

**OFF-FARM EMPLOYMENT IN
AGRO-MANITOBA**



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IN AGRO-MANITOBA**

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PREFACE

Often lost in the massive restructuring that has occurred in Canadian agriculture since the Great Depression is the variety of ways in which farm families have adjusted to changing economies. Changes usually are measured by the number of farms, acreage of farms, types of operations or other physical characteristics. There are, however, also a number of social or economic changes that farm families have been making that sustain agricultural lifestyles. Perhaps foremost among these options is that of one or more family members securing off-farm employment to augment income. This practice has been common since first recognized in the 1941 Census.

Although many view off-farm employment as a symbol of failing agricultural economies, this is not necessarily the reason why people seek employment elsewhere. Some consider off-farm work as a form of diversification of farm activities. Others see employment as wise use of spare time seasonally. Some need the money simply to preserve, or to expand present operations. Many female farm spouses see off-farm work as a means to pursue a career, or to augment family income and enhance their lifestyle. Accordingly, monies derived may be either essential or discretionary within family budgets.

Off-farm employment is increasing in both number of participants and amount of time involved. This, in turn, brings the farms and rural towns and villages closer together as people from the countryside become the labour pool for urban enterprises. The bond between the farm and town, therefore, strengthens, and the "community" becomes more interdependent. This study documents not only rates and trends in off-farm work, but also ascertains the motivations for and results of such employment. Rural development must involve an understanding of both the parts and the whole.

Many individuals contributed to the formulation of this research project. Andrew Dickson, Wayne Digby, John Neabel and Bruce Dryburgh of Manitoba Agriculture assisted during the proposal stage. Bob Grodzik, Chief of Research of Manitoba Rural Development, provided assistance throughout the project. Joan Rollheiser, Administrative Assistant at RDI, prepared the manuscript for publication. Funding was provided by Manitoba Rural Development. The Rural Development Institute receives on-going support from Manitoba Rural Development and Brandon University. We especially acknowledge the assistance of the Honourable Len Derkach, Minister of Rural Development, Winston Hodgins, Deputy Minister, and Ron Riopka, Director, Corporate Planning and Business Development. Dr. Susan Hunter-Harvey, Vice-President Academic & Research, assists RDI at Brandon University.

EXECUTIVE SUMMARY

Farm families have used off-farm employment to augment agricultural income for decades. In detail, however, the pattern of off-farm employment is changing in that the amount of time allocated to off-farm activities is increasing. This project is designed to investigate current patterns, trends and characteristics of employment of farm families in non-farm enterprises in Manitoba.

Ten communities were selected from the five agricultural regions of southern Manitoba. Fifty farm households within a 40 km radius of each community were selected randomly. Main operators and spouses were interviewed by trained local personnel. Questions related to 1) current and former off-farm employment, 2) the contribution of off-farm income to the total farm household economy, 3) motivations for participation among various family members, and 4) perceived barriers to off-farm work. Major comparative groups for all data include 407 main farm operators (primarily men) and 382 spouses (primarily women) in the 10 sample communities. Data are analyzed descriptively and compared among groups and regions. Background context is provided from the literature.

Approximately 36 percent of main farm operators were employed off-farm in 1992. Duration of employment varies widely, but most (65 percent) are employed for 10 months or more each year. Among main operators who work off-farm, 60 percent work full-time and 40 percent work part-time. A higher percentage (55 percent) of spouses work off-farm, and their employment is primarily continuous throughout the year (>80 percent at >10 months). Among spouses who work off-farm, 40 percent are employed full-time and 60 percent part-time.

Main operators are opportunistic employees who take advantage of whatever employment opportunities are available, and thus are distributed widely among occupations. Farm men prefer jobs that utilize their farm skills. Spouses, however, concentrate employment in health care, education and clerical categories. The differences in types of work are explained by significantly higher average levels of education among spouses.

The use of income derived from main operators and spouses varies within the farm family economy. Off-farm monies generated by main operators typically are intended to maintain or expand agricultural operations. Those generated by spouses, however, are used for a variety of purposes, including household expenditures, discretionary spending to support a preferred lifestyle, and agricultural operations.

The major motivations for main operators to work off-farm are the desire to maintain and expand agricultural operations, to wisely use discretionary time afforded by modern agriculture, and to maintain the farm household/lifestyle. Spousal motivations are to maintain the household and family necessities, to reduce farm financial risk, and to attain personal goals related to career development. Most main operators (86 percent) and spouses (88 percent) are satisfied or very satisfied with their off-farm employment. As a result there was little interest expressed in training to access alternative employment opportunities. Training programs reviewed substantiate the current patterns of training backgrounds and off-farm work.

Perceived barriers to off-farm employment also varied between main operators and spouses. Both main operators and spouses list lack of time and availability of employment as the two most important obstacles to off-farm employment. Few other significant differences in barriers occur between main operators and spouses, except that spouses rate availability and cost of day care significantly higher than do main operators. Neither, however, consider day care issues very important.

Most characteristics of off-farm employment do not vary significantly among the five regions from which farm families were selected. The Central Region (Portage la Prairie south) is most different among regions in measured characteristics.

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ADDENDA

All percentages presented in Table 1, Figure 1 and Figure 2 are derived from Statistics Canada: Censuses of Agriculture.

INTRODUCTION

The poorly defined condition of social and economic upheaval known as the "farm crisis" has had far-reaching effects on Canadian agriculture. Its precise causes and consequences remain largely misunderstood, but the combination of financial pressure and the modernization of agricultural production has accelerated the disappearance of traditional family farms. Many researchers point to the emergence of a dual (bi-polar) structure in Canadian and U. S. agriculture. Large-scale enterprises account for a growing share of agricultural production, while smaller farms satisfy a complex of social, residential and hobby functions. The impossibility of non-viable farmers to leave the sector leads them to involvement in a variety of activities that produce income (Etchezarreta and Viladomiu, 1988:40).

Farm operators often have to capitalize their agricultural enterprises with resources secured outside of the farm production economy. Increasing levels of off-farm employment, or multiple job-holding, evidence the restructuring of the agricultural sector. Macro-level economic processes which impact agriculture have emphasized the importance of off-farm activities, embedding them within the farm systems. Some observers argue that the future of North American agriculture hinges on the availability of supplementary sources of capital. Albrecht (1984:407) states that "Developing policies to promote part-time farming may be one of the most effective means of maintaining agricultural production and a viable farm population in an area". In this sense, multiple job-holding, or part-time farming, is characterized as a positive adaptive solution to economic stress within the wider farming community. Fuller (1991) takes a similar position by suggesting that off-farm work often enables farm families to stay on the land and continue their involvement in agriculture. He also acknowledges that off-farm activities represent more than survival strategies; multiple job-holding provides family members with opportunities to pursue employment in the non-farm labor market, develop skills, as well as gain experience and personal satisfaction. Fuller (1991:41) describes multiple job-holding as "a flexible mechanism for adjusting to changes in agriculture, family needs, and shifts in the external environment".

There is limited consensus about the meaning of the phrase *part-time farming*. Many of the variables used to explain the differing conditions of off-farm employment are of only limited explanatory value. Indeed, the terminology used to describe the nature of farm operators' involvement in off-farm capital and labor markets betrays an overly simplistic approach to this phenomenon. The phrase "part-time farming" implies that individuals engaged in off-farm employment are only partially (or minimally) active in agricultural production. Fuller (1991:32) notes that "An operator who has a part-time job does not necessarily run a part-time farm". Clearly, there are individuals who combine on and off-farm sources of income within the farm household economy, even though they are primarily involved in non-farm related activities. This is but **one** of many sub-categories or types of part-time farming. There are other farm operators who are engaged principally in agricultural production, while carrying on some off-farm employment.

