increased. The capital requirements of the owner-operated farm business increased *pari passu* with land values. Therefore the amount of capital necessary to get started in farming increased as well as the period of time involved in accumulating it. As a result of this beginning farmers began substituting tenantship for ownership (The capital invested in land was high relative to the total capital invested on the owner-operated farm unit).

Agricultural and political leaders of the United States thought that the owner-operated family farm ideal was being attained until the 1880 Census showed that 25 per cent of the farm units were tenant-operated. Over the next quarter century the trend toward tenancy continued, and it commanded the attention of research workers during the decade

following 1910. They began the task of discovering the processes by which farmers attained owner-operatorship. It was believed that if the secret of success could be discovered from those who had become owner-operators, others who aspired to ownership could be given this information and, in due course, achieve owner-operatorship in agriculture. From this research developed the concept of the agricultural ladder. This concept is essentially one of individual tenure progress along with its counterpart, progress in capital accumulation.

The agricultural ladder was originally defined by W. J. Spillman and it had four major rungs:

1. The first or lowest rung on the ladder, the unpaid family labor stage, was a period in which the young man worked on his parents' farm for room and board, and spending money.

2. The second rung, the hired man stage, was a period in which the young man worked as a farm laborer on neighboring farms, saving his earnings to purchase machinery and equipment to reach the third rung of the ladder.

3. The third rung, the tenant-operator stage, was a period in which the young man started farming as a tenant-operator, and accumulated savings to purchase land some day.

4. The fourth or top rung of the ladder was the owner-operator stage, the highest attainable goal in land tenure.[1]

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[1]Spillman, W.J., The Agricultural Ladder, American Economic Review, Supple., March 1919, Vol. 9, pp. 170-79

Spillman suggested that farm owners who had experience on at least two of the four rungs, actually climbed the agricultural ladder. He then concluded that his theory held in general and it therefore represented the tenure progress of all farmers. During the first two decades of this century it was the common observation that almost every farm owner had climbed the agricultural ladder.

A study of 2,112 Midwestern farm owners at the end of World War I, for example, indicated that "21 per cent had climbed the entire ladder, 13 per cent had skipped the tenant stage, 32 per cent the hired man stage, and 34 per cent passed directly to ownership from their fathers' farms, omitting both the stages of hired man and tenant ..... a large proportion of the latter group inherited their farms, or bought them from near relatives who presumably allowed easy terms of credit."[2]

The study indicated that a large proportion of beginning farmers received farm family assistance in the forms of inheritance and credit which enabled them to become owner-operators. This suggests the existence of some form of farm family operating and transfer arrangements. Thus, the present-day father-son problems of formulating satisfactory economic operating agreements and equitable transfer arrangements had

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[2]Ibid

their origin as early as the second decade of this century. As a result succession taxes and regulations by governments to enforce the two general rules of our traditional land tenure policy raise some discomfort among the owner-operators of efficient farm business units. It is conceivable that this contributes to the sub-division of farm business units. The new farm business units may be too small to provide the operator and his family with an adequate standard of living.

Spillman observed in this study that the average period of time spent as a hired man or tenant was increasing for those farm owners who had climbed the entire ladder. Thus, starting at the bottom of the ladder and working toward the top was becoming much less attractive to those young men who aspired to farm ownership. Hence farm credit became an important factor in re-financing the owner-operated family farm once every generation.

Spillman further observed that the successive rungs of the agricultural ladder from the bottom to the top, generally represent progress in financial standing and independence of control of the farm business, but they do not always represent progress in well being. He wrote:

> As the amount of capital owned increased the proportion of owners increased, and, generally speaking, when the average farm income of a group of owners had risen to the point that permitted a satisfactory standard of living, practically all of the men passed from the tenant into the owner class. This in spite of the fact that a tenant with a given

> amount of owned capital in practically all cases where considerable numbers were averaged, had a farm income approximately three times as great as owners with the same amount of capital.[3]

Home ownership, economic independence, and the prospective rise in future land values are reasons why tenants invest in farm land according to Spillman. Another reason might be the insecurity of a short-term lease. This type of lease has been characteristic of the landlord-tenant relationship in North America. The owner-operator has greater tenure security than the tenant on a short-term lease. The tenure insecurity of the owner-operator is dependent on the indebtedness of the farm business. Hence for different reasons the tenant and owner must plan investments in the farm business that will pay highest net returns in the short run. Problems to increase returns and to conserve the soil resources in agriculture are in part explained by limited capital and tenure insecurity.

## Efficiency of the Ladder Concept

Overcapitalization of farm land and new technology effect the efficiency of the agricultural ladder. If a relatively stable "business cycle" is presupposed, then overcapitalization is caused by the relatively constant supply of farm land, the relatively high birth rate in the

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[3]Spillman, W.J., op. cit., pp. 230-231

rural areas, the preference of most young farmers for owner-operatorship, and the high degree of immobility in the farming population.

It follows that immobility of farm people results in a surplus of labor on farms. Consequently, the rungs of the agricultural ladder tend to become overcrowded. As a result the marginal value product of farm labor declines relative to the marginal value product of non-farm labor. It also follows that the preference of young men to climb the several rungs of the agricultural ladder, beginning as unpaid family labourers and ending as owner-operators, causes the demand for farm land to increase at a faster rate than the supply of farm land, and the price of land rises beyond the capitalized value of expected profits. This would be true regardless of whether the business cycle was fluctuating or relatively stable.

As a result of this, easy farm credit and government aids to increase farm incomes (the marginal value product of labor is assumed to rise since capital would normally be substituted for labor) are, to a large extent nullified in the land market. The established farmers can afford to put a higher effective money value on the intangible benefits (preference) of owner-operatorship than beginning farmers (only when farm operators experience a standard of living

above the subsistence level can they put effective money values on intangible benefits). Thus, the opportunities for beginning farmers to purchase farm land would be almost as limited during the era of easy farm credit and government aids as they were before.

Employment of new technology (this refers to technology that has developed exogenously of the farm business) on farms causes (1) an increase in the size of farm business both in the amount of capital invested as well as in acres, (2) an increase in total operating expenses of the farm business, and (3) an increase in the disparity of farm sizes as well as farm incomes. The established farmers are first to employ the new technology - the productivity of labor rises and they increase the scale of their operations to a given supply of labor. This group of farmers tend to "keep pace" with economic progress; they operate economic farm units. Other groups of farmers who do not "keep pace" with economic progress are forced to accept lower farm incomes and lower standards of living relative to the first group. The disparity of farm sizes and farm incomes is now greater.

It follows from above: the traditional belief that a beginning farmer should start "in a small way" (with little capital) is not valid in our agricultural industry which is

characterized by increasing dependence on markets for purchases of inputs, and for the sale of it's products.

The economic farm business unit demands a higher quality of labor and management at present than it did in the past. This is due to the application of the new technology on farms. The successful adoption of new farming techniques requires the farm operator to possess a greater knowledge in the technical and managerial fields of farm business. This need was recognized and accordingly, public programs were implemented to instruct young farmers on new farming methods. The wiser fathers found it quite natural to build and expand upon the knowledge obtained by the son in allocating farm resources and in planning the future operations of the farm business (i.e., the farm business became organized according to the resources vested in the business by the farm family). Consequently, it would appear that the major problems of commercial farms, operated by the farm family, are (1) expanding the farm business to family size and (2) formulating satisfactory economic farm family operating agreements.

A basic desire of the farm operator is to perpetuate the family farm in the family name. Therefore, the expansion of commercial farms to family sized units suggests that most of the farm business units which become available on the land

market for purchasing or renting are not family-sized units. In general, they are farm units which are incapable of providing a farm family with a minimum standard of living. These farm units are usually acquired, as they become available, by the larger commercial farms which are expanding to family-sized units.

The operators of the larger farm units can offer higher prices for land, or higher rewards to landlords who rent land, than beginning farmers who lack the necessary capital to obtain economic farm business units. If beginning farmers cannot rent, or buy farm land, i.e., no room left on the tenant and owner rungs of the agricultural ladder, it follows that individual progress on the agricultural ladder is next to impossible.

## The Intra-Family Farm Ladder

The per cent of "managed" farms compared to total farms in Manitoba has remained relatively constant. In 1956 0.8 per cent of the farms in Manitoba were operated by hired managers. The owner-operated family farm is the basic farming institution in Manitoba. There has been a shift since 1941, however, from the tenant-operated farm to the owner-operated and to the part tenant-part owner-operated farm (Table 2.1).

In 1956, approximately 30 per cent of the farms in

Table 2.1. Per Cent Distribution of Farms by Tenure Manitoba 1901 - 1956[4]

| Year | Total No. of Farms | Per Cent Distribution By | | | |
|---|---|---|---|---|---|
| | | Owner % | Tenant % | Part Owner Part Tenant % | Manager % |
| 1901 | 32,252 | 88.9 | 5.0 | 6.1 | - |
| 1911 | 43,631 | 83.4 | 10.4 | 6.2 | - |
| 1921 | 53,252 | 81.1 | 11.4 | 6.6 | 0.9 |
| 1931 | 54,199 | 69.7 | 18.2 | 11.7 | 0.4 |
| 1941 | 58,024 | 66.0 | 18.9 | 14.4 | 0.7 |
| 1951 | 52,385 | 70.9 | 9.7 | 18.7 | 0.7 |
| 1956 | 49,201 | 69.0 | 8.8 | 21.4 | 0.8 |

Manitoba had some leasing arrangements. It is anticipated that leasing arrangements are often an integral part of the farm family operating agreement, and farm family transfer arrangement. When the farm parents retire the family business is often rented to the son or sons who remain on the farm. Gradually the son or sons acquire ownership through gifts or special option to buy. This suggests that beginning farmers are getting started in farming by means of the farm family and the family farm. Barlowe and Timmons have this to say:

> The combination of programs progressing from the 4-H club or Future Farm Projects, through a

[4]Gilson, J.C., Ec. Aspects of Tenant Operated Farms, Dept. of Agric. Ec., and Farm Management, University of Manitoba, Res. Rep. No. 5, Feb., 1960

> father-son partnership to an intra-family transfer, provides an agricultural ladder working within the framework of the family.[5]

Marshall Harris defined the intra farm ladder as follows:

> ...the new agricultural ladder may be divided into two major parts - operating agreements and transfer arrangements. The operating agreement phase is made up of three rungs that are labelled project agreements, apprenticeship, and partnership. The transfer phase is composed of two rungs: transfer arrangements and full ownership.[6]

Harris calls the intra-family farm ladder "a five rung process;" it "begins all over again when the new family farm owner takes his own son through 4-H club and FFA projects and enters into an apprenticeship-operating agreement with him." The recurrence of this process within the framework of the family farm once every generation implies a continuous process rather than a discrete one.

## The Family Farm Cycle

J. C. Gilson postulated the family farm cycle to best explain "the need for suitable operating and transfer arrangements" for the family farm business. He defined the cycle as follows:

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[5] Barlowe, R. & Timmons, J.F., What Has Happened to The Agricultural Ladder, J.F.E., Feb. 1950. Vol. 32, p. 46

[6] Marshall Harris, A New Agr. Ladder, Land Ec., Aug. 1950, Vol. 26, pp. 258-267

The family farm grows through a cycle once every generation. It starts with the beginning farmer and ends with his retirement. His son, in turn, goes through the same type of cycle during his lifetime on the farm.[7]

The cycle was divided into five stages:

1. The beginning farmer may be on his own or he may be working closely with his father. He is somewhere between the ages of 20 to 30 years in this stage.

2. The beginning farmer is now on his own - the children are growing up - and the farm business is characterized by larger debts.

3. The farm operator is somewhere between the ages of 40 to 55 years. Some of the children begin leaving home for non-farm occupations. The farm operator is confronted with (1) the problems of educating some of his sons and daughters away from the farm and (2) the problems of operating agreements with the son or sons who remain at home.

4. The farm operator starts to consider retirement plans. Problems of transferring the family farm business to the son or sons arise in this stage. For example: Should the farm operator sell or rent the family farm to his son or sons? Has the farm operator enough savings on which to retire or must he depend on income from the family farm? What provision should the farm operator make for his wife in this stage? Who inherits the family farm estate when the parents have passed on?

5. In stage five of the cycle there is an overlapping of the old and new generation on the family farm. Contributions to, receipts from, and management of, the farm business are divided between the old and the new generation. Part of the farm business is generally transferred to the new farm operator in this stage. The type of

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[7] Gilson, J.C., Family Farm Business Arrangements, Dept. of Agr. Ec. and Farm Mgr., Bul. No. 1, May, 1959, pp 6-7

> transfer arrangement can adversely effect the efficiency of the farm business. If only a small part of the farm business is transferred to the beginning farmer before the death of the farm parents, it may force him to relinquish large portions of the business to the other heirs.

The intra-family farm ladder defines the stages of getting started and established in farming more precisely than the family farm cycle. This concept is a discrete process which does not conform to reality. The family farm cycle, however, is a continuous process which does conform to reality.

In the next chapter the implications of the two theories are used in developing a conceptual model which is expected to provide a framework for empirical investigation.

# CHAPTER III

## THE FARM FAMILY CYCLE

The object of this chapter is to design a satisfactory conceptual model of the processes followed by beginning farmers in becoming established in farming. The major process is the farm family cycle. Other processes are inter-dependent with this cycle. Through empirical investigation these processes are evaluated in Chapters IV and V.

The theory of the farm family cycle is based on the farm family, a co-ordinating unit composed of the parents and family, which provide the labor and management of the farm business. Analogically, the father is chairman of the Board of Directors (i.e. the farm family) of the farm business. The operating efficiency of the farm business unit, therefore, is not just dependent upon the individual effort of the farm operator, but is dependent upon changing variables (the growing family) which command the attention of the farm operator, since (1) if the family farm business is to be perpetuated within the farm family it must continue to function efficiently; and (2) the prospective heirs to the farm family estate must be treated equitably. In view of this, it is concluded that the establishment of a farm business is primarily dependent

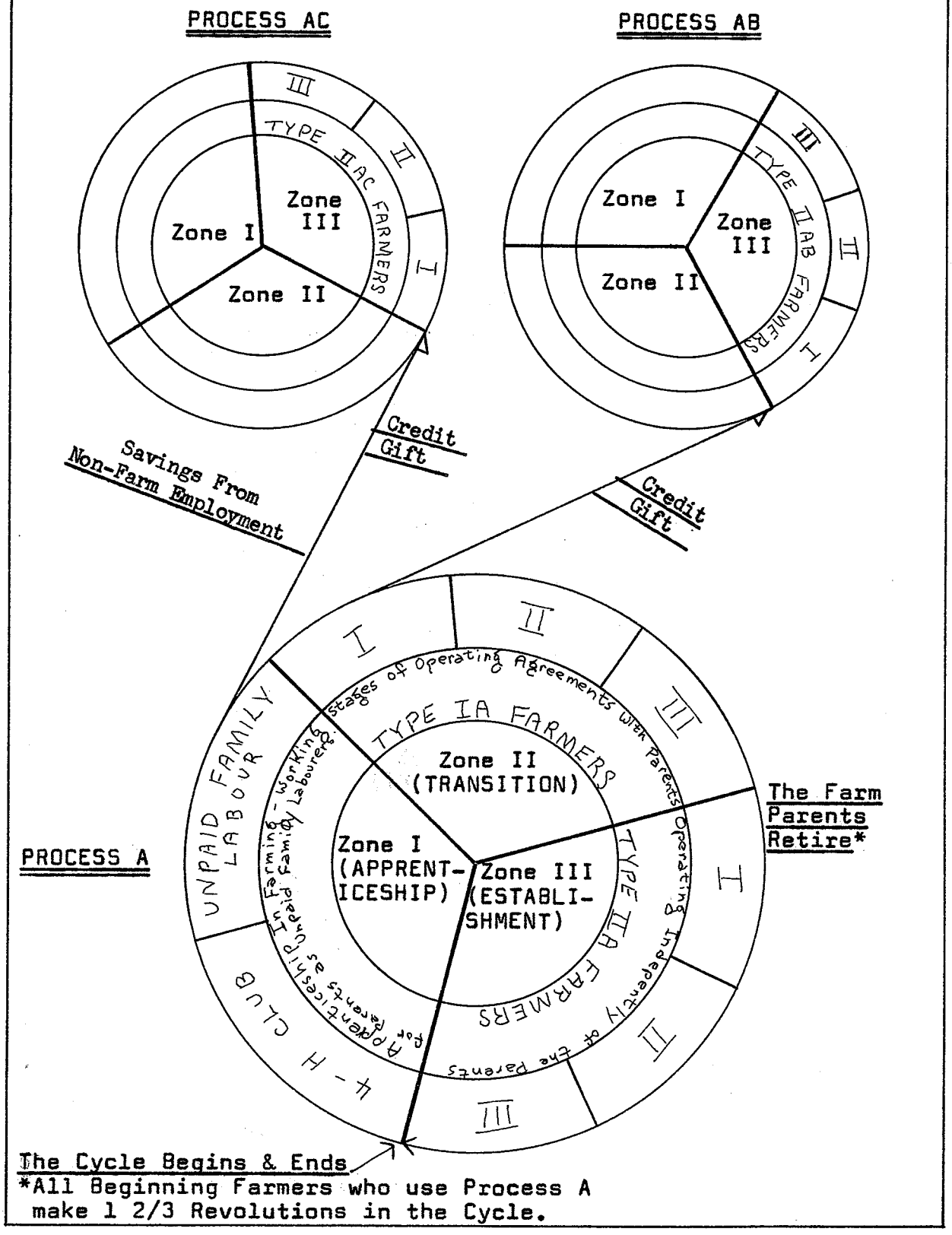
upon (1) the economic aspects of the farm family business; and (2) the particular needs of the farm family.

## PROCESS A

The farm family cycle is designated Process A (Fig. I). This cycle was developed from three problematic situations occurring within the framework of the family farm, which are represented on the farm family cycle by three zones: (1) Apprenticeship (Zone I), (2) Transition (Zone II), and (3) Establishment (Zone III). The zones are equal in magnitude - each zone representing a period of 11 years. The zones, in turn, are sub-divided into stages, for example, the 4-H Club stage and the Unpaid Family Labor stage of Zone I (Fig. I, Process A).

The first problematic situation, occurring within the framework of the family farm, is associated with Zone I (Fig. I, Process A). The young man, working at home for his parents as an unpaid family laborer, is confronted with the problems of deciding whether to continue his education away from home in a desired field, or to continue his education at home and work toward the goal of establishing his own farm business.

The second problematic situation is associated with Zone II (Process A). Those young men who decide to remain




*All Beginning Farmers who use Process A make 1 2/3 Revolutions in the Cycle.

FIGURE 1. THE FARM FAMILY CYCLE (PROCESS A)

at home and start farming with their parents are confronted with problems of formulating economic operating agreements, equitable transfer arrangements, and enlarging the farm family business to provide the farm families with a satisfactory farm income. Psychological, social, economic, and ethical problems evolve in Zone II. For example, the farm family business may not be large enough to provide an adequate income for two or more families.

The third problematic situation is associated with Zone III (Process A). Beginning farmers in Zone III, operating the farm family business independent of the farm parents, are confronted with the problems of leasing arrangements, obtaining enough credit to purchase (part or all) the farm family business, increasing the degree of tenure security, and enlarging the farm business to family size. Most of these problems are a function of the farm family transfer arrangement, after the parents have retired from the farm business.

Beginning farmers are located in Zones II and III (Fig. I, Process A).

Type IA Farmers

Type IA farmers have operating agreements with their parents, and are located in Zone II (Process A). Type IA

farmers are generally somewhere between the ages of 21 to 32 years.

Type IIA Farmers

Type IIA farmers operate family farm business units independent of their parents. The approximate ages of type IIA farmers are somewhere between 32 to 43 years.

As a result, the farm family cycle (Process A) begins and ends at Zone I (Fig. I, Process A). There is overlapping of the "old" and "new" generations in Zones I and II. In Zone I, the farm son is learning the farming profession from his father. As a result, Zone I represents a period of apprenticeship for the young man aspiring to own and operate a family farm business. In Zone II the farm son begins farming with his parents under some type of operating agreement until the farm parents retire. In view of this, each farmer, beginning in the cycle at Zone I, makes one and two-thirds revolutions in the cycle before retirement (Fig. I, Process A).

PROCESS AB

Psychological, social, economic, and ethical problems evolve when two or more farm families are associated through farm family operating agreements. For example, the farm

families may desire independence, or the farm family business may not be large enough to provide an adequate income for two or more families, or the farm operator may desire complete managerial control of the farm business until his retirement. It is anticipated that these problems generate a series of centrifugal forces which cause some type IA farmers to leave the farm family cycle in stages I or II of Zone II (Process A), and farm independent of the farm parents (i.e. before the retirement of the farm parents). It was assumed that type IIA farmers attaining stage III of Zone II were committed by nature of the farm family operating agreements to remain in Process A. As a result, a new farm family cycle is born. The process followed by this group of beginning farmers is designated AB.

The new farm family cycle is, analogically, firstly a fetus and the tangent which connects the farm family cycle to the fetus is, analogically, an umbilical cord; farm family assistance flows down the cord to the beginning farmer until the farm parents retire from farming. At this time the umbilical cord becomes severed and the new farm family cycle is born. Beginning farmers usually receive farm family assistance in two forms: (1) credit extended on farm assets and (2) gifts of farm assets. It is anticipated that credit extended by relatives has flexible repayment

schedules and below normal interest rates. As a result, part of the "risk" involved in becoming established in farming is born by the farm parents.

Type IIAB Farmers

Type IIAB farmers operate farm business units independent of their parents who have not reached retirement age. The approximate ages of type IIAB farmers are somewhat lower than the ages of type IIA farmers. Type IIAB farmers are located in Zone III of the new farm family cycle (Fig. I, Process AB). This group of beginning farmers transferred from Process A to Process AB by leaving stages I or II of Zone II (Process A) before retirement of the farm parents.

The distinguishing characteristic between type IIAB farmers and type IIA farmers is that the latter assumed managerial control of the farm family business through a transfer arrangement when the farm parents retired, whereas the former assumed managerial control of a neighboring farm business through a purchasing or leasing agreement before the farm parents retired. Generally, type IIAB farmers obtain or receive farm family assistance for expanding their farm business units to family size before the farm parents retire, whereas type IIA farmers often obtain or receive farm family assistance for the same purpose after the farm parents retire. Sometimes type IIAB farmers acquire

part of their parents farms through a transfer arrangement when the parents retire from farming. It is conceivable that some type IIA and AB farmers become re-united through brother partnership agreements after the parents retire from farming. It is anticipated that the longer the period of time farming Zone II (Process A) as type IA farmers (having operating agreements with parents), the shorter will be the period of time in which the farm business (type IIAB farmers) is a fetus. Accordingly, type IIAB farmers are sub-divided into two groups for empirical investigation.

Type $IIAB_1$ farmers: They evolved by transferring from Process A to Process AB in the first stage of operating agreements (Stage I) of Zone II (Process A).

Type $IIAB_2$ farmers: They evolved by transferring from Process A to Process AB in the second stage of operating agreements (Stage II) of Zone II (Process A).

It is anticipated that type $IIAB_2$ farmers acquired more managerial experience and accumulated more farm capital during the period of time farming with their parents under operating agreements than type $IIAB_1$. This is attributed to the anticipation that type $IIAB_2$ farmers had farmed with their parents for a longer period of time than type $IIAB_1$.

## PROCESS AC

Some young men, aspiring to ownership of a farm business, leave the farm family cycle (Process A) in the unpaid family labor stage to obtain non-farm employment, saving capital for future investments in farm assets. It is anticipated that this group of beginning farmers started farming with a small amount of capital. Thus, they evolved through a fetus stage and a new farm family cycle was born. The process followed by this group of beginning farmers is designated AC (Fig. I, Process AC). This group of beginning farmers did not enter Zone II (Process A). As a result, they had no operating agreements with their parents. The tangent in Fig. I (Process AC) serves exactly the same function as the one illustrated in Fig. I (Process AB). When the farm parents retire the tangent (umbilical cord) becomes severed and the new farm family cycle is born.

### Type IIAC Farmers

Type IIAC farmers operate farm business units independent of their parents who have not reached retirement age. Type IIAC farmers are located in Zone III of the new farm family cycle (Fig. I, Process AC). This group of beginning farmers transferred from Process A to Process AC by leaving the unpaid family labor stage of Zone I (Process A) to

obtain non-farm employment, saving capital to someday obtain a family farm business.

The distinguishing characteristic between type IIAB farmers and type IIAC farmers is that type IIAC had no operating agreements with their parents, whereas type IIAB had operating agreements with their parents. Type IIAC farmers saved capital for investment in farm assets by obtaining non-farm employment, whereas type IIAB saved capital for investment in farm assets through operating agreements with their parents.

Transfer arrangements between beginning farmers and their parents are common to Processes A, AB and AC. Generally, the transfer arrangement becomes effective through landlord-tenant leases, special option to buy, or gifts. Through transfer arrangements beginning farmers acquire part or all of their parents farms.

The processes followed by beginning farmers in becoming established in farming are summarized in Chart I.

ZONE I (APPRENTICESHIP) A PRE-REQUISITE TO FARMING

The zone of apprenticeship (Process A) is primarily one of progress in acquiring specific skills and scientific knowledge in order to operate, or to participate in operating,

CHART I PROCESSES OF BECOMING ESTABLISHED IN FARMING

| COMPOSITION OF BEGINNING FARMERS | RELATIONSHIP TO PARENTS | ZONE AND PROCESS LOCATED | STAGES LOCATED | PROCESS FOLLOWED IN BECOMING ESTABLISHED |
|---|---|---|---|---|
| Farm Boys | Young men working at home for their parents as unpaid family laborers, and learning the farming profession | Zone I (Apprenticeship) Process A | 4-H Club and unpaid family labor stages (Zone I) | A, AB, or AC |
| Type I A Farmers | Operating agreements with parents | Zone II (Transition) Process A | All stages (Zone II) | A or AB |
| Type II AC | Operating independently of the parents | Zone III (Establishment) Process AC | All stages (Zone III) | AC |
| Type II AB | Operating independently of the parents | Zone III (Establishment) Process AB | All stages (Zone III) | AB |
| Type II A | Operating independently of the parents | Zone III (Establishment) Process A | All stages (Zone III) | A |

a farm business. This zone is recognized by two stages (1) the 4-H Club stage and (2) the unpaid family labor stage.

The farm boy[8] in the 4-H Club stage is somewhere between the ages of 10 to 16 years. In this stage the farm boy increases his knowledge of farm technical information and he acquires some experience in farm management and leadership. Very often the father incorporates some of the ideas that have been discussed at the 4-H Club meeting into the farm business. The farm boy in this stage also acquires some information from his father on the "art and science" of managing the 4-H projects, for example, the 4-H beef calf. This project marks the first father-son agreement.

The farm boy in the unpaid family labor stage is somewhere between the ages of 16 to 21 years. In this stage the farm boy works on his father's farm in return for (1) acquiring apprenticeship in the farming profession;[9] (2) the use of the family car; and (3) spending money.

(TRANSITION)
ZONE II METHODS OF GETTING STARTED IN FARMING

The zone of transition (Process A) is essentially one of progress in capital accumulation, along with its

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[8]This term is used to designate farmers' sons residing at home between the ages of 10 to 21 years.

[9]When the farm boy has decided on farming as a career, acquiring apprenticeship in the farming profession becomes a major objective.

counterpart, increasing managerial responsibilities to the farm family business. This zone is recognized by various farm family operating, transfer, and financial arrangements. It begins with father-son participation in planning and co-ordinating resources for production, and in sharing the rewards of production. It ends with the retirement of the farm parents, and a transfer arrangement with the new farm operator.

This zone was sub-divided into stages:

1. Stage I is defined by these operating agreements: (i) livestock or crop enterprise agreement or both, (ii) wages, and (iii) payment in kind.

2. Stage II is characterized by an enormous variety of operating agreements. In order to encompass all these agreements, it was defined as follows:

   The beginning farmer may own land, rent land, or both; he may pay part or all the operating expenses; and he may use part or all the residual machinery and equipment[10] and work for the farm parents and family in return for the use of it.

3. Stage III is defined as follows: The beginning farmer may own land, rent land, or both, and share in the receipts and expenses of the entire farm business. The nature of operating agreements in this stage are anticipated to vary between partial and full partnership agreements.

In view of this it was hypothesized that progress in capital accumulation by type IA farmers is a function of five factors.

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[10]This includes the aggregate machinery and equipment employed in the farm family business, minus that part owned by the beginning farmer.

Stage of Operating Agreements

The amount of equity capital accumulated by type IA farmers increases as they progress from the first stage of operating agreements (stage I) to the third stage of operating agreements (stage III) of Zone II (Process A). As a result, type IIA farmers (operating independently of the farm parents in Zone III, Process A) become established in a fewer number of years (a higher rate of gain in equity farm capital) than type IIAB farmers (operating independently of the farm parents in Zone III, Process AB).

Intra-Family Transfers of Capital

The amount of equity capital accumulated by type IA farmers is partially dependent on the amount of intra-family transfers of capital through two methods: (1) Gifts; and (2) The savings accrued as a result of purchasing farm assets at a lower cost than market value. There are three conceivable reasons for capital being transferred by gifts:[11]

(i) Due to problems occurring within the farm business, for example, too many sons wanting to farm, it may be desirable for the farm parents and family to increase the rate at which the beginning farmer is accumulating equity capital

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[11]Both the first and second methods of transferring capital are essentially gifts.

so that he can start farming on his own (by means of credit) before the farm parents retire (i.e. Process AB).

(ii) The farm parents and family may desire a share operating agreement (stage III). With equity capital accumulated through gifts the beginning farmer can acquire an investment share in the farm family business, and remain in Process A.

(iii) The farm parents and family may wish to avoid succession taxes.

## The Amount of Credit

The amount of farm assets that type IA farmers purchase is partially dependent on credit. In view of both the second and third stages of operating agreements in Zone II (Process A) it is anticipated that credit is extended on land and buildings, and machinery and equipment, by both relatives and non-relatives. Often farm parents offer their equity as collateral so that beginning farmers can obtain credit from institutional or private sources. Beginning farmers obtain credit from relatives for two major (conceptual) reasons: Firstly, the intra-family purchase agreements on farm assets generally involves intra-family credit arrangements (for example, crop share payments on land); and secondly, relatives will generally extend credit on a narrower margin of security and on easier terms than lending institutions.

## The Scale of Operations

The greater the amount of capital invested in the

farm family business, the larger will be the amount of equity capital accumulated by type IA farmers through the farm family operating agreement, and intra-family transfers of capital. Generally, the farm operator wishes to keep the family farm in the family name. To this end, he wants to help his son get started in farming. The wealthier farm operators tend to transfer greater (absolute) amounts of capital through gifts of farm assets than the less wealthy farm operators. Since a large percentage of farm family agreements are anticipated to be partial to full partnership agreements, the larger the scale of farming operations, the larger is the beginning farmers absolute share.

The Savings from Non-Farm Employment

The amount of equity capital accumulated by type IA farmers is partially dependent on savings from non-farm employment. Sometimes the farm family business is too small to employ economically two farm operators (father and son) for the entire year. As a result, when the crop has been harvested beginning farmers (wives as well) often obtain non-farm employment for the fall and winter months. Generally, type IA farmers use earnings from non-farm employment both for living expenses and savings for investment in more farm assets.

It is further hypothesized that the first and second

stages of operating agreements are less satisfactory to beginning farmers (type IA) than the third stage of operating agreements. This is attributed to the following (conceptual) reasons:

1. The type IA farmer has fewer responsibilities in stages I and II than stage III. This was indicated through the nature of the farm family operating agreements. Accordingly, the beginning farmer desires independence or managerial control of his own farm business, and wishes to follow Process AB.

2. The complexity of stage II operating agreements suggest the lack of economic organization of farm resources. In view of this, it is anticipated that the net operating income of beginning farmers in stage II will be less relative to the net operating income of beginning farmers in stages I or III.

## ZONE III (ESTABLISHMENT) METHODS OF ESTABLISHING A FAMILY-SIZED BUSINESS

The zone of establishment is essentially one of increasing the scale of operations of the farm business to provide, at least, a minimum standard of living for the farm family (Processes A, AB, and AC). It follows that type II farmers[12] increase the size of the farm business in acres as well as the amount of capital invested in farm assets as they progress through zone III (Fig. I, Processes A, AB, and AC). It is anticipated that type II farmers substitute

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[12]This is a general term. It applies to type IIA, AB and AC farmers only. They operate farm business units independent of their parents.

owner-operated cropland acres for tenant-operated cropland acres as they progress through zone III. In view of this, it is hypothesized that progress in enlarging the farm business is a function of four factors.

Amount of Equity Capital-Preceding Type II Status

The greater the amount of equity capital invested in farm assets just preceding type II status, the greater the amount of credit that can be obtained - the larger will be the farm business - and the greater will be the rate at which equity capital is accumulated. It is anticipated that type IIA farmers will have larger farm business units, as well as larger net operating incomes, relative to type IIAB or AC farmers. It is anticipated that type IIAC farmers (started farming from savings accumulated through non-farm employment) will have the smaller farm business units, as well as the smaller net operating incomes. Consequently, the problem of low farm incomes associated with beginning farmers would be greater for type IIAC farmers relative to type IIAB or A farmers.

Intra-Family Financial Assistance

The amount of capital invested in the farm business is partially dependent on the amount of farm family assistance through four methods: (1) Gifts, (2) The savings accrued

as a result of purchasing farm assets at a lower cost than market value,[13] (3) Inheritance, and (4) Credit. Often some of the wealthier farm parents can "afford the luxury" of transferring some farm assets to beginning farmers at a lower cost than market value. This is anticipated to take place before and after the farm parents have retired from farming. The purchases of farm assets from parents often involve intra-family credit arrangements.

Number of Years Farming

The greater the number of years farming the larger will be the farm business, since the savings accumulated by the farm family are invested in the farm business. It follows, therefore, that the net worth to farm debt ratio should be increasing the greater the number of years farming, and accordingly, the degree of security of tenure should be rising. If the reverse of this proves to be true, then the difficulties of re-financing a family farm business once each generation necessarily become extended over longer periods of time.

Savings from Non-Farm Employment

The amount of capital invested in the farm business by type II farmers (wives as well) is partially dependent

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[13] Included as gifts in the analysis

on savings from non-farm employment. Some type II farmers operate farm business units that are too small to employ economically the farm operator for the entire year. Often the farm operator and his wife must seek non-farm employment in order to provide their family with an adequate standard of living, to make payments on farm debt, to have some capital available for operating expenses the following year, and to purchase more farm assets. It is anticipated that non-farm employment will have greater relative importance to beginning farmers proceeding through Processes AC and AB than Process A. This attributed to the hypothesis which indicates that type IIA farmers have the larger farm business units as well as the larger net operating incomes relative to type IIAB or AC farmers.

In the following chapter the conceptual framework of the processes of becoming established in farming is evaluated through empirical investigation.

# CHAPTER IV

## CYCLE-LADDER EVALUATION

## THE SURVEY

The questionnaire that was designed for this study is shown in Appendix I. It was anticipated that beginning farmers would have difficulty in estimating past farm inventories. Accordingly, farm inventories were assumed constant from one accounting period to another. It was also anticipated that type I farmers, by nature of the farm family operating agreements, would have difficulty in estimating the value of their share of the farm receipts and expenses. A cash balance statement was included in the questionnaire (p.20) to aid the enumerators in rectifying possible errors of farm receipts and expenses during the interview.

Instructions and methods of completing and analyzing the questionnaire are given in Appendix I.

Three areas in Manitoba were selected for this field survey: Russell, Brandon, and Morris. The geographical locations of these areas are shown in Appendix II.

These areas were selected for the field survey for two reasons:

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1. There is differentiation in the types of farming between the areas. Mixed farming is the predominant farming system at Russell. The mixed farms in the Brandon and Morris areas are interspersed with specialized and highly capitalized farm business units. Higher land values and special crops are more common to the Morris area than either of the other two areas. It is conceivable, therefore, that there may be differentiation in the methods and problems of beginning farmers in getting started and established in farming between the areas.

2. The Agricultural Representatives provided assistance to the field enumerators in locating type IA and type II farmers (Type IIA, AB, and AC only).

The number of successful interviews by area and type of farmer are shown in Table 4.1. Twenty-six questionnaires were rejected from the analysis because the error in the cash balance statement was over 5 per cent. Ten questionnaires were completed by young farmers operating the farm family business in joint partnership with a brother. The average capital investment in the farm business was $61,686 compared to $30,435 for all type II farmers. The average debt of the farm business for brother partnership arrangements was $5,977, compared to $11,602 for all type II farmers (i.e. Type IIA, AB, and AC farmers). Due to the major differences in the capital investment of the farm business and the amount of farm debt, the questionnaires obtained from brother partnership arrangements were separated from all type II questionnaires for individual analysis.