The complexity of farm family work patterns has helped to create new terminology, most notably *multiple job-holding* and *pluriactivity*. Fuller (1990:367) suggests that the term multiple job-holding represents a significant improvement over part-time farming, but its usage "relates specifically to jobs which are remunerated in the conventional, contractual sense". Pluriactivity, a term more commonly used in Western Europe, includes both "gainful employment" (Gasson et al., 1988) and less formal systems of exchange. Fuller (1990:367) identifies a number of (pluri)activities in which farm household members might participate, in addition to agricultural production:

- employment on other farms (e.g. hired labor);
- para-agricultural activities such as food processing (e.g. wine making for direct sale);
- other non-agricultural activities on the farm (e.g. tourist accommodation, furniture making);
- off-farm activities (wage labour).

Even this definition, however, presents some difficulties in dealing with businesses (other than the farm production process) located on the property or holding. Earnings generated from on-site, agriculturally-oriented businesses are difficult to classify because their capital operations can range anywhere from being totally distinct from, to heavily intertwined with the agricultural enterprise.

Researchers are developing new terms with which to more precisely analyze variation in the types and levels of farm operator involvement in off-farm capital and labor markets. The two terms *off-farm work* and *off-farm income* reflect a distinction made between a narrower category of off-farm, employment-related earnings and a more inclusive definition composed of wages, salaries, benefits, investments, non-farm government transfer payments, self-employment income from a non-farm business and other miscellaneous sources. In this sense, off-farm income is not restricted to off-farm employment; rather, it refers to the total of everything which is not derived from net farm income.

Subtle distinctions in language can affect the interpretation of research results and the implications of these findings for long-term policy development. Bollman and Smith (1987, 1988) and Bollman and Fuller (1992) provide valuable information concerning the relative contributions of off-farm work and off-farm income to the total farm family income. Their data allow researchers to make inferences about the level of reliance on off-farm income and the degree of interconnectedness between rural and urban economies.

Information provided by individual tax filers has been employed to evaluate the contribution of off-farm income to farmers' (as defined by Revenue Canada) total net income. Bollman and Smith (1987) report that, between 1946 and 1985, off-farm income steadily increased in importance relative to farm-related income. "In the 1940s, net farm income represented 90 percent of their [farmers] total income, but fell as low as 52 percent by the early 1980s" (Bollman and Smith, 1987:157). Operators are spending more days per year working off the farm and, as a consequence, the ratio of off-farm to farm earnings is increasing. During the first three decades of this time period, off-farm work (wages) represented the primary component of off-farm income, but off-farm investments have since increased to form a second major source (Bollman and Smith, 1987).

Trends related to the distribution of off-farm income among farm families have become a subject of recent concern. Bollman and Smith (1988) point out that, in 1981, 53 percent of farm families included at least one individual (operator, spouse and/or child) who was involved in off-farm labor. This approach expands the analysis to include both operators' and other family members' off-farm contributions to total family income, depending on the definition of a farm family. Bollman and Smith (1987) establish three definitions of the farm family, each of which affects the analysis of off-farm income. The proportion of off-farm income reported depends on which definition is employed. The three types of farm families are as follows:

- where one individual had some net farm income;
- where one individual had net farm income as a major source of income; or
- where one individual reported farming as the main occupation (Bollman and Smith, 1988:158).

Based on these definitions, Bollman and Fuller (1992) report that, off-farm *wage income* from all family members represented 21 percent to 36 percent of the total family income in 1985, compared to a range of 31 percent to 51 percent in 1989. When discussion includes off-farm income from all sources, not simply off-farm employment earnings, the figures increase dramatically. Over this same time period, off-farm income increased from 35 percent to 54 percent of farm family income (1965) to somewhere between 54 percent and 77 percent (1989), depending on the definition of the farm family. Although off-farm income as a percentage of farm family income declines as farm size increases, off-farm sources still account for a significant proportion of total net income. Bollman and Smith (1987) suggest that off-farm income

contributions remain important at the upper end of the farm size scale because of paid on-farm work, investments and spousal earnings.

Similar patterns in the importance of off-farm income have been identified in the United States. Between 1965 and 1979, off-farm sources increased from 44 percent to 63 percent of total family income for farms with less than \$40,000 in gross sales. Farms reporting between \$40,000 and \$99,999 in sales also evidenced increased dependence on off-farm capital over this time span (20 percent to 31 percent; Coughenour and Swanson, 1983). As farm families are becoming increasingly reliant on non-farm markets for a growing share of their household incomes, it is important to distinguish between the operator and the household unit, as well as off-farm work and off-farm income.

The male operator or head of household is employed as the primary unit of analysis in much of the early research. The findings and analyses, therefore, reflect a gender bias. Recent investigations into off-farm employment have broadened the focus of inquiry to include **all** members of the farm household unit. Prior to the 1990 Agricultural Census, data-collection procedures focused on information provided by the main operators, whereas modifications now allow for the identification of as many as three operators for each census farm. This change recognizes that any or all members of the family unit can assume variable roles in supporting the farm operation and its constituent lifestyle. Female contributions to the agricultural enterprise, both in terms of on and off-farm activities, are receiving increased attention, as are the efforts of sons and daughters. This orientation to studying off-farm work provides a more comprehensive view of who is involved in off-farm activities, for what portion of the year, in what types of employment and for what reasons. One of the most important outcomes of this change is the treatment of the agricultural operation as only one of several elements within the larger farm household economy.

Investigations into farm women's labor efforts are complicated by their potential *three-fold* contributions to the unit: household duties, farm production and off-farm work. Smith (1987) employs a similar model to analyze women's inputs into agriculture; however, she uses slightly different terminology: *indirect support, direct involvement and direct assistance*, respectively. She observes that most farm households still operate on the basis of a fairly rigid division of labor, particularly with regard to women's responsibilities for performing domestic tasks. Many women also contribute labor, management skills and support services directly to the production process. If these activities are combined with the potential for part-time or full-time employment off the farm, it becomes readily apparent that women perform multiple roles which help to sustain both the farm enterprise and the family household. Concerning off-farm activities, Smith (1987:158) observes that "One national study found that over half of employed farm women work to provide household necessities, to contribute to the farm operation, or to improve or maintain the family's standard of living; 35 percent of the women who worked off-farm reported investing over three-quarters of their personal incomes in the farm".

The increase of rural women in the work force has drawn attention to the value of their labor both on and off the farm. Labor lost to the farm operation often is allocated to off-farm employment and returned to the household economy through exchange value in earnings, benefits and work experience. Huffman (1976:681) suggests that men and women allocate labor to "farm and off-farm work in a fashion that maximizes farm household income". Off-farm activities of farm women must, therefore, be analyzed as one component of the division of labor operating within the total farm family unit. Bollman and Smith (1988) state that there are significant gender differences in the distribution of farm/non-farm labor. The 1981 Canadian Census indicated that 72 percent of male operators' labor was agricultural in nature and 28 percent was involved in off-farm occupations, while the comparable figures for females were 43 percent and 57 percent, respectively. Buttel and Gillespie (1984) also analyze the differential allocation of household labor to farm and non-farm production. Findings confirm a number of hypotheses suggesting that male and female labor inputs on and off the farm are intimately intertwined, although farm size was decisive in the allocation processes.