The total net sample of questionnaires used in the

main analysis was composed of 63 type IA farmers and 55 type II farmers. The division of type IA and type II farmers, by area, is shown in the table below.

Table 4.1. Size of Samples

| Area | Type Farmer | Size Sample | Questionnaires Rejected | Brother Partnerships | Net Size Sample |
|---|---|---|---|---|---|
| Russell | I | 34 | 11 | - | 23 |
| | II | 19 | 3 | 4 | 12 |
| Brandon | I | 28 | 3 | - | 25 |
| | II | 30 | 2 | 3 | 25 |
| Morris | I | 15 | 0 | - | 15 |
| | II | 28 | 7 | 3 | 18 |
| Total All Areas | I | 77 | 14 | - | 63 |
| | II | 77 | 12 | 10 | 55 |

The differences in methods, employed by beginning farmers in getting started and established in farming, between areas were insignificant. Intra-family transfers of capital and farm family operating agreements were the most important methods of accumulating equity farm capital (Table 4.2.)

Table 4.2. Average Equity Capital Accumulated, Importance of methods by Per Cent, for Type IA Farmers Stratified by Areas, Jan. 1, 1960.

| Area | Size Sample | Present Age of Type I Farmer | Total Equity Capital | Importance of methods of acquiring equity capital: Farm Family Operating Agreement | Gifts from Family | Non Farm Employment | Inheritance | Hired Man |
|---|---|---|---|---|---|---|---|---|
| | No. | Years | $ | % | % | % | % | % |
| Russell | 23 | 27 | 11,144 | 72.9 | 18.8 | 6.2 | 2.0 | 0.1 |
| Brandon | 25 | 27 | 14,566 | 81.3 | 15.1 | 3.3 | - | 0.3 |
| Morris | 15 | 29 | 14,661 | 60.6 | 30.0 | 9.4 | - | - |

The differences and importance of methods employed by type II farmers in becoming established in farming are shown in Appendix III. The composition of type II farmers (type IIA, AB, and AC) were assumed to be normally distributed among the three areas of the survey (Russell, Brandon and Morris).

## THE EVOLUTION OF BEGINNING FARMERS

All beginning farmers passed through apprenticeship on their parents' farms. Approximately 51 per cent of the sample farming under some type of farm family operating agreement (type IA) began apprenticeship in the 4-H club stage, compared to approximately 24 per cent of the sample farming independently of the farm parents and family (type II). The evolutionary stages of type IA and type II farmers are illustrated in Figures 2 and 3, respectively.

### Type IA Farmers

Thirty-eight type IA farmers moved directly to the first stage of operating agreements[14] (Zone II, Process A) from the unpaid family labor stage. Out of this group 21 moved to the second stage of operating agreements, and in turn 5 moved to the third stage, with 4 moving to the third

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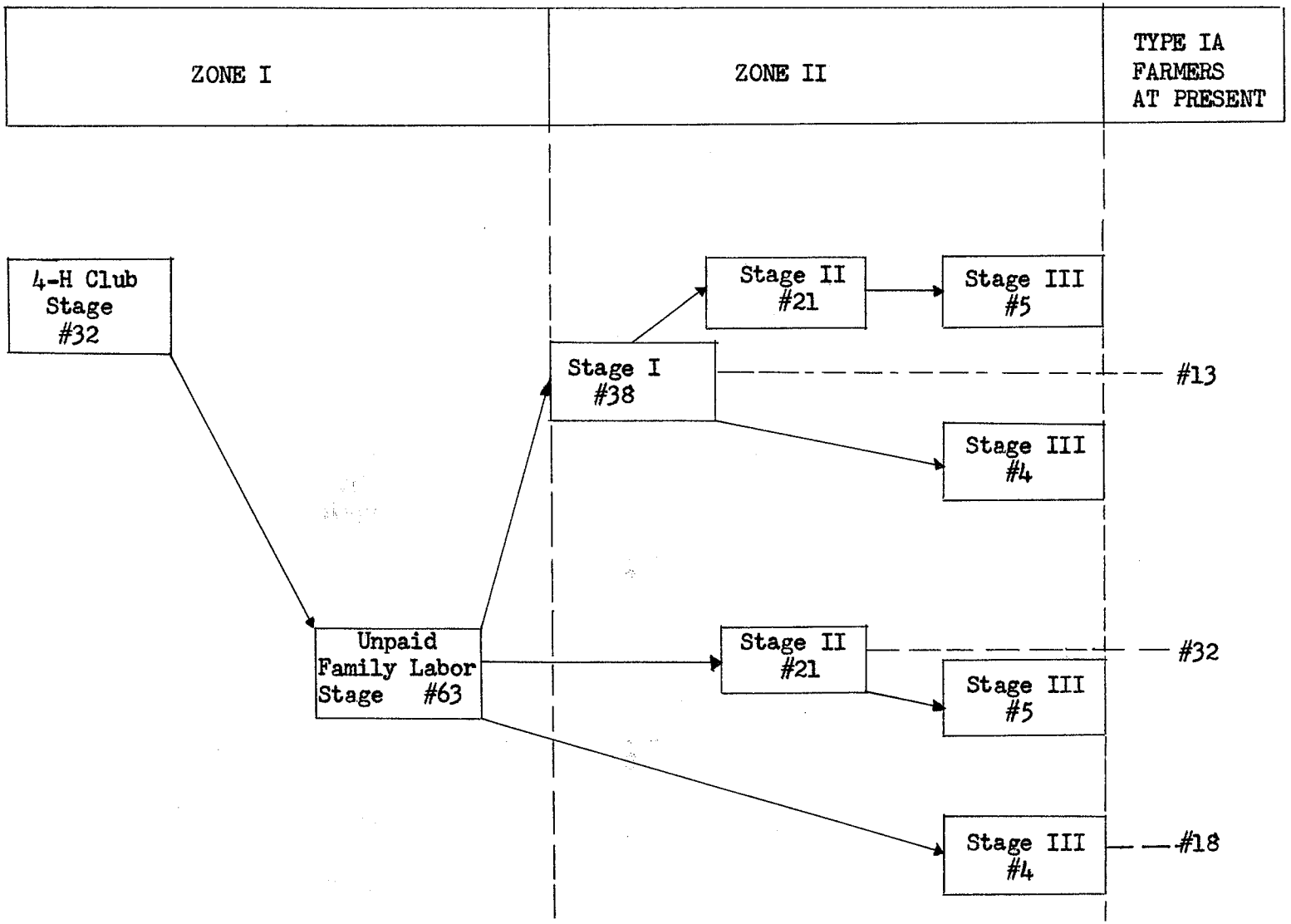
[14]The stages of operating agreements were defined on page 33.

FIG. 2. The Evolution of 63 Type I Farmers from Zone I to Zone II by stages. (Process A).



stage omitting the second stage. There are 13 remaining in stage I at present.

Twenty-one type IA farmers moved directly to the second stage of operating agreements (Zone II, Process A) from the unpaid family labor stage. Out of this group, 5 moved to the third stage. At present there are thirty-two type IA farmers in stage II.

Four type IA farmers moved directly to the third stage of operating agreements (Zone II, Process A) from the unpaid family labor stage. The total number of type IA farmers in stage III at present is 18.

Type II Farmers

The reader will observe from the evolutionary stages illustrated in Figure 3 that the present sample of type II farmers is composed of 7 type IIA, 26 type $IIAB_1$[15], 12 type $IIAB_2$[15], and 10 type IIAC farmers. Consequently, 7 type II farmers followed Process A, 38 Process AB, and 10 Process AC.

## PRESENCE OF BIAS

There was a discrepancy between the actual ages of type IIA farmers and the ages postulated in the conceptual

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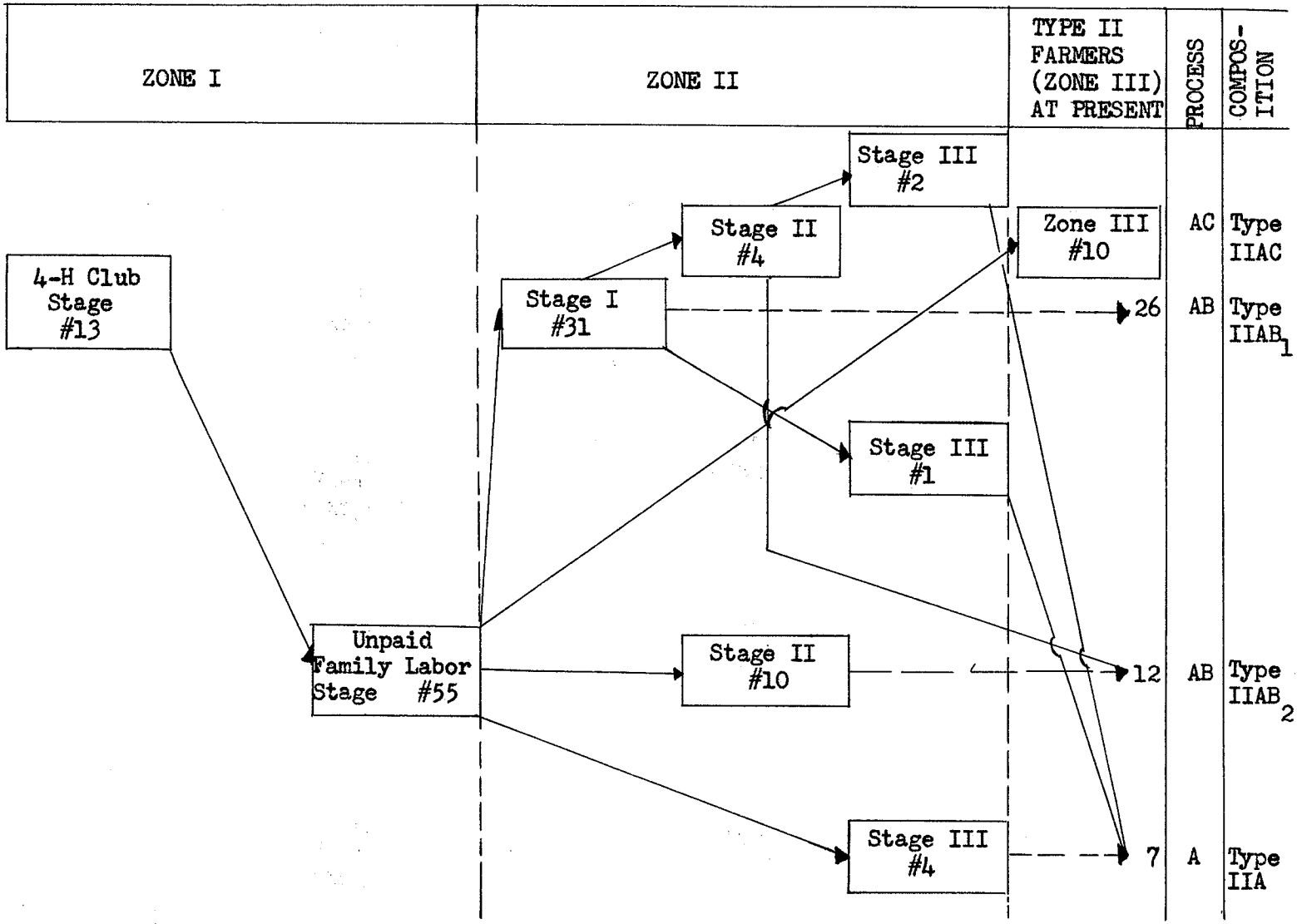
[15] Type $AB_1$ and $AB_2$ farmers were defined on page 28.

FIG. 3. The Evolution of 55 Type II Farmers from Zone I to Zone II (Type I Farmers) to Zone III (Type II Farmers) by stages.



framework. The average age of type IIA farmers was 29 years, compared to 32 + years in the conceptual framework. It is anticipated that this difference is due to bias in the sample. Two prevalent biases were:

1. The first bias was associated with the size of the sample. The total net sample of questionnaires was too small to provide the necessary observations for sufficient cross-tabular analysis.

2. The second bias was associated with locating beginning farmers. There was a tendency for Agricultural Representatives and retired farmers[16] to associate young farmers with beginning farmers. As a result of this, the average age of type II farmers was understated in the analysis (Table 4.3.), and the sample was biased toward Process AB. This partially explains why approximately 69 per cent of all type II farmers in the sample followed Process AB.

Table 4.3. Average Age and Years Farming (Type II Farmers) Stratified by Composition

| Composition | Size Sample No. | Age Yrs. | Years Farming No. |
|---|---|---|---|
| Type II AC | 10 | 31 | 7 |
| Type II $AB_1$ | 26 | 29 | 5 |
| Type II $AB_2$ | 12 | 31 | 6 |
| Type II A | 7 | 29 | 4 |

The table below indicates a bias of the first type.

[16] The Agricultural Representatives and retired farmers of the survey areas provided the enumerators with names and the geographical location of beginning farmers.

Table 4.4. Average Age of Father and Son (Type IA Farmers) Stratified by Stages (Zone II)

| Stages (Zone II) | Age | |
|---|---|---|
| | Father | Son |
| I | 61 | 24 |
| II | 60 | 28 |
| III | 64 | 30 |

The age of the type IA farmers increases from stage I through to stage III but the age of their fathers decreases in stage II.

In order to minimize the degree of bias in the analysis conceptual ages were not used for stratifying empirical data.

## CROSS-TABULAR ANALYSIS

The major stratifications of the empirical data were: (1) by stage of operating agreement (Zone II, Process A) for type IA farmers; (2) by composition of type II farmers (Type IIA, $AB_1$, $AB_2$ and AC); and (3) by years farming independent of the farm parents (1-4, 5-8, and 9-12 years) for type II farmers.[17]

The minor stratifications were: (1) by the total farm capital invested in the farm family business (0-49,999,

[17] The composition of type II farmers was assumed to be normally distributed about these groupings which are illustrated in Figure 1, Zone III (Process A) and designated I, II, and III.

50,000-79,999, and 80,000 +) for type IA farmers; and (2) by type of land tenure for type II farmers.

This chapter was designed to evaluate the conceptual framework of the farm family cycle (Process A) and inter-dependent processes (Processes AB and AC). The following chapter is designed to test hypotheses implicit in the conceptual framework.

# CHAPTER V

## CYCLE-LADDER EVALUATION CONT'D

This chapter is designed to test hypotheses. Sections I and II test hypotheses associated with type IA farmers (having operating agreements with parents) and type II farmers (operating independently of parents), respectively. The third section tests minor hypotheses which were stated in Chapter I.

### I

The amount of equity farm capital accumulated by type IA farmers increases as they progress from the first to the third stage of operating agreements (Zone II, Process A). The average equity farm capital accumulated by type IA farmers in stage I was $6216, compared to $11,357 in stage II, and $22,007 in stage III (Table 5.1). In view of this it follows that type IIA farmers (operating independently of the farm parents in Zone III, Process A) have more opportunities to become established in a fewer number of years (a higher rate of gain in equity farm capital), ceteris paribus, than type IIAB farmers (operating independently of the farm parents in Zone III, Process AB). Consequently, young farmers assuming managerial control of their parents' farm business units (Process A) should be

more successful in establishing family-sized commercial farm units than young farmers assuming managerial control of neighboring farm business units (Process AB).

Table 5.1. Average* Equity Farm Capital Accumulated by Type IA Farmers Stratified by Stages (Zone II), Jan. 1, 1960.

| Stage (Zone II) | Hired Man | Non-farm Operator | Employment Wife | Inheritance | Gifts | Farm Family Operating Agreement | Total Equity Capital | Present Age of Operator |
|---|---|---|---|---|---|---|---|---|
| | - - - - - - - - - - - - | | | dollars | - - - - - - - - - - - - | | | yrs. |
| I (N:13)** | 58 | 504 | 58 | - | 1545 | 4051 | 6212 | 24 |
| II (N:32) | 23 | 458 | 426 | - | 2879 | 7571 | 11357 | 28 |
| III (N:18) | - | 202 | 501 | 283 | 3169 | 17852 | 22007 | 30 |
| All Type IA Farmers (N:63) | 24 | 394 | 371 | 81 | 2686 | 9782 | 13338 | 27 |

* See Table IV.1.

** (N) is the size of sample

The farm family operating agreement was the main method of accumulating equity farm capital. In stage I, 65.2 per cent of total equity capital was accumulated by means of the operating agreements, compared to 24.9 per cent which was transferred from the farm family to the beginning farm by means of gifts[18] (Table 5.2). Savings from non-farm employment

[18] This includes savings accrued to the Type I Farmer as a result of purchasing farm assets from the farm family at a cost below market value.

contributed 9 per cent of the total equity capital in stage I. Other methods, inheritance and employment as a hired man, were insignificant means of accumulating equity capital. The relative importance of farm family operating agreements in accumulating equity farm capital increased from stage I to stage III, whereas the relative importance of the other methods decreased (Table 5.2). This indicates that the most important means of saving capital for investment in farm assets is through farm family operating agreements. As a result, the scope of opportunities available for young men, aspiring to owner-operatorship in farming, is almost limited to their parents' farms.

Table 5.2. The Importance of Equity Capital Accumulation by Method for Type IA Farmers Stratified by Stages, Jan. 1, 1960.

| Stages (Zone II) | Hired Man | Non-farm Operator | Employment Wife | Inheritance | Gifts | Farm Family Operating Agreement | Total Equity Capital |
|---|---|---|---|---|---|---|---|
| | - - - - per cent of total equity capital- - - | | | | | | |
| I | 0.9 | 8.1 | 0.9 | - | 24.9 | 65.2 | 100 |
| II | 0.2 | 4.0 | 3.8 | - | 25.3 | 66.7 | 100 |
| III | - | 0.9 | 2.3 | 1.3 | 14.4 | 81.1 | 100 |

Source: Table 5.1.

Part of the farm family business is being transferred by intra-family purchase agreements before the retirement of the farm parents. Approximately 58 per cent of the total

farm debt of type IA farmers was owing to relatives. In stage III, for example, $3329 of credit was extended on land and buildings by relatives, compared to $1397 by non-relatives (Table 5.3).[19] Often beginning farmers lack the necessary equity as collateral for obtaining credit to purchase more farm assets. Parents and relatives are usually willing to extend credit on a narrower margin of security than non-relatives. Consequently, some beginning farmers purchase farm assets from or through the family, expanding from this base by savings from farm and non-farm sources, and by credit from non-relatives. This is indicated in Table 5.4.[20] For example, the total farm assets in the farm family business increased progressively from the first to the third stage of farm family operating agreements; but they increased less than the absolute increase of farm assets owned by the beginning farmer.