Deseran et al. (1984) confirmed the importance of examining the effects of human capital (individual variables), family characteristics and labor market factors on farm and non-farm earnings. Ollenburger et al. (1989) also analyzed the relative impacts of *individual* and *structural* factors on the employment patterns of rural farm, rural non-farm and urban women. They point out that between 1977 and 1981, farm women record a "disproportionate" increase in full-time employment. Further, while urban women are more likely to be involved in the paid labor force than their rural counterparts, this gap is diminishing. Indeed, more and more rural women are seeking off-farm employment, regardless of marital status or the presence of preschool children. Bokemeier, Sachs and Keith (1983:535) report that "Marital status and children are not as important a limiting factor as the marketability of their skills in the nonfarm labor force, for example, education determining whether they can find a job".

Godwin and Marlowe (1990:39) hypothesize that labor force participation and earnings of farm wives are influenced by *human capital* variables (education, age and work experience), characteristics of the *farm* (size and debt-to-asset ratio) and the *family* (total family income other than wives' and presence of children under 18 years of age), as well as aspects of the *labor market* (region, unemployment rates for women and race). They conclude that "Farm wives with higher levels of formal schooling, no children under 18, lower other family income, smaller farms, and lower farm and family debt loads had significantly higher earnings from off-farm employment than other wives". After controlling for these variables, labor market characteristics did not have a significant effect on wives' earnings. However, these human capital, farm and family-related variables impact earnings by inducing farm women to take up paid off-farm employment, something the authors refer to as a "participation effect."

Between 1951 and 1986, there has been a steady increase in the share of women in both the total Canadian labor force (22 percent to 43 percent) and the farm labor force (9 percent to 37 percent). Perhaps even more striking, the labor force participation rates of farm women increased to 63 percent in 1986, surpassing that of all women (56 percent). This pattern of higher participation rates among farm women holds across all family income classes below \$40,000 and regardless of the presence or age of children. Dion and Welsh (1992:241) also report that "Within the farm population, the participation rate is higher for women living on farms with gross sales above the median (over \$30,277 in 1986)". The authors, however, suggest that this particular group of farm women is more likely to seek employment owing to the higher levels of farm debt and expenses associated with larger, highly-capitalized operations.

Buttel and Larson (1982) suggest that multiple job-holding among farm families has evaded the attention of rural sociologists largely because of outdated stereotypes. They argue that the lack of importance accorded part-time farming has led to its exclusion from typologies of farm organizational systems. They note that farmers who work off the farm are presumed to operate small holdings and carry out these activities primarily to compensate for extremely low net farm incomes. That is, farm households with off-farm employment have modest family incomes due to "meagre agricultural resources and poorly remunerated off-farm jobs" (Buttel and Larson, 1982:274). Fuller (1991) also notes the tendency to minimize the importance of this phenomenon by treating it as a marginally productive and anachronistic element of Canadian agriculture. Subsequently, debate has occurred over the **efficiency** of part-time farming operations.

Steeves (1980) points out that while multiple job-holders tend to operate smaller farms, one should not underestimate the importance of their agricultural productivity. In 1970, 53 percent of all farm operators *declared* some form of off-farm work and, as a group, accounted for 46 percent of the total agricultural sales for that year. A more conventional technique for assessing the agricultural productivity of part-time farmers, however, includes *only* those operators who indicate that they have worked one or more days *off the farm*. Bollman (1991) suggests that, between 1971 and 1986, operators working "some days of off-farm work" accounted for approximately 20 percent of aggregate gross sales, with the greatest proportion of this contribution being made by those working between 1 and 96 days per year off the farm. Indeed, Bollman (1991) investigated the *technical* and *allocative* efficiency aspects of part-time farming. He broadens this discussion to include the allocation of resources within the farm family household and such non-economic

components as scenery, fresh air, open space, raising children in the country, being one's own boss and psychic income. Bollman's efficiency analysis indicates that, compared to full-time operators, part-time farmers report lower sales per acre and higher average cash inputs per dollar of sales, regardless of farm size. Further, as operator labor is withdrawn from the agricultural enterprise, both gross and net farm income per day of on-farm work decreases. These results support the contention that "this group is less efficient in producing agricultural output" (Bollman, 1991:130).

Bollman (1991) partially addresses the benefits associated with off-farm work by examining average operator and family total incomes among census farmers. He reports that part-time farmers and part-time farm families have higher incomes than operators and families who rely either solely on farm or off-farm work. In this sense, comments concerning the presumed efficiency of part-time farming operations must be tempered with an understanding of the different types of inputs and outputs included in the assessment, as well as a more macro-level view of the household economies and operations in which members report off-farm work.

Recent research indicates that part-time farmers are neither a separate nor homogenous group. Indeed, trend analysis of census information collected on days of off-farm work demonstrates that such activities are becoming increasingly more common across many different types of agricultural enterprises. Fuller (1990:363) states that "An operator with an off-farm job does not necessarily have a farm that is in any way different from those of the area". Previous studies indicate that the incidence of off-farm activity varies across a wide range of operator (socio-demographic) characteristics, production types, size categories, and other related variables.

Statistics Canada routinely reports levels of off-farm work categorized by individual and farm classification variables. Little, however, is known about the lifestyles, motivations and attitudinal dispositions of these individuals. Barlett (1986) has drawn attention to the lack of information concerning these more personal factors. She points out that "The decision to farm in addition to holding a full-time job is a complex one, involving both income and life-style considerations" (Barlett, 1986:290).

Barlett reiterates this position in a more recent article entitled "Motivations of Part-Time Farmers." She notes that the three most often-cited reasons for rejecting full-time farming and opting for off-farm work are inadequate income, risk or uncertainty of farm returns and the lack of employment benefits such as pensions and insurance. In this sense, multiple job-holding activities combine with other income sources to support the desired standard of living and permit higher consumption levels. Barlett (1991:47) suggests that part-time farming (a term she uses interchangeably with multiple job-holding) "allows families the benefits of stable salaries while also giving them the security of control over productive resources". In other words, off-farm employment provides opportunities for various household members to fulfil a diverse set of personal, familial and business-related needs or goals.

The use of the term "part-time farmer" reflects earlier perceptions that this phenomenon was only a temporary aberration, which assisted farm operators either to phase into or out of agriculture. Barlett (1991) notes the once conventional interpretation that farmers choose off-farm employment in response to a failing full-time operation. In this sense, multiple job-holders have been characterized as downwardly-mobile farmers who are in transition out of agriculture. Steeves (1979:579) makes a somewhat cursory attempt to test whether "off-farm work is the beginning of the end of farming and farm income". This proposition is based on the assumption that returns to labor favor non-farm over farm labor markets, thereby diminishing incentives to remain in or seek entry into the agricultural sector. Steeves finds some support for this hypothesis in Canadian census information which reveals that 46 percent of farm operators who had worked 229 or more days off the farm in 1966 had exited agriculture by 1971. He also suggests that off-farm employment facilitated entry into farming during this same period. Others have advanced the view that off-farm employment serves to generate the capital to begin a farming enterprise. Both lines of argument

are related closely to the life-cycle of the operator and the operation itself, particularly because of the financial requirements associated with establishing, expanding and maintaining a farm business and family household.

Involvement in off-farm work bolsters farm household economies; however, there is insufficient evidence to argue that these activities are based solely on efforts to offset poor economic returns. Researchers recognize that "part-time farming represents a relatively permanent life style, whether by choice or not" (Heffernan, Lasley and Nolan, 1981:245). Although Steeves has characterized off-farm employment as "an important 'stepping stone' both into and out of farming" (1979:580), he also acknowledges that it "can no longer be dismissed as a relatively unimportant and transitional feature of farm production" (1980:165).

Current researchers recognize that variable conditions give rise to off-farm activity, each of which requires careful definition and assessment. Attempts to differentiate off-farm activity levels by *operation-operator* characteristics account only partially for the nature of this intricate phenomenon. Little has been done to investigate the many "assumptions about the intentions and motivations of multiple job holders" (Barlett, 1991:50). Fuller (1991:40) perhaps, has best articulated the broad range of factors which affect the incidence of part-time farming. Beyond the conditions present in agriculture, he suggests that factors which should be included are "the local labor market and the desire of farm families to want to experience economic well-being and social development not unlike the perceived quality of life of households in the non-farm sector". In this sense, multiple job-holding can simultaneously serve the *economic, social and psychological* needs of various members of the farm family household.

Off-Farm Work Among Census Farm Operators: 1971-1991

Off-farm work is a reality for a significant proportion of Canadian farm operators. The Dominion Bureau of Statistics began collecting data about part-time farming in 1941, when information was collected concerning the number of farm operators working off of their farms, the types of off-farm employment or occupations engaged in, and the gross returns generated from off-farm sources by operators and other family members (Mage, 1975). Data were assembled without a specific definition of part-time farming. Indeed, it was not until 1951 that a census definition emerged: "Part-time farms include those with gross sales of farm products between \$250 and \$1199 and, 1) the operator reported that he worked 100 days or more off the farm in 1950, or 2) the farm operator reported the farm income less than his income from other sources" (Canada Census, 1951, Agriculture, Volume VI, Part 1, Table 26).

Criteria changed in 1966 when a part-time farmer was defined as one who reported income from agricultural and non-agricultural off-farm work of \$750 or more or one who worked 75 or more days off of the farm during the year preceding the census. In 1971, Statistics Canada dropped this definition in favor of a much simpler question asking "How many days did you (the operator) work off this holding at paid agricultural and non-agricultural work during 1970?" (1971 Census of Canada, Agriculture, Volume IV, Part 1). The question dealing with the total number of paid days of off-farm work was maintained until the 1986 Census, when Statistics Canada began to ask farmers to report income received in the form of wages and salaries, net non-farm self-employment income, and the number of days of paid off-farm employment. In essence, anyone who works at least one day off-farm can be placed into the category of a part-time farmer. Such a classification is inadequate to determine whether farm operators are marginally or fully engaged in agriculture. Derived data only can indicate broad changes in employment patterns and the reliance of farm operators on off-farm work.

What is important, however, is not the definitions, but rather the fact that the terms of reference determining part-time agriculture have undergone several major revisions since 1941. It is important to recognize that changes in Statistics Canada definitions have shifted the focus away from part-time agriculture to the reliance of farm operators on off-farm work, a point of more than subtle importance. That is, in lieu of any precise criteria with which to establish part-time farming status or its various sub-categories, Statistics Canada

recently has opted to cross-classify the number of days of paid off-farm work by various characteristics of census farms(farmers): numbers of acres, types and amounts of agricultural products sold, farm capital, types of organization, age of operator and others.

Unfortunately, the definition of a *census farm* also has varied. "Prior to the 1976 Census, a census farm was defined as a farm, ranch or other agricultural holding of one acre or more with sales of agricultural products of \$50 or more during the 12-month period prior to the census" (1991 Census Dictionary:182). By comparison, the 1976 Census retained the one acre requirement, but increased the minimum income level derived from the sale of agricultural products to \$1200. All holdings with total annual sales in excess of \$50, but less than \$1200 were termed "small agricultural holdings." In so doing, the 1976 Census ushered in the agricultural holding as a data-collection unit, which was then sub-divided into two categories: the small agricultural holding, as defined above, and the census farm, with agricultural sales exceeding \$1200 per annum.

The 1981 and 1986 Censuses share the same, but again modified definition of a census farm. The one acre criterion was removed from earlier definitions and the minimum agricultural sales requirement was set at \$250. The most recent census (1991) employs an even more-loosely specified definition of a census farm. There is no longer any minimum sales criterion; instead, census farm status is associated with the production of one or more products intended for sale: crops, livestock, poultry, animal products, greenhouse or nursery products, mushrooms, sod, honey and maple syrup.

Changes in classifications of census farms, agricultural holdings and part-time farming have created confusion during the past several years, especially in relation to the nature and extent of off-farm work. As definitions have been modified, the total number of census farms and, by implication, the total number of farm operators engaged in off-farm employment also have fluctuated. Any longitudinal comparisons of Statistics Canada information on off-farm employment, therefore, are made more difficult owing to inconsistencies in data-collection processes and classification systems. Some basic observations, however, can be drawn from Census of Agriculture reports.

One of the most important aspects of off-farm employment among census farmers in Canada is its persistence. Statistics Canada reports that approximately 35 percent of census farm operators have been involved in some off-farm work since 1941. Notwithstanding conventional perceptions that off-farm work (either part-time or full-time) has increased sharply in recent years, participation has remained relatively consistent over the past half century, fluctuating modestly between 30 percent and 40 percent of census farmers.

A more significant issue relates to the steady increase in **full-time** off-farm employment, a category which is loosely defined by Statistics Canada as 229 or more days (per year) of work carried out off the agricultural holding. The percentage of census farmers engaged in full-time off-farm work has increased from approximately 4 percent to 16 percent, between 1941 and 1991 (Bollman and Fuller, 1992). Similar patterns of off-farm activity have been observed in the U. S. agricultural sector. Ahearn and Lee (1991:9) point out that "In 1929, 6 percent of the farm operators worked 200 or more days off the farm and in 1982 almost 35 percent of the operators worked 200 or more days off the farm".

The number of days of off-farm work for both Canada and Manitoba increased slightly between 1971 and 1991 (Table 1). Comparisons are problematic because of variation in reporting methods employed in Statistics Canada publications. The total number of days that operators work off the farm in the year preceding a particular census typically are reported in ten categories or ranges of days. The 1986 Census of Agriculture collapses this classification system into only **four** groupings (see Table 1).

The number of days of off-farm work among Manitoba farmers is somewhat lower than trends in Canada as a whole, although the difference has decreased between 1971 and 1991. Both the national and provincial

statistics suggest increased participation of census farmers in off-farm labor markets. There is little doubt that farm operators of both genders will continue to seek out the additional sources of income offered by off-farm employment. Indeed, recent Statistics Canada information indicates that 38 percent of all farm operators worked at least one day off of the farm in the twelve months preceding the 1991 Census. This represents a slight reduction from 1986 levels.