The net worth to farm debt ratio decreased from stage I to stage III (Table 5.3). Approximately 82 per cent of farm credit in stages II and III had been extended on land and buildings, compared to zero per cent in stage I (by definition Type IA farmers in Stage I did not rent or own

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[19] See Table IV.3

[20] See Table IV.2

Table 5.3. Average Farm Debt of Type I Farmers Stratified by Stages, (Zone II) Jan. 1, 1960.

| Stage (Zone II) | Land Bldgs. | Mach. Equip. | Other | Total | Land Bldgs. | Mach. Equip. | Other | Total | Total Farm Debt | Net Worth to Farm Debt Ratio |
|---|---|---|---|---|---|---|---|---|---|---|
| | Relatives | | | | Non-Relatives | | | | | |
| I (N:13) | - | - | 69 | 69 | 462* | - | 92 | 554 | 623 | 10.0 |
| II (N:32) | 1502 | - | 44 | 1546 | 547 | 368 | 148 | 1063 | 2609 | 4.4 |
| III (N:18) | 3329 | - | 228 | 3557 | 1397 | 433 | 250 | 2080 | 5637 | 3.9 |
| All Type IA Farmers (N:63) | 1714 | - | 102 | 1816 | 772 | 311 | 166 | 1249 | 3065 | 4.4 |

* One Type I Farmer in Stage I had acquired land just preceding Jan. 1, 1960.

Table 5.4. Average Capital Invested in Farm Assets for Type IA Farmers and Residual Stratified by Stages, Jan. 1, 1960

| Stage (Zone II) | Land Bldgs. | Mach. Equip. | Livestock | Other | Total Farm Capital | Feed Grain | Total Farm Assets | Total Farm Assets in the Family Business |
|---|---|---|---|---|---|---|---|---|
| I (N:13) | 3452 | 1072 | 1983 | 22 | 6529 | 310 | 6839 | |
| II (N:32) | 6178 | 3393 | 2350 | 35 | 11956 | 2010 | 13966 | |
| III (N:18) | 15004 | 6065 | 3026 | 144 | 24238 | 3406 | 27644 | |
| All Type IA Farmers | 8137 | 3678 | 2467 | 63 | 14345 | 2058 | 16403 | |
| | | | | Residual Capital* Invested in Farm Assets | | | | |
| I (N:13) | 41337 | 11209 | 7809 | 108 | 60464 | 4397 | 64861 | 71700 |
| II (N:32) | 34487 | 12840 | 6565 | 267 | 54158 | 5169 | 59327 | 73293 |
| III (N:18) | 30619 | 9689 | 3958 | 200 | 44466 | 3784 | 48250 | 75894 |
| All Residual (N:63) | 34795 | 11603 | 6077 | 215 | 52690 | 4614 | 57304 | 73707 |

* Total farm assets in the farm family business minus the farm assets owned by the Type IA Farmer

farm land). It would appear that credit is an important source of capital in stages II and III. Firstly, it facilitates intra-family purchase agreements, and secondly, economic re-organization within the farm family business.

The greater the amount of capital invested in the farm family business, the larger was the absolute amount of equity farm capital accumulated by type IA farmers through farm family operating agreements, and intra-family transfers of capital by gifts (Table 5.5). As the amount of capital invested in the farm family business increased, the amount of capital accumulated (saved) by (from) non-farm employment remained relatively constant. However, in relation to the total equity capital accumulated by type IA farmers savings from non-farm employment became less important as the amount of capital invested in the farm family business increased (Table 5.5). This is partially explained through the generality that large farm business units, by virtue of greater mechanization, employ labor and management more efficiently (the marginal value product of labor and management is higher) than small farm business units. Accordingly, beginning farmers (type IA) share the higher rewards of efficient resource use (Labor, Management, and Capital) through farm family operating agreements. In addition beginning farmers receive greater absolute amounts of farm

assets as gifts on the larger farms. It follows that beginning farmers (sons) associated with wealthy farm operators (fathers) are destined to establish their own family-sized farm business units in a fewer number of years than beginning farmers (sons) associated with less wealthy farm operators (fathers), ceteris paribus.

Table 5.5. Average Equity Capital Accumulated, Importance of Method by Per Cent, for Type IA Farmers Stratified by Total Farm Assets, Jan. 1, 1960

| Total Farm Assets | Size Sample | Total Equity Capital | Importance of methods: Farm Family Operating Agreement | Gifts | Non-* Farm Employment | Other** | Present Age of Operator |
|---|---|---|---|---|---|---|---|
| dollars- | | dollars- | percent of total equity capital- | | | | yrs. |
| 0-49,999 | 19 | 6341 | 61.9 | 25.4 | 11.8 | 0.9 | 26 |
| 50,000-79,999 | 24 | 12988 | 79.3 | 15.3 | 5.4 | - | 28 |
| 80,000 + | 20 | 20408 | 72.1 | 22.3 | 4.2 | 1.4 | 29 |

*Includes operator and wife.

**Includes inheritance and savings from earnings while working as a hired man.

The third stage of farm family operating agreements (partial to full partnership agreements) were the most satisfactory for beginning farmers. For example, approximately 39 per cent of the Type IA farmers in stage I desired independence, compared to 25 per cent in stage II, and 6 per cent in stage III (Table 5.6). Six type IA farmers were in the process

of altering their present operating agreements - two desired father-son partnerships, 4 wished to increase their equity in the business, and three wished to increase the security of tenure for their family (Table 5.6).

Twenty type IA farmers were intending to start farming independent of the farm parents: fourteen desired independence, and six were assuming managerial control of the farm business when the farm parents retired. Most of the type IA farmers in this group had a preference for obtaining credit from non-relatives (Table 5.6).

Type IA farmers, by nature of the farm family operating agreements, have fewer responsibilities in stages I and II than in stage III. Accordingly, they desire independence or managerial control of their own farm business, and wish to follow Process AB, though Process AB suggests a slower rate of gain in equity farm capital (i.e., a greater number of years in becoming established) than Process A. This indicates the need for farm family operating agreements (father-son agreements) that delegate partial responsibilities of management to beginning farmers.

Approximately 48 per cent of type IA farmers were married. Approximately 73 per cent of this group had no explicit transfer arrangements (For example: A Will) for transferring their equity in the farm family business to

Table 5.6. Plans of Type I Farmers; the Farm Business and Family Security Stratified by Stages, 1960.

| Stage (Zone II) | Continuing Present Operating Agreement Total No. | Altering Present Agreement | | | | Starting to Farm Independent of Farm Parents | | | | Family Security | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total No. | Type Desired No. (partnership) | Why Inc. Equity No. | Why Inc. Security No. | Total No. | Why Borrowing Capital: Independence No. | Why Borrowing Capital: Non-Relatives No. | Why Borrowing Capital: Relatives No. | Explicit Transfer Arr. No. | Amount Life Insurance (Total Coverage) |
| | | | | | | | No. | | | | $ |
| I N:13 | 4* | 3 | 2 | 3 | - | 5 | 5 (0)** | 5 | 2 | - | $A_1$ n:8 5822 $A_2$ 3577 |
| II N:32 | 17* | 2 | - | 1 | 2 | 12 | 8 (4) | 8 | 3 | 4 | $A_1$ n:25 6620 $A_2$ 5172 |
| III N:18 | 13* | 1 | - | - | 1 | 3 | 1 (2) | 2 | - | 4 | $A_1$ n:14 8571 $A_2$ 6667 |

* Plans of the farm business were not completed on 3 questionnaires (one in each stage).

** Retirement of farm parents

their wives, and sons and daughters. The nature of the operating agreements in stage I indicates no provision for explicit transfer arrangements. For example, the beginning farmer in the first stage of operating agreements generally had a verbal enterprise agreement with his parents. As shown in Table 5.6, no explicit transfer arrangements existed in stage I.

The net operating income of type IA farmers in stage II was $876, compared to $925 in stage I, and $1830 in stage III (Table 5.7). Since the amount of capital employed in the farm family business by type IA farmers doubled each successive stage, beginning in stage I, it follows that the net returns to labor and management are lowest in stage II (Table 5.7).

Table 5.7. Average Farm Receipts, Expenses, and Income of Type IA Farmers Stratified by Stages, 1959.

| Stage (Zone II) | Total Farm Receipts | Cash Operating Expenses | Depreciation on Mach. Equip. | Total Operating Expenses | Net Operating Income | Net Returns* to Labor Mgt. |
|---|---|---|---|---|---|---|
| I | 2311 | 1138 | 248 | 1386 | 925 | 614 |
| II | 3325 | 1748 | 701 | 2449 | 876 | 308 |
| III | 7026 | 4037 | 1159 | 5196 | 1830 | 730 |

* Farm Perquisites have not been included.

Accordingly, the net rate of return on capital is lowest in stage II, and also, the gross rate of return on

operating capital (Table 5.8). This indicates lack of economic organization of farm resources.

Table 5.8. Return to Capital* for Type IA Farmers Stratified by Stages, 1959.

| Stage (Zone II) | Total Farm Capital | | Total Operating Capital |
|---|---|---|---|
| | Gross Rate | Net Rate | Gross Rate |
| I | 13.5 | 9.0 | 44.3 |
| II | 6.3 | 2.2 | 12.6 |
| III | 6.6 | 2.6 | 14.0 |

* No charge was imputed for labor and management.

It would appear that further research is needed to determine satisfactory economic farm family operating agreements. The delegation of some management responsibilities from farm parents to beginning farmers, the provision for explicit transfer arrangements between beginning farmers and their wives, and sons and daughters, and the economic organization of farm resources are significant factors to be considered in determining satisfactory economic farm family operating agreements.

II

To test the validity of the definition of Zone III (i.e., one of increasing the scale of operations of the farm business to provide, at least, a minimum standard of living

for the farm family) of Processes A, AB, and AC, as well as the validity of some associated hypotheses, the composition of type II farmers (operating independently of the farm parents) was assumed to be normally distributed about three groupings defined by years farming (1-4, 5-8, and 9-12 years) and designated I, II, and III in Zone III, Process A (Fig. I). The reason for this assumption was the lack of necessary sample sizes for stratification of groupings I, II, and III by Processes A, AB, and AC.

The size of the farm business increased in acres as well as the amount of capital invested in farm assets from group I to group III. Cropland acres increased by 10 per cent from group I to group III, compared to a 50 per cent increase in the amount of capital invested in farm assets. The large increase in total farm capital was primarily the result of substituting owner-operated cropland acres for tenant-operated cropland acres (Table 5.9).

Table 5.9. Average Size of Farm Business of Type II Farmers Stratified by Years Farming, Jan. 1, 1960.

| Years Farming | Size Sample | Cropland Acres Owned | Cropland Acres Rented | Total Farm Assets | Present Age of Operator |
|---|---|---|---|---|---|
| | | | | - dollars - | |
| I (1-4) | 19 | 196 | 305 | 30186 | 27 |
| II (5-8) | 24 | 251 | 252 | 33252 | 30 |
| III (9-12) | 12 | 323 | 230 | 45267 | 34 |
| All Type II Farmers | 55 | 248 | 266 | 34815 | 30 |

Source: Table V.1.

The net operating income of type II farmers in group I was $1120, compared to $1349 in group II, and $1807 in group III (Table 5.10). The net operating income from group I through to group III increased approximately pari passu with the amount of capital invested in farm assets. This suggests constant proportional increments of profit relative to larger inputs of farm capital. The reason for this is attributed to the fact that many type II farmers do not have the necessary capital invested in farm assets to fully employ their labor resources. Often the beginning farmer and his wife obtain non-farm employment, when their labor is not required on the farm, thereby insuring a positive marginal return to labor for the entire year.

Table 5.10. Average Farm Receipts, Expenses, and Income of Type II Farmers Stratified by Years Farming, 1959.

| Years Farming | Total Farm Receipts | Cash Operating Expenses | Depreciation Mach. Equip. | Total Operating Expenses | Net Operating Income | Net Returns to Labor and Mgt.* |
|---|---|---|---|---|---|---|
| I (1-4) | 7079 | 4246 | 1713 | 5959 | 1120 | 89 |
| II (5-8) | 9098 | 5761 | 1988 | 7749 | 1349 | 217 |
| III (9-12) | 15040 | 10893 | 2339 | 13232 | 1807 | 383 |

* Farm Perquisites were not included.

Table 5.11. indicates that farm resources become more efficiently organized as the amount of capital invested in

farm assets increases. This suggests economies of scale. It also suggests that the substitution of owner-operated cropland acres for tenant-operated cropland acres has economic advantages. One reason for this may be inequitable landlord-tenant leases. It was hypothesized in Chapter I that our traditional landlord-tenant leases are not now equitable, assuming they were equitable in the past. This hypothesis is tested for validity in the following section.

Table 5.11. Return to Capital* for Type II Farmers Stratified by Years Farming, 1959.

| | Total Farm Assets | | Total Operating Capital |
|---|---|---|---|
| | Gross Rate | Net Rate | Gross Rate |
| I (1-4) | 3.7 | 0.0 | 1.5 |
| II (5-8) | 4.0 | 0.6 | 2.8 |
| III (9-12) | 4.0 | 0.8 | 2.9 |

* No charge was imputed for labor and management.

Source: Table 5.10.

It is evident in Table 5.12 that the greater the amount of equity capital invested in farm assets preceding type II status, the greater the amount of credit than can be obtained, the larger the investment in farm assets, and the greater the rate at which equity capital is accumulated. For example, the average annual rate of accumulating equity farm capital was $2392 for type IIAC farmers (Process AC),

Table 5.12. Average Equity Capital, Farm Debt, and Total Farm Capital Employed by Type II Farmers Stratified by Composition.*

| Composition | Preceding Type II Status | | | | | Jan. 1, 1960 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Equity Capital | Total Farm Debt | Percent of Farm Debt Owing to | | Total Farm Assets | Average Annual Rate of Equity Capital Accumulation | No. Years Farming | Total Farm Debt | Percent of Farm Debt Owing to | | Total Farm Assets | Net Worth to Farm Debt |
| | | | Relatives | Non-Relatives | | | | | Relatives | Non-Relatives | | |
| Type IIAC | 4213 | 2109 | 29 | 71 | 6322 | 2392 | 7 | 8615 | 74 | 26 | 29572 | 2.4 |
| Type $IIAB_1$ | 7198 | 5317 | 52 | 48 | 12515 | 2859 | 5 | 9275 | 57 | 43 | 30767 | 2.3 |
| Type $IIAB_2$ | 8158 | 4633 | 56 | 44 | 12791 | 2712 | 6 | 14495 | 48 | 52 | 38924 | 1.7 |
| Type IIA | 17540 | 8792 | 66 | 34 | 26317 | 3298 | 4 | 19562 | 54 | 46 | 50295 | 1.6 |

* Source: Tables VI-1, VI-2, and VI-3.

compared to $2859 for type $IIAB_1$ (Process AB), $2712 for type $IIAB_2$ (Process AB), and $3298 for type IIA (Table 5.12). There appeared to be a significant (positive) correlation between the rate of gain in equity farm capital and the amount of capital invested in farm assets. Accordingly, it follows that type IIA farmers (operating independently of the farm parents in Zone III, Process A) become established on family-sized commercial farms in a fewer number of years than type $IIAB_1$ or $AB_2$ farmers (operating independently of the farm parents in Zone III, Process AB) and similarly type IIAB farmers become established on family-sized commercial farms in a fewer number of years than type IIAC farmers (operating independently of the farm parents in Zone III, Process AC). Hence, the problems of becoming established associated with beginning farmers proceeding through Process AC have greatest relative significance.

The amount of capital invested in farm assets by type II farmers is partially dependent upon intra-family assistance (Table 5.13).

Table 5.13. Average Family Assistance Acquired by Type II Farmers Since Achieving Type II Status Stratified by Composition, Jan. 1, 1960*

| Composition | Gifts | Inheritance | Credit |
|---|---|---|---|
| Type IIAC | 970 | 27 | 5777 |
| Type $IIAB_1$ | 692 | 192 | 2469 |
| Type $IIAB_2$ | 657 | 825 | 4291 |
| Type IIA | 847 | - | 4786 |

* Source: Tables VI.1, and VI.3.

The most important source of intra-family assistance was credit (Table 5.13).

Approximately 56 per cent of the total farm credit obtained by type II farmers was extended by relatives.[21] Approximately 71 per cent of the credit extended by relatives was on land and buildings, 16 per cent on machinery and equipment, and 13 per cent other items (including personal loans).

The above table indicates the significance of the tangents or umbilical cords joining the farm family cycle (Process A) to the two fetuses (Processes AC and AB) as illustrated in Figure 1. Beginning farmers proceeding through Processes AC and AB usually receive most of the family assistance (farm parents and family, and other kin) before the farm parents retire; it flows from the parents farm (Process A) to the beginning farmer operating independently on a neighboring farm in either Process AC or AB. Beginning farmers proceeding through Process A receive family assistance both before and after the farm parents retire. The flow of family assistance in Process A occurs within the parents' farm business.

The amount of equity capital accumulated by type IIAC

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[21]The farm parents and family extended the major portion of farm family assistance. A few beginning farmers had received a small amount of assistance from close relatives (For example, uncles and aunts).

farmers in the farm family business was approximately -18.7 per cent of total equity farm capital, compared to 45.5 per cent by type $IIAB_1$, 71.5 per cent by type $IIAB_2$, and 65.6 per cent by type IIA (Table 5.14). It is presumed that type IIAC farmers understated their actual savings from non-farm employment. Hence, some type IIAC farmers invested part of their savings in the farm family business prior to farming. Gifts received by type IIAC farmers was analogically, the repayment of borrowed capital. As a result, the tangent or umbilical cord connecting the parent's farm to the fetus (Process AC) conveys a "two-way" flow of family assistance. The young man, preceding type IIAC status, usually invests his savings from non-farm employment in the farm family business. Later when this young man begins farming the parents and family return his investment in the form of farm assets.

The most important source of equity farm capital of type IIAC farmers, preceding type II status, was savings from non-farm employment. The importance of this method in accumulating equity capital declined, progressively, from type IIAC farmers to type IIA farmers (Table 5.14). The most important source of equity farm capital for type II farmers is their farm business. The importance of the farm business declined, progressively, from type IIAC farmers to type IIA farmers (Table 5.14).

Table 5.14. The Importance of Methods of Equity Capital Accumulation for Type II Farmers Stratified by Composition.

| Composition (1) | Hired Man | Non-farm Employment Operator | Non-farm Employment Wife | Inheritance | Gifts | Farm Family Operating Agreement | Own Farm Business | Total Equity Capital |
|---|---|---|---|---|---|---|---|---|
| | ----------percent of total equity capital---------- | | | | | | | |
| Type IIAC | 5.0 | 19.3 | 10.7 | 64.1* | 19.6 | -18.7 | - | 100.0 |
| Type $IIAB_1$ | 3.2 | 10.1 | 8.2 | 18.9 | 14.2 | 45.4 | - | 100.0 |
| Type $IIAB_2$ | - | 3.4 | 5.6 | 8.9 | 10.6 | 71.5 | - | 100.0 |
| Type IIA (2) | - | .8 | 3.3 | - | 30.3 | 65.6 | - | 100.0 |
| Type IIAC | 1.0 | 5.2 | 9.6 | 13.0 | 8.6 | -3.8 | 66.4 | 100.0 |
| Type $IIAB_1$ | 1.3 | 5.3 | 4.7 | 7.2 | 8.0 | 15.2 | 58.3 | 100.0 |
| Type $IIAB_2$ | .7 | 5.6 | 2.8 | 6.4 | 6.2 | 23.9 | 54.4 | 100.0 |
| Type IIA | .4 | 3.2 | 3.0 | - | 20.1 | 37.4 | 35.9 | 100.0 |

(1) Preceding Type II Status.
(2) Jan. 1, 1960.

*Only one farmer in this group received inheritance ($27,000)

Source: Table VI.1.

Approximately 61 per cent of all non-farm earnings (farm operators and wives) was used for personal expenditures. Only 39 per cent of all non-farm earnings was invested in farm assets. Approximately 55 per cent of type II farmers who had a negative net farm operating income (1959) obtained non-farm employment (in some instances only their

wives obtained non-farm employment), compared to 30 per cent who had a net operating income between $0 - 1999, and 19 per cent which had a net operating income over $2000. This indicates that earnings from non-farm employment are used to supplement low farm incomes in providing the farm family with, at least, a minimum standard of living, in making payments on farm debt, and in providing the farm business with the necessary operating capital.

## III

### A. Re: The First Minor Hypothesis

Beginning farmers obtain large amounts of farm credit from relatives. The terms of this type of credit are easy - flexible repayment schedules and below normal interest rates are common. Accordingly, it was hypothesized that some terms of institutional credit are unsatisfactory for beginning farmers.

Approximately 56 per cent of the total farm debt of type II farmers was owing to relatives.[22] The largest portion of this was land debt (Table 5.15). The total amount of farm credit obtained by type II farmers increased,

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[22] Approximately 58 per cent of the total farm debt of type I farmers was owing to relatives. Because farm credit has greater relative significance for type II farmers than type I (compare the net worth to farm debt ratios in Table 5.15., to those in Table 5.3) this sub-section is devoted almost entirely to the first group.

Table 5.15. Average Farm Debt of Type II Farmers Stratified by Years Farming, Jan. 1, 1960.

| Years Farming (Zone III) | Land Bldgs. | Mach. Equip. | Other | Total | Land Bldgs. | Mach. Equip. | Other | Total | Total Farm Debt | Net Worth to Farm Debt |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Relatives | | | | Non-Relatives | | | | |
| I (1-4) N*: 19 | 3384 | 1718 | 582 | 5684 | 1646 | 1489 | 756 | 3891 | 9575 | 2.2 |
| II (5-8) N: 24 | 3258 | 521 | 435 | 4214 | 3074 | 1787 | 1540 | 6401 | 10615 | 2.1 |
| III (9-12) N: 12 | 9292 | 900 | 2156 | 12348 | 1683 | 1521 | 1234 | 4438 | 16786 | 1.7 |
| All Type II Farmers | 4618 | 1017 | 861 | 6496 | 2277 | 1626 | 1203 | 5106 | 11602 | 2.0 |

*N: Size of Sample

progressively, from group I to group III. The latter group had obtained $16,786 of farm credit, compared to $9,575 of the first group (Table 5.15).[23]

Type II farmers in group III owed 74 per cent of their total farm debt to relatives, and 26 per cent to non-relatives (Table 5.16). This group owed 85 per cent of their total land debt to relatives, and 15 per cent to non-relatives. This indicates that type II farmers either purchase most of their land from relatives who agree to a period of time for payment to take place, or have a preference for obtaining credit from relatives rather than non-relatives due to more lenient terms. For example, approximately 61 per cent of the credit extended on land by relatives had flexible repayment schedules and below normal interest rates (5 per cent interest was considered normal).

Table 5.16. Per Cent of Total Farm Debt, Land Debt, Owing to Relatives and Non-Relatives - Net Farm Worth to Farm Debt Ratio, Land Value to Land Debt Ratio, for Type II Farmers Stratified by Years Farming, Jan. 1, 1960.

| Years Farming (Zone III) | Total Farm Debt | | Total Land Debt | | Net Worth to Farm* Debt | Land Value** to Land Debt |
|---|---|---|---|---|---|---|
| | Relatives | Non-Relatives | Relatives | Non-Relatives | | |
| | % | % | % | % | | |
| I (1-4) | 59 | 41 | 67 | 33 | 2.2 | 2.3 |
| II (5-8) | 40 | 60 | 51 | 49 | 2.1 | 2.4 |
| III (9-12) | 74 | 26 | 85 | 15 | 1.7 | 1.9 |

[23] See Table V.2.

* Includes all types of farm debt other than "bills"

** This includes buildings as well as land.

Source: Tables 5.15 and V.1.

The theoretical minima ratios of land value to land debt and net farm worth to total farm debt are 1.7 and 1.5, respectively.[24] When these ratios are compared to actual ratios (Table 5.16) it would appear that groups I and II are rationing farm credit. Group III are approaching the theoretical minima ratios. It was indicated, however, that type II farmers substitute owner-operated cropland acres for tenant-operated cropland acres as they progress from group I to group III. Accordingly, it is suggested that some type II farmers are not rationing farm credit; instead, they are waiting for the opportunity to purchase tenant-operated land from relatives.

The regulations of the Manitoba Agricultural Credit Corporation on interest rates and classification by ages discriminate against the farm family operating agreements (zone II), and against type II farmers in group III (zone III). The farm operator in zone II is over 31 years of age. Therefore joint applicants (father-son) must pay $5\frac{1}{2}$ per cent interest, compared to 4 per cent interest for type II

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[24] Derived from the outline of the Manitoba Agricultural Credit Corporation. Appendix VII.

farmers under the age of 31 years.[25] This is an incentive for beginning farmers to follow major process AB. It also suggests one reason for the enormous variety of operating agreements in stage II (Zone II).

According to the ages of type II farmers stratified by years farming, group III[26] are not eligible for loans at 4 per cent interest. The approximate age of this group was 34 years (Table V.1). It was suggested in Chapter IV that the average age of type II farmers in this study is biased downward. As a result type IIA farmers would be over 31 years of age when they enter zone III (the conceptual age was 32 years).

The Manitoba Agricultural Credit Corporation as well as other credit institutions have a preference for land and farm machinery as collateral. As a result, beginning farmers who rent most of the land they farm will experience difficulties in obtaining enough farm credit for intensifying their farming operations. For example, increasing their investment in livestock and farm buildings. The reader will observe the declining net worth to farm debt ratio as the amount of capital invested in land and machinery increases,

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[25] See Appendix VII.

[26] Processes A, AB, and AC were assumed to be normally distributed about groupings I, II, and III.

with the capital invested in livestock remaining relatively constant, from type IIAC farmers to type IIA (Table VI.2 (2) ). Consequently, it follows that some beginning farmers will be discriminated against as long as stronger preferences are given to land and farm machinery than other farm assets.

B. Re: The Second Minor Hypothesis

The capital requirements of the family-sized commercial farm are increasing beyond the possibility of re-financing it once each generation. Accordingly, it was hypothesized that the net farm worth to farm debt ratio would decline, progressively, the greater the number of years farming (i.e. within the range 1-12 years).[27]

The net farm worth to total farm debt ratio declines from 2.2 in group I to 1.7 in group III (Table 5.16). This indicates that the greater the number of years farming as type II farmers (within the range 1-12 years), the lower becomes the total amount of equity farm capital relative to the total amount of capital invested in farm assets. The larger investment in farm assets was mainly due to the substitution of owner-operated cropland acres for tenant-operated cropland acres. It was indicated in Section II that there were economic advantages for this type of substitution.

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[27] Suggested implications of this hypothesis are given in Chapter I.

Approximately 80 per cent of the type II farmers were planning to expand their farm business units. Approximately 67 per cent of this group planned to obtain more farm credit. All type II farmers desiring more farm credit suggested non-relatives as the only source (Table 5.17). Hence, type II farmers are obtaining credit from relatives when they can not obtain it from non-relatives. This emphasizes the need for revision of some terms of institutional credit (Re: The First Minor Hypothesis).

Table 5.17. Plans of Type II Farmers with Respect to the Farm Business Stratified by Years Farming, 1960.

| Years Farming (Zone III) | Size Sample | Reduce Farm Debt | Expand Farm Business | Borrowing Capital Relatives | Borrowing Capital Non-Relatives |
|---|---|---|---|---|---|
| | | per cent of sample | | | |
| I (1-4) | 19 (5)* | 21 | 74 | 0 (6)** | 68 |
| II (5-8) | 24 | 4 | 96 | 0 (21) | 75 |
| III (9-12) | 12 (9) | 33 | 58 | 0 (8) | 50 |

* Per cent of type II farmers having no plans.

** Per cent of type II farmers expanding the farm business through means other than borrowed capital.

The above table suggests that the actual ratios of net farm worth to farm debt, and land value to land debt, could conceivably decline to a lower level than the present theoretical ratios derived from the regulations of the Manitoba Agricultural Credit Corporation (See Sub-Section A).

Hence, the Manitoba Agricultural Credit Corporation (Public Institution) may have to decrease the margin of security if the family farm is to be re-financed once each generation of the future.

A declining net farm worth to farm debt ratio causes increasing risk of loss of equity farm capital (assume that repayment schedules on farm debt are inflexible). If type II farmers, who are operating the farm business at marginal security for farm credit, should experience loss of farm income, they become vulnerable to farm foreclosure. The farm family may be forced to liquefy farm assets to meet debt obligations. The "quick sale" value of farm assets may be lower than their actual value. It is conceivable, therefore, that most of the equity farm capital would be lost by foreclosure. As a result there appears to be a need for flexible repayment schedules on farm debt.

The above phenomenon is also probable if the farm operator should meet with an unfortunate accident. Type II farmers recognize that their families could become paupers due to the inefficiency of meeting debt obligations by liquefying farm assets. Accordingly, type II farmers increase the amount of life insurance as the net farm worth to farm debt ratio declines. For example, the average amount of life insurance of group I was $4079, compared to $6294

of group II, and $9350 of group III.[28]

C. Re: The Third Minor Hypothesis

The amount of operating capital employed by the family-sized commercial farm is increasing at a faster rate than the amount of fixed capital. Accordingly, it was hypothesized that our traditional landlord-tenant leases (1/3 - 2/3 share) were now not equitable.[29]

The size of farm business (Type II Farmers) in cropland acres, and the amount of capital invested in farm assets, is stratified by type of land tenure in the table below.

Table 5.18. Average Size of Farm Business (Type II Farmers) Stratified by Type of Land Tenure, Jan. 1, 1960.

| Type Land Tenure | Size Sample | Cropland Acres | | | Total Farm* Assets |
|---|---|---|---|---|---|
| | | Owned | Rented | Total | |
| Owners | 17 | 335 | - | 335 | 35268 |
| Part-Owners-Part-Tenants | 27 | 294 | 318 | 612 | 41028 |
| Tenants | 11 | - | 547 | 547 | 18863 |

* See Appendix VIII.

The size of tenant-operated farms was approximately

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[28] The total coverage of life insurance included 4 types of policies: Term; Accidental; Straight; Savings.

[29] Implicitly it is assumed that our traditional landlord-tenant leases were equitable in the past.

63 per cent larger than owner-operated farms. Part owner-part tenant operated farms had the largest number of cropland acres, and the largest amount of capital invested in farm assets (Table 5.18). The per cent of cropland acres to total acres was approximately 70 per cent for owners, 62 per cent for part owners-part tenants, and 81 per cent for tenants.

The net operating income of type II owner-operators was $1649, compared to $1428 for part owners - part tenant operators, and $798 for tenant-operators[30] (Table 5.19).

Table 5.19. Average Farm Receipts, Expenses, and Income of Type II Farmers Stratified by Type of Land Tenure, 1959.

| Type Tenure | Total Farm Receipts | Cash Operating Expenses | Depreciation Mach. Equip. | Total Operating Expenses | Net Operating Income | Net Returns* to Labor and Mgt. |
|---|---|---|---|---|---|---|
| Owners | 7285 | 4104 | 1533 | 5636 | 1649 | 413 |
| Part-Owners | 12292 | 8742 | 2122 | 10864 | 1428 | 129 |
| Tenants | 7054 | 3988 | 2269 | 6257 | 798 | 95 |

* Farm Perquisites were not included.

The net rate of return on total farm capital was 1.2 cents per dollar invested in farm assets for owner-operators

[30] Tenant-operators had $3158 invested in livestock, compared to $6261 for part-owners, and $4182 for owners. This would partially explain why tenants had a lower net operating income than part-owners, and owners, but it would not explain why part-owners had a lower net operating income than owners.

compared to zero for the other groups (No charge was imputed for labor and management).

The preceding data indicates that our traditional landlord-tenant lease is now not equitable, ceteris paribus. Further research is needed to determine what type of leases are equitable.

# CHAPTER VI

## SUMMARY AND CONCLUSIONS

This study was based on survey data collected from 118 beginning farmers of the Russell, Brandon, and Morris areas in Manitoba. The sample was composed of 63 type IA farmers (having operating agreements with the farm family), and 55 type II farmers (operating independently of the farm parents).

A basic assumption of this study was that family-sized commercial farms, owned and operated by farm families, assured society of optimum conditions for economic progress as well as security of minimum standards of living in maximizing welfare. On the average, type II farmers had invested $30,435 in their farm business units. Approximately 80 per cent were planning to expand their farming operations. It may be concluded that a 30 thousand dollar farm business unit would be a minimum family-sized commercial farm.

The problem of this study was to define the problem areas of beginning farmers as they progress toward the goal of establishing family-sized commercial farms. A conceptual framework, the farm family cycle, was developed to explain the processes followed by beginning farmers in becoming established. The hypotheses implicit in the farm family

cycle were verified. Three minor hypotheses associated with this concept were also verified.

The significant results of the study are summarized as follows:

1. The most significant methods of beginning farmers in accumulating farm assets were farm family operating agreements, intra-family transfers of capital (gifts from the farm family), and intra-family purchase agreements (purchasing farm assets from the farm family). As a result, it is concluded that the major process of getting started and established in farming is by means of the farm family business. This process is the farm family cycle which is contrary to the popular belief of individual progress on an "agricultural ladder".

2. It was found that beginning farmers are obtaining large amounts of credit from relatives on easy terms (flexible repayment schedules and below normal interest rates). It was further indicated that beginning farmers have a preference for obtaining credit from non-relatives. It may be concluded that some terms of institutional credit are unsatisfactory for beginning farmers. For example, it was found that age classifications and interest rates, as stipulated by the Manitoba Agricultural Credit Corporation, were inconsistent with the needs of beginning farmers.

3. It was found that the greater the number of years farming (within the relevant range 1-12 years) as type II farmers the lower became the net farm worth to farm debt ratio. It may be concluded that the capital requirements of the family-sized commercial farm are increasing beyond the possibility of refinancing it once each generation. It was further found that some type II farmers were operating their farm business units at marginal security for farm credit. If these beginning farmers should experience loss of farm income they become vulnerable to farm foreclosure.

It was indicated that some farmers in this group (wives as well) obtain non-farm employment to supplement low farm incomes in providing the farm family with, at least, a minimum standard of living, in making payments on farm debt, and in providing the farm business with the necessary operating capital. In view of this there appears to be a need for flexible repayment schedules on farm debt.

4. It was indicated that our traditional landlord-tenant leases (1/3-2/3 share) are now not equitable. This was attributed to the fact that the operating expenses of the farm business have been increasing at a higher rate than the fixed capital requirements. The landlord-tenant lease is an integral part of many farm family operating agreements and transfer arrangements. In 1956, approximately 30 per cent of the farms in Manitoba had some leasing arrangements. In view of the importance of tenancy as a stage for beginning farmers in their progress toward the goal of owner-operatorship further research is needed to determine equitable (economic factors) and satisfactory (social and psychological factors) landlord-tenant leases.

Problem Areas

The scope of the first problem area is defined by the unpaid family labor stage. This is the most crucial stage in the farm family cycle. The following problems must be answered in this stage of the cycle if the future beginning farmers are to be successful in progressing toward the goal of establishing a family-sized commercial farm:

1. The application of new technology on farms as well as the increasing dependence of the farming industry on markets for the purchases of resources, or inputs, and for the sale of its products has increased the

need for higher quality labor and management on farm business units. The problem of low farm incomes suggests that the quality of labor and management in agriculture is too low, ceteris paribus. Low farm incomes and beginning farmers are strongly correlated. Therefore, it indicates the need for an agricultural policy designed to assist the young farmer, who has decided upon farming as a career, in increasing his knowledge in both the technical and management fields of farm business. This is primarily an extension problem.

2. The total opportunities of beginning farmers are essentially limited to the farm family business. The problem of low farm incomes suggests that there are too many people employed in agriculture. It would appear that the problem could be partly resolved by educating some young farmers for non-farm employment. This is primarily a problem in the academic and technical fields of high school education. For example, there is need for career counselling in high school as well as a flexible program of academic courses and technical training courses.

3. The farm family must formulate satisfactory economic operating agreements integrated with intra-family transfer arrangements which best satisfy the needs of the farm families, if the beginning farmer is to assess the prospects of establishing his own family-sized commercial farm some day. For example, will the beginning farmer some day assume managerial control of his parent's farm or a neighboring farm.

The scope of the second problem area is associated with the transfer of the farm family business from the "old" to the "new" generation, as well as the expansion of the farm business to family size. The transfer was made through intra-family transfers of capital (gifts), landlord-tenant leases, and intra-family purchase agreements. These

problems are now evident:

1. Generally, the ownership of the farm family business is not transferred to the "new" generation upon retirement of the farm parents. Some farm operators prefer renting the farm family business to the beginning farmer for a period of time. The farm parents may need an income from the farm business. The "old" and the "new" generations are confronted with the problems of formulating equitable share leases. It was indicated that our present landlord-tenant leases are now not equitable.