Table 1. Percentage of census farm operators reporting days of off-farm work in Canada and Manitoba: 1971-1991

Year	No. days worked off-farm				Total
	1-24	25-96	97-228	229-365	
1971:					
Canada	13.5	21.8	32.1	32.6	35.3
Manitoba	14.2	24.7	35.6	25.4	30.9
1976:					
Canada	10.3	20.4	35.5	33.8	31.1
Manitoba	11.4	24.1	38.4	26.0	27.2
1981:					
Canada	10.6	18.3	35.1	35.9	38.7
Manitoba	12.3	23.1	35.1	29.5	35.3
1986:					
Canada	9.0	18.8	36.3	35.9	39.5
Manitoba	10.8	21.6	37.2	30.3	35.5
1991:					
Canada	5.7	14.7	39.0	40.6	37.5
Manitoba	7.3	16.7	40.5	35.5	35.1

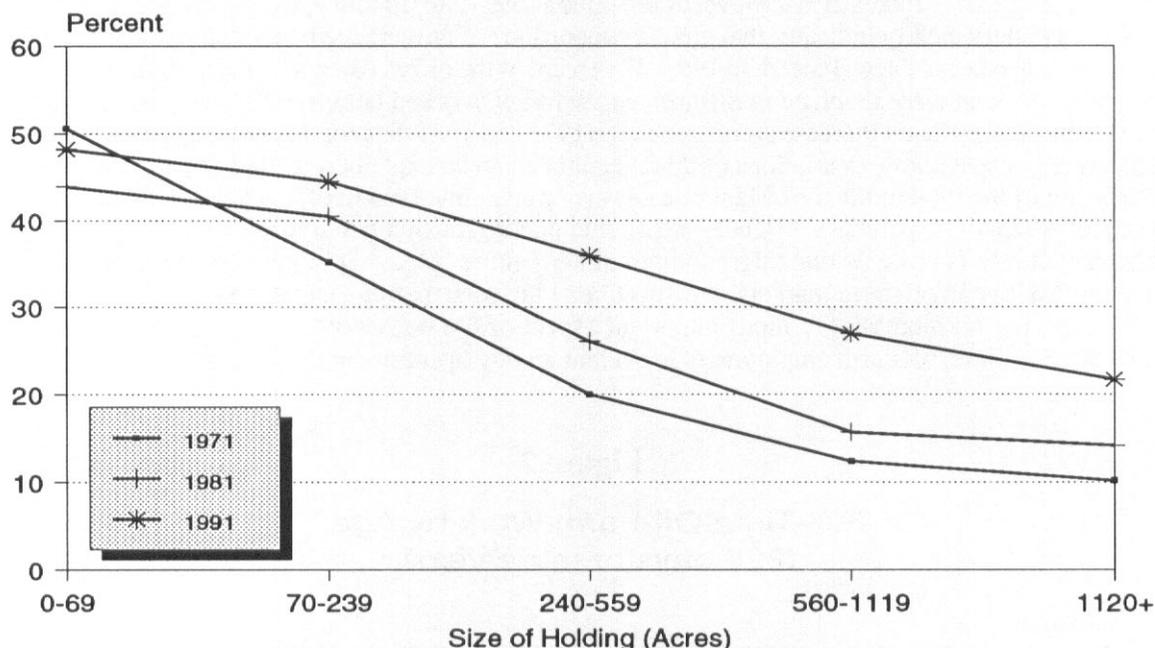
There are two trends in off-farm work between 1971 and 1991 (Table 1). **First**, increasing proportions of census farmers are expending greater amounts of *time* and *energy* in activities which are not associated with the daily operations of agriculture. **Second**, fewer farm operators are reporting employment in the two lowest categories of off-farm activity, 1 to 24 days and 25 to 96 days. Alternately, there has been a progressive increase in the percentages of census farmers working off the farm in the two highest activity ranges: 99 to 228 days and 229 to 365 days. The latter two categories are of particular importance as they are considered equivalent to *full-time*, off-farm employment. The trend towards more intensive involvement in off-farm economies is continuing into the last decade of the twentieth century.

The *size* (acreage) of an agricultural operation is one of the most significant variables impacting the extent of both national and provincial off-farm employment. This is especially true for full-time, off-farm work. Researchers often point out this pattern of decreasing levels of off-farm activity among progressively larger farming operations, arguing that as farm size increases, there is reduced economic necessity and less time available for off-farm work.

While this appears logical, it ignores the persistent increase of full-time involvement in off-farm labor markets across various acreage categories (Figure 1). Data demonstrate an almost straight-line relationship between these two variables. Figure 1 is based on the numbers of farm operators, *within specific size classes*, who were employed off the farm for more than 228 days (in 1971, 1981 and 1991), taken as a percentage of **all** farmers working one or more days off the farm in that particular category. For instance, in 1991, 1265 census farmers reporting at least one day of off-farm employment operated land holdings of less than 70

acres. Of this total, 610 or 48.2 percent worked more than 228 days off the farm. All numbers used to generate Figures 1 and 2 are based on this method of calculation.

Figure 1
Full-Time Off-Farm Work by Size of Farm
(229 days or more/year)



Size of farm defines many situational conditions affecting the *availability of time* and *economic necessity*, which in turn impact levels of off-farm work. Between 1971 and 1981, there is a relatively consistent rise in the proportions of full-time, off-farm employment in **all but** the smallest acreage category (0 to 69 acres). This suggests that there is a discernible trend toward increased levels of involvement in off-farm work among Manitoba operators farming 70 or more acres of land. Despite fluctuations in the percentage of full-time employment in the smallest size class, census data indicate significant off-farm activity within small to medium-sized agricultural enterprises. Of the total number of farmers reporting more than 228 days of off-farm work in 1991, those operating between 70 and 239 acres were the most frequent (33.5 percent). Further, almost one-quarter of all Manitoba census farmers reporting full-time, off-farm employment in 1991 were operating farms ranging from 560 to 759 acres. The pattern is a gradual shift toward more full-time activity among increasingly larger farming operations. Many aspects of the farm production process, the operation of the household economy and the division of labor in small and medium-sized agricultural operations are affected by these changes.

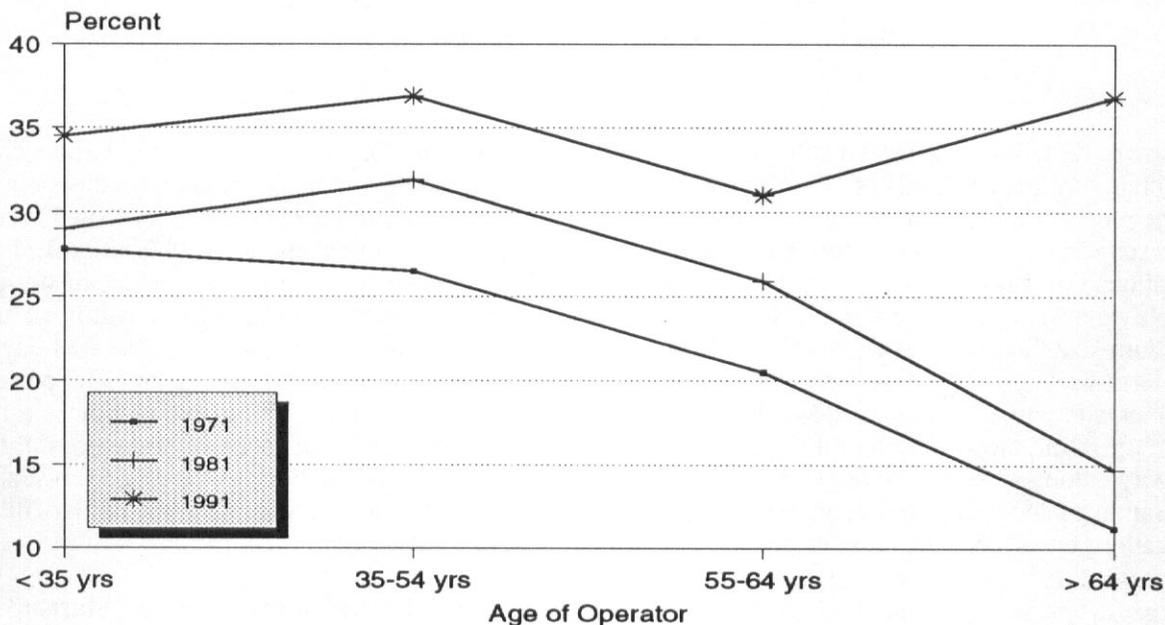
Age of operator also may be used to assess differential levels of off-farm participation. **Start-up** and **expansion** phases of agricultural enterprises parallel the life-cycle of the farmer, and represent critical stages in the capitalization of the farm. The acquisition of land, machinery, and livestock, and the planting of crops demand significant amounts of capital or purchasing power. The relationship between the age of the operator, the stage of the farm life-cycle and the need for capital has led some researchers to examine the effects of age on off-farm participation.