2. The farm family business may not be large enough to provide an adequate income for two or more farm families. As a result the farm operator cannot "afford the luxury" of transferring part of the farm business by means of gifts to the beginning farmer. Whenever these circumstances exist there is a need for farm credit in expanding the farm business to a family-sized unit. It was found that joint applicants (i.e., father-son applicants) for farm credit are discriminated against under the regulations of the Manitoba Agricultural Credit Corporation.

3. Beginning farmers, operating independently of the farm parents (Type II farmers), need farm credit for expanding their farm business units to family size (i.e., purchasing farm assets from both family and non-family sources). It was suggested that agricultural credit institutions have preferences for specific types of collateral (For example: real estate and farm machinery). In view of this it would appear that agricultural credit institutions are concerned more with the security of loans rather than the marginal net returns of loans. For example, economic expansion of livestock enterprises through credit may be impossible for some beginning farmers. As a result of this it may be concluded that farm credit policies should be designed so that credit is available not only on aggregate collateral (aggregate farm assets) but on individual types of collateral (individual types of farm assets) as well.

Other problems associated with the second problem area are normative. For example, the capital requirements of the family-sized commercial farm may increase beyond the possibility of re-financing it once each generation. If type II farmers, who are operating the farm business at marginal security for farm credit, should experience loss of farm income, they become vulnerable to farm foreclosure. This suggests some form of perpetual credit having flexible repayment schedules.

The farm family may be able to cope with the increasing capital requirements of the farm business (1) by re-organizing the business into an incorporated unit and (2) by accepting some form of contract farming or vertical integration.

If the family farm as an incorporated unit becomes a basic institution in agriculture, it may be possible to organize a new type of family farm financing in agriculture. This would involve the expansion of the family farm through the sale of stocks and bonds. Due to over-capitalization of land in agriculture, it is doubtful that private investment agencies or individuals would purchase stocks in agriculture. Due to "risk and uncertainty" in agriculture, it is doubtful that family farm corporations would "float" bonds which have a fixed rate of return. This suggests

that an investment agency designed to purchase stock of family farm corporations would have to be publicly owned. The factor of over-capitalization in agriculture also suggests that specific standards or regulations would have to be imposed (1) on the value of stocks and (2) on management. The public investment agency would thereby insure a "fair" rate of return on stocks in the long run.

The "normative type" problem invariably involves some new value judgements of "what ought to be" before new policy can be developed. These value judgements must be explicit, and orientated to an aggregate value judgement i.e., attaining the optimum combinations of economic growth and security in maximizing the total welfare of society.

# GLOSSARY

ITEM

1. Zone of Apprenticeship (Zone I)

This zone is primarily one of progress in acquiring specific skills and scientific knowledge in order to operate, or to participate in operating, a farm business; it is characterized by farm boys obtaining apprenticeship in farming between the ages of 10 to 21 years (Chart I).

2. Zone of Transition (Zone II)

This zone is essentially one of progress in capital accumulation, along with its counterpart, increasing responsibilities to the farm family business; it is characterized by farm family operating agreements. Beginning farmers in this zone are called type IA farmers (Chart I).

3. Zone of Establishment (Zone III)

This zone is essentially one of increasing the scale of operations of the farm business to provide, at least, a minimum standard of living for the farm family. Beginning farmers in this zone are called type II farmers (operating independently of the farm parents). The composition of type II farmers is associated with the alternative Processes they proceeded through in becoming established in farming (See Chart I).

4. $\underline{A_1}$

This symbol ($A_1$) is an average determined by dividing the summation of a stratified group by the number of observations in the sample having the item involved in the summation (n).

5. $\underline{A_2}$

This symbol ($A_2$) is an average determined by dividing the summation of a stratified group by the number of observations in the sample (N).

6. The term Type I farmer (used in the questionnaire, Appendix I) is synonymous with the term type IA farmer used in the context of this thesis.

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# APPENDIX I

## INSTRUCTIONS

The enumerators of the survey were given the following instructions as to how the questionnaire should be completed.

1. To differentiate the number of acres owned and rented in the farm family business by type I farmer and residual (the number of acres owned and rented by other members of the farm family business, and to specify from whom type I farmers rented land (Item 4, p. 2, Questionnaire).

2. To differentiate the amount of capital employed in the farm family business by type I farmer and residual (Item 8, p. 5).

3. To specify the years, months, and locations that beginning farmers (wives as well) were employed off the farm (Items 9 and 12, pp. 8 and 9).

4. To list the evolutionary stages of the farm family operating agreements - meaning the type of operating agreements prior to the present one for type I farmers and prior to farming independent of the farm parents for type II farmers (Item 11, p. 9).

5. To specify from whom beginning farmers obtained credit (Items 17, 18 and 19, pp. 11, 12 and 13).

6. To employ the system of adult equivalents in estimating personal living expenses, whenever beginning farmers had not kept records of this nature (Item 25, p. 20).

## PROCEDURE OF ANALYSIS

All questionnaires accepted for analysis were checked for omissions and errors. On nine of the questionnaires the

age of the beginning farmer had been omitted. Their ages, at the time the interviews had taken place, were determined by contacting them by telephone. The analysis of the questionnaire was then completed.

1. Additions were made according to the classification on the questionnaire.

2. The amount of equity farm capital accumulated in the family farm business was determined by the method of residual computation:

   a) Type I farmer - Total Farm Assets Jan. 1, 1960, minus III 9, 10, 12, 13, 14, 15, and IV 18, Appendix I.

   b) Type II farmer - Total farm assets, the year when starting to farm independent of the farm parents, minus the amount of equity farm capital accumulated up to this time[31] per III 9, 10, 12, 13, 14, 15, and minus IV 17.

3. The amount of equity farm capital accumulated by type II farmers in their own farm business was determined by making a calculation as in 2 (a) and subtracting from this the calculation that was made in 2 (b) (above).

4. Net operating income was determined by subtracting depreciation on machinery and equipment, and cash farm expenses, from total farm receipts. The depreciation charged to machinery and equipment (used over one year) was determined by the diminishing balance method - at 25% for special machinery and equipment, and 12.5% for all other machinery and equipment. The depreciation charged to new machinery and equipment was determined by the straight line method - at 16% for special and 8% for all other machinery and equipment.

5. The returns to management and labor were determined by subtracting interest on equity farm

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[31] Unless otherwise indicated on the questionnaire the time of marriage and the year when starting to farm independent of the farm parents were assumed synonymous.

capital (5 per cent) from net operating income. The value of farm perquisites was not included in this calculation.

6. The farm family operating agreements were classified by stages of zone II.

ECONOMIC ASPECTS OF BEGINNING FARMERS

DEPARTMENT OF AGRICULTURAL ECONOMICS & FARM MANAGEMENT

University of Manitoba, 1960

Enumerator _____ Date _____ Checked by _____

Name _____ Address _____

Exchange _____ Telephone No. _____

I. DEFINING THE BEGINNING FARMER

1. General Criteria

| | Check |
|---|---|
| Raised on farm | |
| Decided upon farming as a career | |
| At least 21 years of age | |

2. Specific Criteria

| | | Check |
|---|---|---|
| TYPE I | Operating arrangement with parents and family | |
| | Written agreement | |
| | Verbal agreement | |
| TYPE II | Farm business legally and economically separated from the parents | |
| | Makes own decisions with respect to farm business | |

3.

| Status | Time Period | | Class Limit | If Falling Within Class Limit, Check |
|---|---|---|---|---|
| TYPE I | How long have you been farming under an operating arrangement | yrs. | 1 + years | |
| TYPE II | How long have you been farming on your own independent of your parents | yrs. | 1 - 10 years | |

## II CHARACTERISTICS OF THE FARM BUSINESS

### 4. LAND DESCRIPTION 1959

| Legal Description | | | | | | | (O) or (R) | Crop Land Acres | Total Acres |
|---|---|---|---|---|---|---|---|---|---|
| Parish | River - Lot | Q | S | T | R | E or W | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

### 5. FAMILY CHARACTERISTICS TYPE I

| NAME | Age | Education | Marital Status | Brothers & Sisters At Home | Family Size | Occupation of Brothers & Sisters Away From Home |
|---|---|---|---|---|---|---|
| Beginning Farmer | | | | X | | X |
| Wife | X | | X | X | | X |
| *Parents: Father | | | X | X | X | X |
| Mother | | | X | X | X | X |
| Brothers | | | | | | |
| | | | | | | |
| | | | | | | |
| Sisters | | | | | | |
| | | | | | | |

*If son-in-law check wife's family

### 6. FAMILY CHARACTERISTICS TYPE II

| NAME | Age | Education | Marital Status | Family Size And Sex | Children | |
|---|---|---|---|---|---|---|
| | | | | | At Home | Away from home occupation |
| Beginning Farmer | | | | | | |
| Wife | | | | | | |
| Children | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

7. PRESENT OPERATING ARRANGEMENTS TYPE I FARMER

| | Arrangement (Type ) | Enumerator Describe Explicitly |
|---|---|---|
| 1. | Wages to son, and son pays for machinery on land he owns or rents | |
| 2. | Crop or livestock enterprise agreement | |
| 3. | Rents land from father and uses part or all of father's machinery | |
| 4. | Son owns land and uses part or all of father's machinery | |
| 5. | Shares investment, expenses and receipts for entire farm | |
| 6. | Legal partnership arrangement | |
| 7. | Corporate arrangement | |
| 8. | Other: (specify) | |

8. VALUE OF FARM ASSETS

| Asset | The Beginning Farmer | | | | Father (Beginning Farmer must be type I) Jan. 1, 1960 | |
|---|---|---|---|---|---|---|
| | Type I or Type II Jan. 1, 1960 | | Type II when Starting on his own | | | |
| | Qty | Value | Qty | Value | Qty | Value |
| Land (bare land value) | | | | | | |
| Buildings: | | | | | | |
| House | | | | | | |
| Barn | | | | | | |
| Hen House | | | | | | |
| Hog House | | | | | | |
| Machine Shed | | | | | | |
| Stationary Granaries | | | | | | |
| Portable Granaries | | | | | | |
| Other Buildings | | | | | | |
| TOTAL REAL ESTATE | | | | | | |
| Livestock: | | | | | | |
| Cows | | | | | | |
| Heifers | | | | | | |
| Steers | | | | | | |
| Calves | | | | | | |
| Bulls | | | | | | |
| SUB-TOTAL | | | | | | |
| Hogs: | | | | | | |
| Market or Weanlings | | | | | | |
| Sows | | | | | | |
| Boar | | | | | | |
| SUB-TOTAL | | | | | | |
| Poultry: | | | | | | |
| Hens, Chicks, Roosters | | | | | | |
| Turkevs | | | | | | |
| SUB-TOTAL | | | | | | |
| Sheep: | | | | | | |
| Ewes | | | | | | |
| Lambs | | | | | | |
| Rams | | | | | | |
| SUB-TOTAL | | | | | | |
| Horses | | | | | | |

8. VALUE OF FARM ASSETS

| Asset | The Beginning Farmer | | | | Father (Beginning Farmer must be type I Jan. 1, 1960 | |
|---|---|---|---|---|---|---|
| | Type I or Type II Jan. 1, 1960 | | Type II when Starting on his own | | | |
| | Qty | Value | Qty | Value | Qty | Value |
| Special Machinery: | | | | | | |
| Tractor | | | | | | |
| | | | | | | |
| | | | | | | |
| Truck | | | | | | |
| | | | | | | |
| | | | | | | |
| Car | | | | | | |
| Combine (self propelled tractor drawn) | | | | | | |
| Other | | | | | | |
| SUB-TOTAL | | | | | | |
| Semi-Special: | | | | | | |
| Swather | | | | | | |
| Combine P.T.O. | | | | | | |
| Baler | | | | | | |
| Forage Harvester | | | | | | |
| Beet Harvester | | | | | | |
| SUB-TOTAL | | | | | | |
| General Equipment: | | | | | | |
| Plow | | | | | | |
| One-way | | | | | | |
| Disker & Attachments | | | | | | |
| Cultivators: | | | | | | |
| - field | | | | | | |
| - row crop | | | | | | |
| - heavy duty | | | | | | |
| Harrows | | | | | | |
| Drill & Attachments | | | | | | |
| Sprayer | | | | | | |
| Mower | | | | | | |
| | | | | | | |

8. VALUE OF FARM ASSETS

| Asset | The Beginning Farmer | | | | Father (Beginning Farmer must be type I Jan. 1, 1960 | |
|---|---|---|---|---|---|---|
| | Type I or Type II Jan. 1, 1960 | | Type II when Starting on his own | | | |
| General Equip. (con't) | Qty. | Value | Qty. | Value | Qty. | Value |
| Hay loader | | | | | | |
| stacker | | | | | | |
| Rake side | | | | | | |
| dump | | | | | | |
| Cutter, blower | | | | | | |
| Other: | | | | | | |
| | | | | | | |
| | | | | | | |
| SUB-TOTAL | | | | | | |
| Livestock Equip.: | | | | | | |
| Cattle - beef | | | | | | |
| - dairy | | | | | | |
| Hogs | | | | | | |
| Poultry | | | | | | |
| Sheep | | | | | | |
| Shop Equipment: | | | | | | |
| Tools | | | | | | |
| Parts | | | | | | |
| Motors | | | | | | |
| Other: | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| SUB-TOTAL | | | | | | |
| Supplies: | | | | | | |
| Diesel Fuel | | | | | | |
| Gasoline | | | | | | |
| | | | | | | |

8. VALUE OF FARM ASSETS

| Asset | The Beginning Farmer | | | | Father (Beginning Farmer must be type I Jan. 1, 1960 | |
|---|---|---|---|---|---|---|
| | Type I or Type II Jan. 1, 1960 | | Type II when Starting on his own | | | |
| | Qty. | Value | Qty. | Value | Qty. | Value |
| Supplies (con't) | | | | | | |
| Oil | | | | | | |
| Grease | | | | | | |
| Anti-freeze | | | | | | |
| Twine | | | | | | |
| Building Materials | | | | | | |
| Fertilizer | | | | | | |
| Spray | | | | | | |
| Other: | | | | | | |
| | | | | | | |
| | | | | | | |
| SUB-TOTAL | | | | | | |
| Grain and Feed: | | | | | | |
| Wheat | | | | | | |
| Oats | | | | | | |
| Barley | | | | | | |
| Flax | | | | | | |
| Other: | | | | | | |
| | | | | | | |
| Feed: | | | | | | |
| Hay | | | | | | |
| | | | | | | |
| Straw | | | | | | |
| Screening & Crushed Feed | | | | | | |
| Concentrate & Minerals | | | | | | |
| SUB-TOTAL | | | | | | |

## III METHODS OF ACCUMULATED PRESENT FARM ASSETS

### 9. THE VALUE OF ASSETS ACCUMULATED BY NON-FARM WORK

| Number of Months or Years Employed in Non-farm Work | Occupation | Location | Amount Earned | Estimated amount saved for invest. in farm assets |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

### 10. THE VALUE OF FARM ASSETS ACCUMULATED AS A HIRED MAN ON FARMS

| Months & Years Employed | Location | Amount Earned | Estimated amount saved for investment in farm assets |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

11. THE VALUE OF ASSETS ACCUMULATED WITHIN THE FAMILY FARM BUSINESS

Methods

1. 4-H club member

   yes___ no___

   Type of club
   1. Heifer ___ 3. Grain ___
   2. Beef ___ 4. _____

2. Operating arrangements with parents

   yes___ no___

   List types of arrangements

   1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

12. THE VALUE OF ASSETS OR THE AMOUNT OF CAPITAL CONTRIBUTED TO THE FARM BUSINESS BY THE WIFE

i. How much capital did your wife contribute to the farm business at the time of your marriage? Amount_____ Year _____

ii. Has your wife been working outside the farm business since your marriage?

yes___ no___

iii. How much capital has your wife contributed to the farm business since your marriage? _____

| (Post-marriage) months & years employed | Occupation | Location | Amount Earned | Estimated amount saved for investment in farm assets |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

12. (con't)

| | | | | |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

13. THE VALUE OF ASSETS INHERITED

| Type Asset | Quantity | Value | Received From | Year Received |
|---|---|---|---|---|
| i Land & Buildings | | | | |
| ii Machinery & Equipment | | | | |
| iii Stocks & Bonds | | | | |
| iv Cash | | | | |
| | | | | |

14. THE VALUE OF ASSETS RECEIVED BY GIFT

| Type Asset | Quantity | Value | Year Received | Received From |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

15. THE VALUE OF SAVINGS ACCRUED BY PURCHASING ASSETS BELOW THE MARKET RATE FROM PARENTS

| Type of Asset Purchased | Quantity | Value (Amount Paid) | Year Received | Estimated Saving |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Have you included the estimated savings accrued under gifts? yes___ no___ | | | | |

IV DEBT OF BEGINNING FARMERS

17. DEBT OF TYPE II FARMERS WHEN STARTING ON THEIR OWN (YEAR ___)

| Type Debt | Amount Owing | Interest Rate | Length Loans Years or Months | Type Repayment Schedule | Collateral |
|---|---|---|---|---|---|
| Mortgages: | | | | | |
| | | | | | |
| | | | | | |
| Chattle mortgages: | | | | | |
| | | | | | |
| | | | | | |
| Agreements of sale: | | | | | |
| | | | | | |
| | | | | | |
| Lein notes: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Personal debts: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| * Total Amount Owing | | | | | |

* To be filled out in the office

18. DEBT OF BEGINNING FARMERS, JAN. 1, 1960.

| Type Debt | Amount Owing | Interest Rate | Length Loans Years or Months | Type Repayment Schedule | Collateral |
|---|---|---|---|---|---|
| Mortgages: | | | | | |
| | | | | | |
| | | | | | |
| Chattle mortgages | | | | | |
| | | | | | |
| | | | | | |
| Agreements for sale: | | | | | |
| | | | | | |
| | | | | | |
| Lein notes: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Personal debts: | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| * Total Amount Owing | | | | | |

* To be filled out in the office.