A 20-year trend analysis of full-time, off-farm work based on the ages of farm operators is illustrated in Figure 2. The percentages of farmers **within specific age categories** who were engaged in full-time employment are taken as proportions of all census farmers working at least one day off the farm within respective age ranges. For example, 36.9 percent of farm operators between the ages of 35-54 who worked off the farm did so for more than 228 days in the year preceding the 1991 Census. This information indicates that the largest concentrations of off-farm activity are among farmers aged 35 to 54 years, with only slightly lower full-time participation rates depicted for the youngest age category.

There is a progressive increase in the level of full-time activity, for **all four age categories**, over this 20-year span. Such a pattern clearly indicates that greater proportions of farmers are becoming involved in full-time employment regardless of age. Indeed, in 1991, 37 percent of the oldest category of census farmers (65 years of age and over) *who were involved in off-farm employment*, worked between 229 and 365 days per year. This represents a significant increase compared to the 1971 and 1981 data for this same age group: 11 percent and 15 percent, respectively. Variations of this magnitude can be explained partially by the fact that only a small fraction of the total number of Manitoba census farmers involved in off-farm work are over 64 years old (340 of 9025 or 4 percent). Hence, small fluctuations in number translate into large changes in percentages. It also is possible that migration out of agriculture is leaving larger concentrations of farmers who are more active in off-farm markets. Irrespective of the contributing factors, data indicate that off-farm work is becoming an increasingly more important aspect of the household economies of Manitoba farm enterprises. Full-time, off-farm employment is evident among operators in all age categories.

Figure 2

**Full-Time Off-Farm Work by Age
(229 days or more/year)**



Land tenure is a related but less discriminating variable with which to analyze participation in off-farm labor markets. Statistics Canada identifies three rather simplified categories of census farmers: *owner*, *tenant* and *owner-tenant* combination. In 1971, the percentage of full-time, off-farm work within these categories was 29 percent, 29 percent and 16 percent, respectively. By 1986, these percentages increased across all three classes of operators: 35 percent, 31 percent and 23 percent, respectively.

In summary, the cross-classification of days of off-farm work by farm size, age of operator and land tenure demonstrates extensive and intensifying patterns of off-farm activity among census farmers. Whether this trend has developed as a function of farm depopulation, economic necessity or personal motivation, it is clear that off-farm work is assuming an increasingly more prominent position in farm household economies in Canada. All variables used to analyze the incidence of off-farm employment point toward increased levels of full-time participation in off-farm labor markets.

METHODS

This study involved the collection of information through *semi-structured* questionnaires completed, where appropriate and practical, by the main farm operator and his or her spouse. A main operator is that member of the household who by **self-definition** or consensus carries out the primary functions of operating the farm enterprise. By soliciting additional information concerning the off-farm activities of spouses, we provide a more comprehensive assessment of how such employment contributes to the total operation of the farm household economy. This research design is consistent with recent examinations of off-farm work from the standpoint of the **total** farm household. Understanding of the incidence and extent of off-farm activity can be properly assessed only if the study design recognizes that members of the household other than the traditionally-defined main (male) operator also contribute to the overall financial or fiscal operation of the enterprise.

An advisory committee composed of senior research staff and government representatives was established in the early stages of the research project to assist both in the identification of study communities and the development of questionnaires. Based on the advice of these individuals, a number of communities were proposed as potential data-collection sites. Of these, a total of ten rural communities, within **five** regions of southern Manitoba, were chosen for inclusion in the study (Figure 3). The rural communities selected were geographically dispersed within their respective regions, so as to allow for a more representative sample. Some consideration also was given to the **types** of farm enterprises operating in the vicinity of these communities, in turn ensuring that there was a good cross-section of various types of agriculture within the total sample.

Questionnaires were developed to collect data from **both** the main operators and spouses within the selected farm households. Interviewers were identified for each community in consultation with local agricultural representatives. These agents provided the names of a number of residents who might be interested in assisting in the data-collection phase of the project. After consultation with various candidates, it was determined whether one or two community-based research assistants would be required to collect the desired information. Two training seminars were arranged (one in Brandon and another in Winnipeg) to facilitate the distribution of questionnaires, explain the purposes of the study and provide some basic interview training. Although a range of issues was discussed in these sessions, several warrant special mention:

- selecting farm operations within a 25-mile radius of selected communities
- ensuring random selection and regional dispersion of farming units
- making initial contact with members of sample households
- explaining the basic goals of the research project
- assisting participants in proceeding through the questionnaire(s)

- providing assistance with the interpretation of questions
- facilitating the participation of farm operators in the study
- dealing with refusals and substitutions
- making use of alternate modes of data collection: face-to-face interviews, telephone surveys, dropping off and retrieving interviews
- timing data collection to minimize interference with farming activities
- establishing a final date for the completion of the data-collection phase

One research assistant was selected to serve as a contact person concerning data-collection protocols to facilitate communication with the interviewing staff. This individual's research role included a variety of basic information functions. Most importantly, the research assistant coordinator maintained bi-weekly contact with the various community interviewers throughout the data-collection process (May to mid-September of 1992).

A quota of fifty households was set for each study community, although this total was not met in all areas. Interviewers were instructed to contact both the main operator and the spouse (if appropriate or possible), as well as any other individuals involved at a primary level in the farm business. Some obstacles were encountered during the course of collecting information which hindered the completion of the total number of desired questionnaires (Table 2). Included were general resistance to survey processes, pessimism concerning the value of such research endeavors and, in extreme instances, a rather intense concern that the "government" was indirectly encouraging farm operators to seek off-farm employment to compensate for problems in agriculture. Consequently, the proposed date for completing data collection was moved back several weeks to compensate for timing problems associated with collecting information from farm operators during peak activity periods. Because it was not always possible to collect information from both the main operator and the spouse, the numbers of cases vary somewhat among communities.

Table 2. Distribution of respondents by region, community and function

Region	Community	Main operators	Spouses
Southwest	Neepawa	51	43
	Souris	46	44
Central	Pilot Mound	50	50
	Altona	25	25
Northwest	Swan River	40	40
	Russell	24	23
	Dauphin	44	42
Eastern/Interlake	Stonewall	48	34
	Steinbach	50	49
	Arborg	29	32
Total		407	382

Figure 3



This study used households as the *units of analysis*. That is, it is possible to compare variables across the two questionnaires, providing information was collected from the main operator and the spouse. Interviewers were instructed to ask who in the household could be considered the main operator before collecting the required information. In this sense, the term implies some degree of *authority* (management role) or *responsibility* (labor/task definition) in the farming operation. To the extent that several people can be involved in decision-making processes in farm households, however, the expressions "main operator" and "spouse" were used as categories of convenience for the purposes of collecting and reporting information concerning degree of off-farm employment among various members of the farm household. The 1991 Census of Agriculture was the first in which respondents could identify more than one operator within a single census farm. The person(s) responsible for making the day-to-day decisions in the operation of the agricultural holding was identified. This modification in the data-collection procedure is a direct reflection of the changing role of women in agriculture. In keeping with this trend, we acknowledge the joint contributions of males and females to the continuity of agriculture, and the importance of probing the experiences, attitudes and perceptions of both members of the farm household. Asking each individual identical or similar questions also allows for comparisons across variables affecting off-farm activity.

Characteristics of the Respondents

The age distributions for main operators and spouses are similar (Table 3). By identifying the household as the unit of analysis, the majority of the questionnaires are **paired** according to conjugal (marital) relationships between respondents. In this sense, the age distributions for the main operators and spouses vary only slightly, in turn adding to the credibility and significance of male to female comparisons discussed later.

There is an observable difference in educational attainment between the two classes of farm operators (Table 3). More main operators (42 percent) than spouses (16 percent) have *less than a grade 12 education*. Accordingly, spouses are over-represented in **all** of the remaining levels of education at or exceeding high school matriculation. Indeed, 47 percent of the spouses, compared to 30 percent of the main operators, had been or presently are involved in some form of post-secondary education.

Table 3. Age and education levels among male and female operators

Variable	Main operators		Spouses	
	No.	%	No.	%
Age				
Less than 35 years	81	21	100	27
35 to 44 years	156	40	151	40
45 to 54 years	96	25	93	25
55 years or more	56	14	31	8
Total	389	100	375	100
Education Level				
Less than grade 12	160	42	60	16
Grade 12	111	29	135	37
Community College	39	10	83	23
University	75	20	87	24
Total	385	100	365	100

Higher average education levels are related to traditional female career paths and their suitability to rural employment opportunities: office work, teaching and health care. Farm women have been involved in specialized local labor markets for many years, both before and after becoming co-contributors to farm household economies. Marriage brings their earning power into the farming operation as a source of external, supplementary income. Although the long-term trend is moving toward increased education levels among males involved in agriculture, it is obvious that their female counterparts hold a significant advantage with respect to education. Differences in educational qualifications have implications for the **nature and extent** of off-farm employment among both main operators and spouses.

Additional information was gathered concerning characteristics of the respondents' farming enterprises. Approximately 72 percent of the sample is classified as *individual or family holdings*, a percentage which compares favourably with the 1991 census figure of 66 percent. *Partnerships*, with or without written agreements, are the next most frequent type of farm organization, accounting for 22 percent of the operations. A small proportion of the sample (5 percent) is *legally-constituted family companies*.

Descriptive criteria for sample farms include *production type, size (acreage), and economic classification* (Table 4). The primary *crop* types are cereals (81 percent), forage (60 percent) and oilseeds (56 percent). Among *livestock* producers, beef production (51 percent) is the most common, followed by more modest levels of involvement in dairy (14 percent), swine (9 percent) and poultry (7 percent). More than one-quarter of the farms, however, had no livestock whatsoever, implying that the remaining three-quarters of the operations were **mixed** farming enterprises. The acreages of the farms are distributed relatively uniformly across six size categories (Table 4). There is a slight concentration of producers in the 321 to 640 acres class, but this is a reflection of typical farm size in Manitoba. The 1991 Census of Agriculture reports the average **total** area of Manitoba farms at 743 acres, as compared to 498 acres **owned** and 466 acres **rented or leased**.

Operators were asked to provide **economic** information concerning the *total gross sales* of all agricultural products sold in 1991, and an estimation of the *total fair market value* of all capital assets. The proportions of Manitoba census farmers classified into these same gross sales categories by the 1991 Census are somewhat at variance with the percentages represented in our sample: 20 percent, 34 percent, 21 percent, 19 percent and 6 percent, respectively. We have an under-representation of sample households in the lowest class and an over-representation in the \$100,000 to \$249,999 gross sales category¹.

The Census Overview of Canadian Agriculture: 1971-1991 provides additional information on the total farm capital value of agricultural holdings, including land, buildings, machinery, equipment, livestock and poultry. The same definition was employed in the present study to classify farm operators according to the total value of all capital farm assets. The above-mentioned document does not report the numbers (or percentages) of census farm operators by class, but it does provide an average for Canada and the various provinces; in Manitoba, this figure is \$399,101. This average is consistent with our capital value distribution insofar as 41 percent of the sample is grouped within the \$200,000 to \$499,999 category (Table 4). In short, the respondents included in our data base are reasonably representative of Manitoba census farmers.²

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- 1 Differentials of this order are not unanticipated given that small changes in the actual numbers of farmers grouped within each classification level can have profound effects on percentage calculations.
 - 2 Although data presented in this report were collected as randomly as possible (given the nature of population under study), the absolute representativeness of the sample cannot be ascertained. Samples reported (approximately 400), however, are of sufficient size to approach normality. Larger samples typically are more accurate than smaller ones. In this situation, representativeness is enhanced by stratifying the communities surveyed according to regional location and type of agriculture.

Table 4. Production type, acreage and economic classification of farm operations

Category/Characteristic	No.	%
Crop Production		
None	10	2
Cereals	334	81
Oil seeds	229	56
Forage	247	60
Corn	32	8
Vegetables/Roots	15	4
Livestock Production		
None	108	26
Beef	209	51
Dairy	59	14
Swine	38	9
Poultry	29	7
Sheep	11	3
Acreage		
Less than 161 acres	54	15
161 to 320 acres	56	15
321 to 640 acres	95	26
641 to 800 acres	40	11
801 to 1280 acres	64	17
Greater than 1280 acres	62	17
Total	371	100
Gross Sales		
Less than \$10,000	33	11
\$10,000 to \$49,999	66	21
\$50,000 to \$99,999	79	26
\$100,000 to \$249,999	103	33
\$250,000 and over	27	9
Total	308	100
Total Capital Value		
Less than \$100,000	42	14
\$100,000 to \$199,999	48	16
\$200,000 to \$499,999	126	41
\$500,000 to \$999,999	57	19
\$1,000,000 and over	35	11
Total	308	100

OFF-FARM EMPLOYMENT IN MANITOBA

Two similar questionnaires were employed to collect information from the main operators and spouses included in this study. The following sections discuss results most closely related to the original objectives of this research project. The information is, therefore, presented according to the following major analytical topics:

1. *The extent and nature of respondents' involvement in off-farm work.*
2. *The effects of various motivational factors on participation in off-farm labor markets.*
3. *The respondents' perceptions of various barriers to employment activities outside of the farm economy.*
4. *Regional comparisons of off-farm work and other related variables.*

Discussion defines the scope of off-farm employment among Manitoba farm operators (along with other members of their households), as well as several of the more important factors promoting and inhibiting present-day participation rates. We include cross-classification analyses of off-farm data using selected socio-demographic characteristics of farm men and women (e.g. age, education, years in farming), as well as specific features of their farm operations (size, type of organization, product(s) sold and total capital value).

Family (Household) Participation in Off-Farm Employment

Greater integration of the agricultural sector with non-farm economies accounts for increased levels of off-farm employment. The reciprocity of global economic processes, particularly in the areas of international markets and production needs, indicate that various sectors of the Canadian economy are becoming more heavily intertwined. Accordingly, farm households are relying more and more on the financial inputs generated from off-farm business or employment. Members of farm households other than the main operators are compounding this trend by venturing into or increasing the levels of their involvement in off-farm markets. These patterns are not likely to change in the near future. Statistics Canada information and specialized reports generated from census information are available, but these sources do not detail the types of off-farm employment or the motivation and barriers which impact its character.

The measurement of off-farm activity among Canadian farmers has been a subject of interest for the past half century. Over this period of time, the definition of off-farm work has been restricted to the number of days worked (for pay) off the agricultural holding during the twelve months preceding the census. Additional information which details the type of off-farm work (agricultural, non-agricultural or some combination thereof), typically has been collected, but was omitted from the 1991 Census of Agriculture. Off-farm activity is measured in days per year, combined with a classification of the employment (economic) sector. In contrast, the questionnaires developed for this study include more precise classification dealing with off-farm employment history, type of work, employment status (part-time or full-time), and distance commuted.