V TOTAL RECEIPTS AND EXPENSES, 1959

19. NEW DEBT AND PAYMENTS ON DEBT FOR THE CALENDAR YEAR, 1959.

| Type Debt | New Debt | Payments on Debt |
|---|---|---|
| Mortgages: | | |
| | | |
| | | |
| Chattle Mortgages: | | |
| | | |
| | | |
| Agreements for sale: | | |
| | | |
| | | |
| | | |
| Lein Notes: | | |
| | | |
| | | |
| | | |
| | | |
| Personal Debts: | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Total New Debt _____ | | Total Payments on Debt _____ |

20. CAPITAL EXPENDITURES & SALES, 1959

| ITEM | Purchases | | Sales | |
|---|---|---|---|---|
| | Acres | Value | Acres | Value |
| i Land | | | | |
| | | | | |
| ii Buildings | | | | |
| | | | | |
| | | | | |
| iii Other investments: | | | | |
| Stocks, Bonds | | | | |
| Other | | | | |
| | | | | |
| Sub-total | | | | |
| iv Machinery & equipment | Make and years used | Value | Make and years used | Value |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Sub-total | | | | |
| TOTAL | | | | |

20. TOTAL FARM CASH RECEIPTS, 1959

| Item | Value | Item | Value |
|---|---|---|---|
| Livestock Sales | | Sheep: Ewes | |
| Cattle: Cows | | | |
| | | Lambs | |
| Calves | | | |
| | | Rams | |
| Steers | | Livestock Product Sales | |
| | | Milk | |
| Heifers | | Cream | |
| | | Butter | |
| Bulls | | Eggs | |
| | | | |
| Hogs: Market | | Other | |
| | | | |
| Weanling | | Custom Work: | |
| | | Combining | |
| Sows | | | |
| | | Trucking | |
| Boars | | Baling | |
| | | Other | |
| Poultry: Hens | | | |
| | | Ins. Proceeds For Loss | |
| Chicks, Roosters | | of: Buildings | |
| Turkeys | | Crop | |
| Other | | Other | |
| Sub-total | | Sub-total | |

20. (con't)

| Crop Sales: | | Value |
|---|---|---|
| | Wheat | |
| | | |
| | Barley | |
| | | |
| | Oats | |
| | | |
| | Sunflowers | |
| | | |
| | Flax | |
| | Rye | |
| | Sugar beets | |
| | Other | |
| | | |
| | Wheat board payment | |
| | | |
| | | |

| | | Value |
|---|---|---|
| | | |
| | Hay | |
| | Other hay | |
| | | |
| | | |
| | | |
| | Straw | |
| | Sub-total | |
| Dividends & interest received | | |
| | | |
| Capital Sales (19) p. 14 | | |
| | | |
| | | |
| Gas tax rebate: | | |
| Breeding fees: | | |
| Farm labor: | | |
| Rent received: | land | |
| | machinery | |
| Acreage payments & P.F.A.A. | | |
| Other Remuneration: | | |
| | | |
| | | |
| | | |
| | | |
| TOTAL Farm Cash Receipts | | |

21. OPERATING EXPENSES ON MACHINERY & EQUIPMENT, 1959

| TYPE | Make Years Used | FUEL | | | | C Oil & Grease | D Insurance & License | E Repairs | Total A, B, C, D & E |
|---|---|---|---|---|---|---|---|---|---|
| | | Gas | | Diesel Fuel | | | | | |
| | | Quantity | A Value or Price | Quantity | B Value or Price | | | | |
| Special Equipment (motor driven) | | | | | | | | | |
| Tractor | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Combine | | | | | | | | | |
| | | | | | | | | | |
| Car | | | | | | | | | |
| | | | | | | | | | |
| Truck | | | | | | | | | |
| | | | | | | | | | |
| Other | | | | | | | | | |
| Semispecial | | X | X | X | X | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| General Equipment | | X | X | X | X | X | X | | |
| | | | | | | | | | |
| | | | | | | | | | |
| TOTAL | | | | | | | | | |

Total Operating Expenses _____

22. TOTAL FARM CASH EXPENSES

| Expense Item | Value | Expense Item | Value |
|---|---|---|---|
| Seed treatment | | Salaries & wages | |
| Seed cleaning | | Board of paid labor | |
| Fertilizer | | Interest paid | |
| Sprays | | Other | |
| Blacksmith | | | |
| Twine | | | |
| Vet. Bills | | Sub-total | |
| Medicine | | Grain & Feed bought: | |
| Fees | | Wheat | |
| Antifreeze | | Oats | |
| Egg crates, pails, cans | | Barley | |
| | | Flax | |
| Insurance: buildings | | Rye | |
| Hail insurance | | Screenings | |
| Taxes on Real Estate | | Seed: | |
| | | | |
| Cash rent: land | | | |
| Hay lease | | | |
| Building repairs | | | |
| Telephone | | | |
| Hydro | | Other | |
| Custom work: spray | | Hay | |
| bale | | Straw | |
| combine | | Concentrate, minerals & salt | |
| bulldoze | | Sub-total | |
| truck grain | | Operating (21) | |
| machinery rent | | | |
| Other: | | | |
| Sub-total | | Sub-total | |

22. (con't)

| Livestock purchases: | Value | Poultry: | Value |
|---|---|---|---|
| Cattle: | | Chicks | |
| Cows | | Turkey poults | |
| Steers | | Other | |
| Heifers | | Sheep: | |
| Calves | | Ewes | |
| Bulls | | Feeder lambs | |
| Hogs: | | Rams | |
| Sows | | | |
| Feeder | | | |
| Weanlings | | | |
| Boars | | | |
| Sub-total | | TOTAL | |

24. INVENTORY OF PERSONAL ASSETS, AND THE CHANGE ACCOUNTS RECEIVABLE, 1959

| Personal Assets | | | Accounts Receivable | | |
|---|---|---|---|---|---|
| Type Asset | Value Beginning Year | Value End Year | Type | Total Accounts Receivable Jan. 1, 1960 | Amount Received in 1959 |
| Cash: On Hand Current Acc't Savings Acc't | | | Mortgages: Chattel Mtg | | |
| Sub-total | | | Agreements for sale: | | |
| Life Insurance (CSV) | | | | | |
| Investments Shares Bonds | | | Lein notes: | | |
| Other Personal Assets | | | Personal Debts: | | |
| TOTAL | | | | | |

24. PERSONAL LIVING EXPENSES OF BEGINNING FARMERS AND FAMILY, 1959

| ITEM | Value | Estimatrd Living Expenses by Adult Equivalents | | |
|---|---|---|---|---|
| | | Number A.E. | Average per A. E. | Amount per A. E. |
| 1. Groceries, fruit, meat, etc. | | | 237 | |
| 2. Heating home | | | (43) | |
| 3. Life insurance premium | | | 53 | |
| 4. Personal, clothing, recreation charity | | | 248 | |
| 5. New household furnishings and repairs | | | 84 | |
| 6. Hospital, medical, dental, etc. | | | 43 | |
| 7. Board paid | | X | X | X |
| 8. Other | | X | X | X |
| Sub-total | | | (708) | |
| 9. Less board of hired help | | X | X | X |
| TOTAL | | X | X | |

25. CASH BALANCE, 1959

| Income | | Expenditure | |
|---|---|---|---|
| Total cash receipts (23 - b) p. 16 | | Farm Cash Expenditure p. 18 | |
| Decrease in bank balance p. 19 | | Increase in bank balance p. 19 | |
| Decrease in accounts receivable p. 19 | | Increase in accounts receivable p. 19 | |
| Non-farm income (9) p. 8 (12) p. 9 & 10 | | Payments on debt p. 13 | |
| New debt (excluding) interest p. 13 | | Total living expenses p. 20 | |
| | | Capital expenditures p. 14 | |
| TOTAL | $ | TOTAL | $ |

VI PLANS OF BEGINNING FARMERS

26. PLANS OF TYPE I - FARMER

1. Do you plan to continue farming under the present operating arrangement?

Yes ____ No ____

(a) If you don't plan to continue under the present operating arrangement what do you intend to do?

(i) to quit farming? Yes ____ No ____

(ii) to alter the present operating arrangement? Yes ____ No ____

(iii) to start farming on your own? Yes ____ No ____

i If you plan to quit farming, why?

| | Check |
|---|---|
| - ill health | ____ |
| - low income | ____ |
| - inadequate operating arrangement | ____ |
| - lack of capital to start farming on your own | ____ |
| - too much variability of farm income | ____ |
| - because you have training in another field, what | ____ |
| - your wife would work if you moved off the farm | ____ |
| occupation? ____ | |

ii If the present operating arrangement is inadequate to support your family, what type of operating arrangement would you consider more desirable? ____

____

Why do you believe this to be a superior arrangement? ____

____

____

iii Why do you want to start farming on your own? _____

_____

_____

Do you have enough capital? Yes ____ No ____

If not where do you intend to obtain credit? _____

_____

_____

What terms could you get? - length of loan: _____

_____

- Type of repayment schedule: _____

_____

- interest rate: _____

- collateral provided: _____

_____

_____

How much collateral would your parents be willing to provide? _____

_____

What type? _____

(b) If you plan to continue under the present operating arrangement, what are your intentions?

To eventually take over the farm business (or part of) on your own?

Yes___ No___

How do you plan to acquire the farm business?

- option to buy ____
- gift from parents ____
- inheritance by will ____
- other _____ ____

_____

2. What are your plans with respect to the security of your family?

i What type of transfer arrangement do you have? _____

_____

_____

Is it legal? Yes _____ No _____

ii Do you have life insurance? Yes _____ No _____

- amount of coverage: (i) $ _____
- (ii) _____
- (iii) _____
- types of policy (i) _____
- (ii) _____
- (iii) _____
- premiums $ (i) _____ (ii) _____ (iii) _____
- beneficiary _____ _____

_____ _____

Do you plan to increase the amount of life insurance you now have?

Yes _____ No _____

If you don't have life insurance policy, do you plan to take one out?

yes _____ No _____

iii Do you plan annuity or other type savings for your children's education?

Yes _____ No _____

Specify the type of saving plan (e.g. annuity, the farm business, stocks & bonds, out of agriculture investments)

1. _____
2. _____
3. _____

27. PLANS OF TYPE II - FARMER

1. Do you plan to continue farming: Yes _____ No _____

a. If you do plan to continue farming, what are your intentions?

i To expand the farm business? Yes _____ No _____

ii To use more borrowed capital? Yes _____ No _____

How much? _____

_____

For what purpose? _____

_____

iii To keep the same size of farm business and reduce debt? Yes _____ No _____

If you plan to expand the farm business how do you intend to obtain more capital? Check

1. Private borrowing _____
2. Institutional borrowing _____
3. Credit from merchants _____
4. Local credit union or church _____
5. From savings _____

What do you plan to use for collateral?

1. Land _____
2. Chattels _____
3. Good name _____

b. If you don't plan to continue farming what are your intentions?

i When do you intend to quit farming? _____ Why?

- Want to retire _____
- Income too low _____
- Lack of capital _____
- Insecurity of farming _____
- Wife can work if you move to town _____

- ill health _____

- too much debt _____

ii What new opportunities do you have in mind? _____

_____

_____

_____

Have you experience? _____

_____

2. What are your plans with respect to the security of your family?

i What type of transfer arrangement do you have? _____

_____

Is it legal? Yes _____ No _____

ii Do you have life insurance? Yes _____ No _____

- Amount of coverage (i) $_____

(ii) _____

(iii) _____

- Types of policy (i) _____

(ii) _____

(iii) _____

- Premiums $ (i) _____ (ii) _____ (iii) _____

- Beneficiary _____

iii Do you plan annuity or other type savings for your children's education?

Yes _____ No _____

Specify the type of saving plan (e.g. annuity, the farm business, stocks & bonds, out of agriculture investments.)

1. _____

2. _____

3. _____

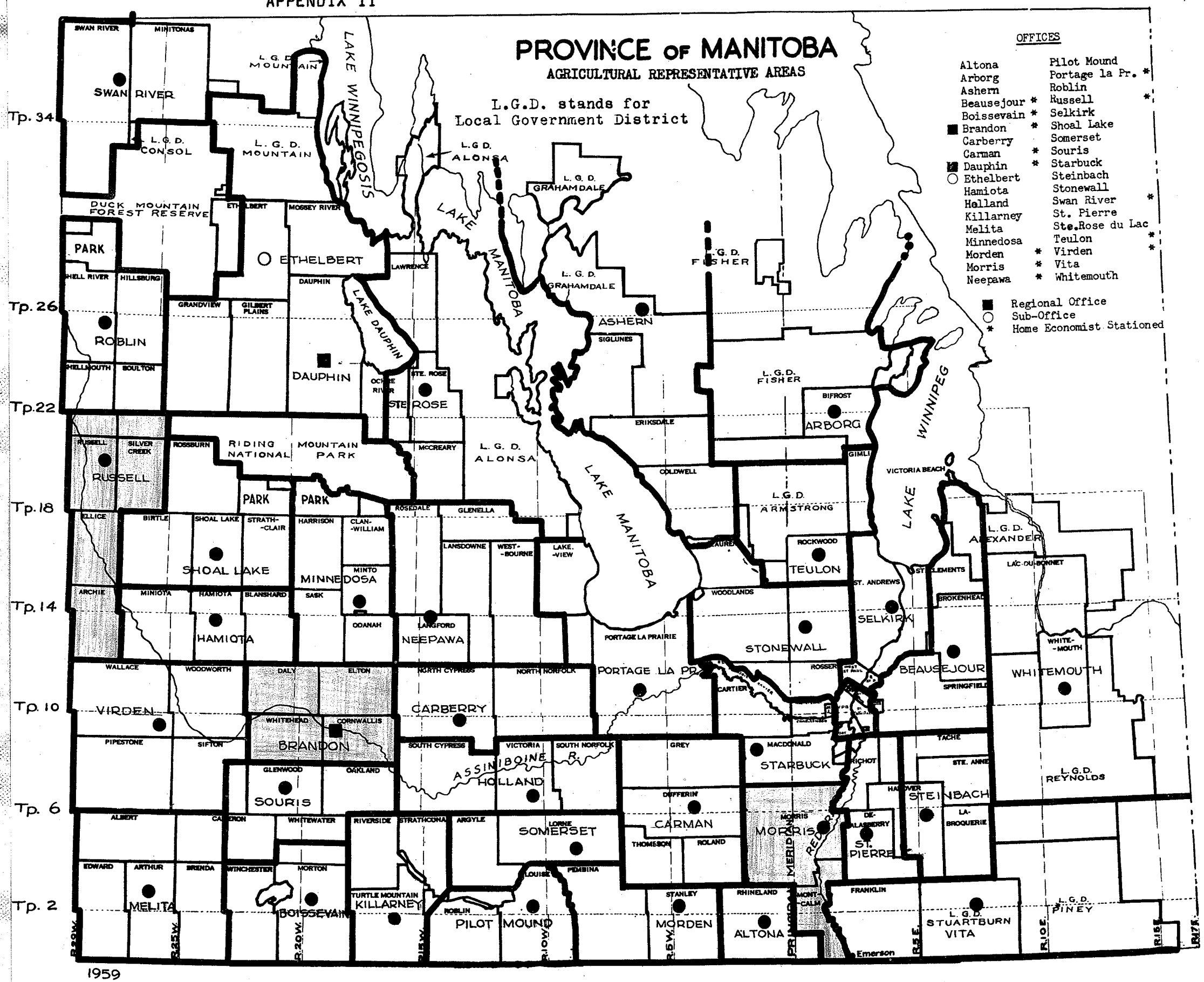
## GLOSSARY

1. Inheritance
   - assets transferred after death P. 10
2. Gift
   - assets transferred before death P. 10
3. Type of repayment schedule
   - fixed or flexible P. 11
4. Collateral
   - the security provided to acquire a loan P. 11
5. Mortgage
   - Collateral-land P. 11
6. Chattel Mortgage
   - a mortgage on personal property (those assets other than land) P. 11
7. Agreements for sale
   - the purchase arrangement of an asset P. 11
8. Lien note
   - a right of the creditor to enforce a charge against the property of a debt or if the conditions specified in the "note" are not satisfied. P. 11
9. Personal debts
   - a promisory note (collateral-personal assets or land)
   - a verbal promise to pay (collateral-a good credit rating) P. 11
10. Fuel
    - includes purchases on the farm and at the "pump" P. 17
11. Dividends
    - e.g. Manitoba Pool Elevator patronage dividend P. 16
12. Adult Equivalent (A.E.)
    - based on Canadian Recommended allowances for calorie requirements by age groups. P. 20

| Age Group | Number (A.E.) |
|---|---|
| 1. 15 years & over | 1 |
| 2. 10-14 years | .75 |
| 3. 5- 9 years | .50 |
| 4. 1- 4 years | .33 |

13. Average Living Expenses by Item per A.E.
    - based on data drawn from the Annual Report, 1958, The Carman Farm Business Association. P. 20
14. Increase in Accounts Receivable
    - the amount owing to the farm operator, Jan. 1, 1960, on transactions having occurred within the calendar year, 1959. P. 20
15. Decrease in Accounts Receivable
    - the amount received by the farm operator within the calendar year 1959, on transactions prior to Jan. 1, 1959. P. 20

APPENDIX II




1959

Table III.1. The Importance of Equity Farm Capital Accumulation by Method for Type II Farmers Stratified by Areas*

| Area | Size Sample | Total Equity Capital | Importance of Equity Capital Accumulation | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Hired Man | Non-Farm Employment | | Inheritance | Gifts | Farm Family Operating Agreement | Own Farm Business |
| | | | | Operator | Wife | | | | |
| (1) | | | per cent of total equity capital | | | | | | |
| Russell | 12 | 5426 | 6.6 | 9.7 | 5.6 | - | 11.2 | 66.9 | - |
| Brandon | 25 | 8720 | .9 | 5.8 | 5.7 | 9.5 | 16.5 | 61.6 | - |
| Morris | 18 | 9269 | 1.1 | 7.6 | 7.9 | 30.1 | 23.4 | 29.9 | - |
| (2) | | | | | | | | | |
| Russell | 12 | 19175 | 1.9 | 4.3 | 7.4 | - | 12.3 | 18.9 | 55.2 |
| Brandon | 25 | 25184 | .8 | 3.7 | 4.2 | 4.9 | 7.6 | 21.3 | 57.5 |
| Morris | 18 | 23164 | .6 | 7.3 | 4.2 | 13.3 | 11.4 | 12.0 | 51.2 |

(1) Preceding Type II Status
(2) Jan. 1, 1960

*In Addition:

| Area | Present Age of Operator | Years Farming |
|---|---|---|
| Russell | 29 | 5 |
| Brandon | 30 | 6 |
| Morris | 30 | 6 |

Table IV.1. Average Equity Farm Capital Accumulated by Type I Farmers Stratified by Stages, Jan. 1, 1960

| Stage (Zone II) | n | Hired Man | Non-farm employment n | Operator | n | Wife | n | Inheritance | n | Gifts | n | Farm Family Operating Agreement | n | Total Equity Capital |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I $A_1$ * | 2 | 378 | 4 | 1638 | 2 | 375 | | - | 9 | 2232 | 13 | 4051 | 13 | 6216 |
| II $A_1$ | 4 | 188 | 16 | 916 | 12 | 1135 | | - | 22 | 4187 | 32 | 7571 | 32 | 11357 |
| III $A_1$ | | - | 7 | 519 | 9 | 1002 | 1 | 5100 | 12 | 4754 | 18 | 17852 | 18 | 22007 |

Table IV.2. Average Capital Invested in Farm Assets for Type I Farmers Stratified by Stages, Jan. 1, 1960

| Stage (Zone II) | n | Land Bldgs. | n | Mach. Equip. | n | Livestock | n | Other | n | Total Farm Capital | n | Feed Grain | n | Total Farm Assets |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I $A_1$ | 4 | 11218 | 10 | 1394 | 12 | 2149 | 2 | 144 | 13 | 6529 | 4 | 1005 | 13 | 6839 |
| II $A_1$ | 23 | 8595 | 31 | 3503 | 26 | 2892 | 16 | 69 | 31 | 12341 | 29 | 2218 | 32 | 13966 |
| III $A_1$ | 15 | 18004 | 18 | 6065 | 17 | 3204 | 15 | 173 | 18 | 24238 | 17 | 3607 | 18 | 27644 |

* See Glossary

Table IV.3. Average Farm Debt of Type I Farmers Stratified by Stages, Jan. 1, 1960.

| Stage (Zone II) | Relatives | | | | | | | Non-Relatives | | | | | | | Total Farm Debt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | n | Land Bldgs. | n | Mach. Equip. | n | Other | n Total | n | Land Bldgs. | n | Mach. Equip. | n | Other | n Total | n |
| I $A_1$* | | - | | - | 1 | 900 | 1 900 | 1 | 6000 | | - | 2 | 600 | 3 2400 | 4 2025 |
| II $A_1$ | 7 | 6868 | | - | 2 | 710 | 9 5499 | 3 | 5833 | 8 | 1472 | 5 | 949 | 15 2268 | 18 4640 |
| III $A_1$ | 6 | 9987 | | - | 3 | 1368 | 8 8002 | 5 | 5030 | 10 | 779 | 5 | 898 | 13 2880 | 14 7650 |

* See Glossary

Table V.1. Average Capital Invested in Farm Assets, Cropland Acres Owned and Rented by Type II Farmers Stratified by Years Farming, Jan. 1, 1960.

| Years Farming | n | Land Bldgs. | n | Mach. Equip. | n | Live-stock | n | Other | n | Total Farm Capital | n | Feed Grain | n | Total Farm Assets | Present Age of Operator | n | Cropland Acres Owned | n | Rented |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I (1-4) $A_1$* | 13 | 16812 | 19 | 8741 | 18 | 5219 | 16 | 205 | 19 | 25361 | 18 | 5095 | 19 | 30188 | 27 | 12 | 311 | 10 | 579 |
| N:19 $A_2$** | | 11503 | | 8741 | | 4944 | | 173 | | 25361 | | 4827 | | 30188 | | | 196 | | 305 |
| I (5-8) $A_1$ | 23 | 15600 | 24 | 10297 | 22 | 4436 | 23 | 164 | 24 | 29470 | 24 | 3782 | 24 | 33252 | 30 | 21 | 287 | 17 | 356 |
| N:24 $A_2$ | | 14950 | | 10297 | | 4066 | | 157 | | 29470 | | 3782 | | 33252 | | | 251 | | 252 |
| I (9-12) $A_1$ | 11 | 23230 | 12 | 12030 | 10 | 8337 | 11 | 140 | 12 | 40399 | 12 | 4868 | 12 | 45267 | 34 | 11 | 353 | 10 | 276 |
| N:12 $A_2$ | | 21294 | | 12030 | | 6947 | | 128 | | 40399 | | 4868 | | 45267 | | | 323 | | 230 |
| All Type II Farmers N:55 | | 15143 | | 10138 | | 4998 | | 156 | | 30435 | | 4380 | | 34815 | 30 | | 248 | | 266 |

* Average determined by actual number of Type II Farmers having the various farm assets in the stratified samples.

** Average determined by the total number of Type II Farmers in the stratified samples.

APPENDIX V

Table V.2. Average Farm Debt of Type II Farmers Stratified by Years Farming, Jan. 1, 1960.

| Years Farming | n | Land Bldgs. | n | Mach. Equip. | n | Other | n | Total | n | Land Bldgs. | n | Mach. Equip. | n | Other | n | Total | n | Total Farm Debt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | relatives | | | | | | | | non-relatives | | | | | | | | | |
| I (1-4) $A_1$ | 6 | 10717 | 5 | 6530 | 4 | 2762 | 12 | 9000 | 5 | 6254 | 10 | 2830 | 7 | 2052 | 16 | 4621 | 18 | 1108 |
| II(5-8) $A_1$ | 12 | 6517 | 5 | 2499 | 4 | 2612 | 17 | 5950 | 8 | 9218 | 17 | 2523 | 13 | 2844 | 21 | 7315 | 24 | 10615 |
| III(9-12) $A_1$ | 5 | 22300 | 2 | 5400 | 5 | 5175 | 8 | 18522 | 3 | 6733 | 7 | 2607 | 9 | 1646 | 11 | 4842 | 11 | 18312 |

Table VI.1. Average Equity Farm Capital Accumulated by Type II Farmers Stratified by Composition.

| Composition | n | Hired Man | Non-Farm Employment n | Operator | n | Wife | n | Inheritance | n | Gifts | n | Farm Family Operating Agreement | n | Own Farm Business | n | Total Equity Capital | Years Farming as Type II |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) | | | | | | | | | | | | | | | | | |
| Type IIAC $A_1$ | 2 | 1050 | 3 | 2717 | 5 | 900 | 1 | 27000 | 4 | 2062 | 10 | -787 | | -- | 10 | 4213 | |
| N:10 $A_2$ | | 210 | | 815 | | 450 | | 2700 | | 825 | | -787 | | -- | | 4213 | |
| Type $IIAB_1$ $A_1$ | 2 | 3000 | 8 | 2372 | 16 | 951 | 3 | 11793 | 7 | 3796 | 26 | 3269 | | -- | 26 | 7198 | |
| N:26 $A_2$ | | 231 | | 730 | | 585 | | 1361 | | 1022 | | 3269 | | -- | | 7198 | |
| Type $IIAB_2$ $A_1$ | | -- | 3 | 1100 | 2 | 2750 | 2 | 4350 | 5 | 2070 | 12 | 5837 | | -- | 12 | 8157 | |
| N:12 $A_2$ | | -- | | 275 | | 458 | | 725 | | 862 | | 5837 | | -- | | 8157 | |
| Type IIA $A_1$ | | -- | 1 | 1100 | 4 | 995 | | -- | 5 | 7450 | 6 | 13408 | | -- | 7 | 17540 | |
| N:7 $A_2$ | | -- | | 157 | | 569 | | -- | | 5321 | | 11493 | | -- | | 17540 | |
| All Type II Farmers $_{N:55}$ $A_2$ | | 147 | | 573 | | 531 | | 1292 | | 1498 | | 4139 | | | | 8180 | |
| (2) | | | | | | | | | | | | | | | | | |
| Type IIAC $A_1$ | 2 | 1050 | 5 | 2162 | 8 | 2526 | 2 | 13635 | 5 | 3590 | 10 | -787 | 10 | 13910 | 10 | 20957 | -- |
| N:10 $A_2$ | | 210 | | 1081 | | 2021 | | 2727 | | 1795 | | -787 | | 13910 | | 20957 | 7 |
| Type $IIAB_1$ $A_1$ | 4 | 1788 | 15 | 1964 | 19 | 1373 | 4 | 10095 | 15 | 2972 | 26 | 3269 | 26 | 12545 | 26 | 21493 | -- |
| N:26 $A_2$ | | 275 | | 1133 | | 1003 | | 1553 | | 1714 | | 3269 | | 12545 | | 21493 | 5 |
| Type $IIAB_2$ $A_1$ | 1 | 2170 | 8 | 2059 | 3 | 2733 | 4 | 4650 | 8 | 2279 | 12 | 5837 | 12 | 13286 | 12 | 24429 | -- |
| N:12 $A_2$ | | 181 | | 1373 | | 683 | | 1550 | | 1519 | | 5837 | | 13286 | | 24429 | 6 |
| Type IIA $A_1$ | 1 | 819 | 2 | 3482 | 4 | 1620 | | -- | 7 | 6168 | 6 | 13408 | 7 | 11034 | 7 | 30733 | -- |
| N:7 $A_2$ | | 117 | | 995 | | 926 | | -- | | 6168 | | 11493 | | 11034 | | 30733 | 4 |
| All Type II Farmers $_{N:55}$ $A_2$ | | 223 | | 1158 | | 1108 | | 1568 | | 2253 | | 4139 | | 12763 | | 23212 | 5.5 |

(1) Preceding Type II Status
(2) Jan. 1, 1960

Table VI.2. Average Capital Invested in Farm Assets for Type II Farmers Stratified by Composition.

| Composition | n | Land Bldgs. | n | Mach. Equip. | n | Live-stock | n | Other | n | Total Farm Capital | n | Feed Grain | n | Total Farm Assets | Net Worth to Farm Debt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) | | | | | | | | | | | | | | | |
| Type IIAC $A_1$ | 1 | 25000 | 9 | 3605 | 8 | 691 | | -- | 10 | 6302 | 1 | 200 | 10 | 6322 | -- |
| N:10 $A_2$ | | 2500 | | 3244 | | 558 | | -- | | 6302 | | 20 | | 6322 | 2.0 |
| Type $IIAB_1$ $A_1$ | 16 | 12006 | 23 | 4086 | 20 | 1680 | 4 | 38 | 26 | 12301 | 5 | 1111 | 26 | 12515 | -- |
| N:26 $A_2$ | | 7388 | | 3614 | | 1293 | | 6 | | 12301 | | 214 | | 12515 | 1.4 |
| Type $IIAB_2$ $A_1$ | 6 | 8917 | 11 | 5788 | 8 | 2012 | 2 | 312 | 11 | 12172 | 4 | 4902 | 12 | 12791 | -- |
| N:12 $A_2$ | | 4458 | | 5305 | | 1342 | | 52 | | 11157 | | 1634 | | 12791 | 1.8 |
| Type IIA $A_1$ | 5 | 21460 | 6 | 7893 | 5 | 4762 | 3 | 42 | 7 | 25514 | 3 | 1873 | 7 | 26317 | -- |
| N:7 $A_2$ | | 15325 | | 6765 | | 3402 | | 18 | | 25514 | | 803 | | 26317 | 2.0 |
| All Type II Farmers $N:55$ $A_2$ | | 6870 | | 4317 | | 1439 | | 16 | | 12642 | | 565 | | 13207 | 1.6 |
| (2) | | | | | | | | | | | | | | | |
| Type IIAC $A_1$ | 8 | 15325 | 10 | 8965 | 9 | 3924 | 9 | 218 | 10 | 24952 | 10 | 4620 | 10 | 29572 | -- |
| N:10 $A_2$ | | 12260 | | 8965 | | 3532 | | 196 | | 24952 | | 4620 | | 29572 | 2.4 |
| Type $IIAB_1$ $A_1$ | 22 | 15341 | 26 | 8584 | 23 | 5908 | 23 | 96 | 26 | 26876 | 25 | 4047 | 26 | 30767 | -- |
| N:26 $A_2$ | | 12981 | | 8584 | | 5227 | | 84 | | 26876 | | 3891 | | 30767 | 2.3 |
| Type $IIAB_2$ $A_1$ | 11 | 18168 | 12 | 11441 | 11 | 6397 | 11 | 281 | 12 | 34217 | 12 | 4707 | 12 | 38924 | -- |
| N:12 $A_2$ | | 16654 | | 11441 | | 5864 | | 258 | | 34217 | | 4707 | | 38924 | 1.7 |
| Type IIA $A_1$ | 6 | 28821 | 7 | 15351 | 7 | 4758 | 7 | 191 | 7 | 45005 | 7 | 5290 | 7 | 50295 | -- |
| N:7 $A_2$ | | 24704 | | 15351 | | 4758 | | 191 | | 45005 | | 5290 | | 50295 | 1.6 |
| All Type II Farmers $N:55$ $A_2$ | | 15143 | | 10138 | | 4998 | | 156 | | 30435 | | 4380 | | 34815 | 2.0 |

Table VI.3. Average Farm Debt of Type II Farmers Stratified by Composition.

| Composition | n | Land Bldgs. | n | Mach. Equip. | n | Other | n | Total | n | Land Bldgs. | n | Mach. Equip. | n | Other | n | Total | n | Total Farm Debt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (1) | | | | relatives | | | | | | | | non-relatives | | | | | | |
| Type IIAC $A_1$ | | -- | | -- | 3 | 2060 | 3 | 2060 | 1 | 3500 | 3 | 3802 | | -- | 4 | 3727 | 5 | 4217 |
| N:10 $A_2$ | | -- | | -- | | 618 | | 618 | | 350 | | 1141 | | -- | | 1491 | | 2109 |
| Type IIAB$_1$ $A_1$ | 5 | 6100 | 1 | 5400 | 6 | 6121 | 11 | 6602 | 8 | 7162 | 5 | 1402 | 2 | 650 | 11 | 5964 | 18 | 7680 |
| N:26 $A_2$ | | 1173 | | 208 | | 1412 | | 2793 | | 2204 | | 270 | | 50 | | 2524 | | 5317 |
| Type IIAB$_2$ $A_1$ | 1 | 16000 | 2 | 4000 | 3 | 2400 | 4 | 7800 | 4 | 4500 | 3 | 1967 | 1 | 500 | 5 | 4880 | 7 | 7943 |
| N:12 $A_2$ | | 1333 | | 667 | | 600 | | 2600 | | 1500 | | 492 | | 41 | | 2033 | | 4633 |
| Type IIA $A_1$ | 2 | 11500 | 1 | 8400 | 1 | 9000 | 4 | 10100 | 2 | 8450 | 2 | 2000 | 1 | 250 | 4 | 5288 | 5 | 12310 |
| N:7 $A_2$ | | 3286 | | 1200 | | 1285 | | 5771 | | 2414 | | 571 | | 36 | | 3021 | | 8792 |
| All Type II Farmers N:55 $A_2$ | | 1264 | | 397 | | 1074 | | 2735 | | 1740 | | 515 | | 37 | | 2292 | | 5027 |
| (2) | | | | | | | | | | | | | | | | | | |
| Type IIAC $A_1$ | 5 | 11740 | | -- | 3 | 1750 | 10 | 6395 | 1 | 7500 | 7 | 1316 | 6 | 912 | 9 | 2467 | 10 | 8615 |
| N:10 $A_2$ | | 5870 | | -- | | 525 | | 6395 | | 750 | | 922 | | 548 | | 2220 | | 8615 |
| Type IIAB$_1$ $A_1$ | 9 | 7444 | 8 | 4649 | 5 | 6519 | 17 | 8046 | 7 | 7428 | 14 | 2119 | 10 | 2267 | 21 | 4968 | 25 | 9645 |
| N:26 $A_2$ | | 2577 | | 1431 | | 1254 | | 5262 | | 2000 | | 1141 | | 872 | | 4013 | | 9275 |
| Type IIAB$_2$ $A_1$ | 5 | 14200 | 3 | 3350 | 3 | 542 | 7 | 11811 | 6 | 6308 | 7 | 2700 | 9 | 3834 | 11 | 8295 | 12 | 14495 |
| N:12 $A_2$ | | 5917 | | 838 | | 136 | | 6891 | | 3154 | | 1575 | | 2875 | | 7604 | | 14495 |
| Type IIA $A_1$ | 4 | 14325 | 1 | 8700 | 2 | 3950 | 7 | 10557 | 2 | 13936 | 6 | 5244 | 4 | 874 | 6 | 10505 | 6 | 22822 |
| N:7 $A_2$ | | 8186 | | 1243 | | 1128 | | 10557 | | 3982 | | 4524 | | 499 | | 9005 | | 19562 |
| All Type II Farmers $A_2$ N:55 | | 4618 | | 1018 | | 861 | | 6497 | | 2277 | | 1626 | | 1203 | | 5106 | | 11603 |

## APPENDIX VII

## OUTLINE OF THE MANITOBA AGRICULTURAL CREDIT CORPORATION[32]

The Manitoba Agricultural Credit Corporation (MACC) may loan up to 65 per cent of the appraised value of the security. Sixty per cent of the security must be in land, 20 per cent may be in machinery and equipment, and 40 per cent may be in livestock. Maximum loans ($25,000) can be made to individuals, joint applicants, or family corporations. These loans are available to farmers between the ages of 21 to 60 years. At least one member of joint applicants, or family corporations, must qualify under the age classification.

Other terms stipulated by the Corporation are:

1. Interest rate to young farmers between the ages of 21 to 31 years is 4 per cent.
2. Interest rate to farmers over the age of 31 years is 5½ per cent.
3. Interest rate to joint applicants or family corporations, if one member is over the age of 31 years, is 5½ per cent.
4. The maximum term of mortgage is 30 years.
5. The corporation does not provide short term credit.

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[32] The Manitoba Agricultural Credit Corporation, 290 Vaughan Street, Winnipeg 2, Manitoba.

Table VIII.1. Average Capital Invested in Farm Assets by Type II Farmers Stratified by Type of Land Tenure, Jan. 1, 1960

| Type Land Tenure | Size Sample | Land Bldgs. | Mach. Equip. | Livestock | Other | Total Farm Capital | Feed Grain | Total Farm Assets | Years Farming | Present Age of Operator |
|---|---|---|---|---|---|---|---|---|---|---|
| Owners | 17 | 19462 | 7706 | 4182 | 171 | 31521 | 3747 | 35268 | 5 | 30 |
| Part Owners -Part Tenant | 27 | 18536 | 11295 | 6261 | 145 | 36237 | 4791 | 41028 | 7 | 31 |
| Tenants | 11 | 141 | 11057 | 3158 | 160 | 14516 | 4347 | 18863 | 4 | 28 |
| All Farm Operators | 55 | 15143 | 10138 | 4998 | 156 | 30435 | 4380 | 34815 | 6 | 30 |