Involvement in off-farm work was assessed by the numbers of positive responses to questions detailing main operators' and spouses' off-farm activities (Table 5). Raw counts are converted into percentages based on the number of valid responses for each item. The most notable result concerns the level of **current** off-farm employment among primary members of the farm household. Thirty-six percent of main operators actively engaged in work off the agricultural holding, a figure similar to that reported for Manitoba in the 1991 Census (35 percent). The percentage of spouses working off the farm is significantly higher at 55 percent.

As mentioned, 1991 was the first year in which members of farm households had the option of declaring more than one operator per census farm. This allows for **male-female comparisons** of off-farm activity levels. For Canada as a whole, 37 percent of male farm operators worked off the farm, as compared to 36 percent of **self-designated** female farm operators. Although there is little difference between these two *national figures*, it is possible that many females would chose **not** to define themselves as farm operators, in turn under-representing females in the census information and distorting their presumed participation rates in off-farm employment. Notwithstanding this possibility, there is a substantially higher level of off-farm activity among the females surveyed in this study than is reported by their male counterparts.

Table 5. General measures of off-farm employment among farm household members

Type of involvement	Main operators			Spouses		
	Yes	Percent	N	Yes	Percent	N
Currently engaged in some form of off-farm employment	143	36	399	202	55	370
Previously worked off the farm while actively involved in agriculture	79	31	255	67	40	168
Worked off the farm prior to beginning farming	169	45	376	not applicable		
Other members of the household involved in off-farm employment	230	58	399	not applicable		
Spouse working off the farm	not applicable			137	38	360

Among respondents **not currently involved** in off-farm activities, 79 main operators (31 percent) and 67 spouses (40 percent) had, at some previous time, worked off the farm while active in agriculture. Few of these respondents (17 from each of the two sub-samples), were interested in pursuing off-farm employment at the time of the study. Many households had multiple-member involvement in non-farm economies. Indeed, 230 of the main operators (58 percent) indicated that other individuals in the farm household were working off the farm.

Both male and female Manitoba farm operators, therefore, are involved with non-farm labor markets, and the integration of the agricultural sector with the local economy is evident in the extent of off-farm activities among various farm household members. It is apparent that farm operators are expending significant proportions of time and energy in off-farm economic pursuits. Although the financial gains generated from such activities obviously support the livelihood of both individuals and the agricultural enterprise, the data suggest fragmentation in the farm family unit as a self-sufficient household economy.

Current Involvement in Off-Farm Work: Main Operators and Spouses

The *type* (occupational), *duration* (months/year) and *intensity* (numbers of hours per week) of employment vary by gender (Table 6). Data were collected at a more detailed level and categorized into broad groupings to simplify discussions. For instance, main operators identified more than 70 different types of off-farm occupations, while spouses listed 20 occupations. One can infer that main operators are widely dispersed in off-farm labor markets, seemingly taking advantage of whatever opportunities are available in rural economies. There is some concentration in occupations such as trucking (which includes driving school buses), unskilled blue-collar/labor, trades and office employment. By comparison, spouses are more concentrated in fewer occupations. Females involved in agriculture rely predominantly on health care, education, sales and office work for employment.

Table 6. Type, duration and intensity of current off-farm work

Type of employment	Main operators		Spouses	
	No.	%	No.	%
Professional/Semi-professional	9	6	37	18
Self-employed/Manager	13	9	9	4
White-collar	18	13	19	9
Health care	-	-	41	20
Clerical/Sales	25	17	36	18
Secretarial	-	-	24	12
Technical/Trades	23	16	17	8
Unskilled/Labor	32	22	16	8
Trucking/School Bus	24	17	5	3
Total	144	100	204	100
Duration of employment				
1 to 3 months	12	9	7	4
4 to 6 months	29	22	17	9
7 to 9 months	6	5	7	4
10 to 12 months	87	65	158	84
Total	134	100	189	100
Employment Status				
Part-time (# hrs/wk)	55	41	116	59
Full-time (35 hrs/wk)	80	59	82	41
Total	135	100	198	100

Duration of employment also differs across the various members of the farm household. Sixty-five percent of the main operators and 84 percent of the spouses were engaged in off-farm work for 10 or more of the previous 12 months (Table 6). Furthermore, 59 percent of the males and 41 percent of the females are involved in full-time (35 or more hours/week) off-farm employment. It is apparent that various members of the farm household commit significant amounts of time and energy to earn income off the farm. Also, they often must commute to take advantage of those opportunities. On average, main operators travel 22 miles (35 km, one-way), while spouses travel 28 miles (45 km).

Additional questions were asked of respondents to collect information concerning the importance of off-farm employment to their agricultural operation. Among main operators currently involved in off-farm work, 60 percent plan to suspend these activities in order to concentrate solely on agriculture. An even greater percentage of active spouses (86 percent), however, indicate intentions to continue working off the farm. Further, both males and females express high levels of satisfaction with their current form of employment. For example, 86 percent of the main operators and 88 percent of the spouses are either '*satisfied*' or '*very satisfied*' with their off-farm activities.

Respondents were asked if they felt that they possessed adequate skills to carry out present off-farm employment. The vast majority of both the main operators (94 percent) and spouses (90 percent) said that they are adequately trained. The issue of skill requirements, however, is connected with the diversity of local labor markets, businesses and industries. It appears that the types of employment in which these respondents currently are engaged are not at variance with their occupational skills. General satisfaction with present employment opportunities and skill levels may represent adaptation to whatever personal or regional limitations exist in order to maximize benefits for family and farm. Issues related to additional training did not surface as major concerns, but may require a different and more comprehensive form of study.

Farm men and women express little concern with developing specialized skills for the purposes of accessing additional off-farm employment. Rather, it appears that off-farm employment represents an economic necessity and being employed may be all that is of interest. Expanding or extending work activities, or assessing employment satisfaction implies the recognition of off-farm work as a long-term feature of life in

agriculture. Until this is perceived as such by significant proportions of off-farm employees, there may be little spontaneous interest in training programs that direct operators away from the farm enterprise as the essential source of economic well-being. This is not to say that farm residents are not interested in training opportunities, but there may be sensitivity that they are being encouraged to pursue occupations which might replace agriculture as a primary way of life.

Respondents were asked about the financial importance of off-farm income. Main operators and spouses were asked to rate the significance of this income on a *five-point scale* ranging from **1**, meaning 'very important,' to **5**, indicating such resources are 'very unimportant'. Using only the two highest levels of importance, 79 percent of the males and 53 percent of the females rate off-farm income either as very important or important in the *general finances* of the farming enterprise. Similarly, 80 percent of the males and 69 percent of the females believe that this income makes either a very important or important financial contribution to the *family's overall lifestyle*.

Farm household members also indicated the approximate proportion of off-farm income that is (a) *invested in the farming operation*, (b) *spent on household expenditures* and (c) *used for discretionary purposes*. This information provides an understanding of how off-farm income is dispersed **within** the total operation of the farm household.

Interesting differences are evident between the responses of main operators and spouses regarding distribution of off-farm income (Table 7). The financial benefits of spousal participation in off-farm work are directed primarily toward offsetting household expenditures and some discretionary spending. Indeed, 16 percent of working spouses suggest that their own off-farm income is 'not applicable' to the farming operation as a whole. By comparison, main operators distribute the bulk of their off-farm proceeds to cover general farm and household expenses.

Table 7. Percentage contributions of off-farm income to household unit

Category	Main operator		Spouses	
	No.	%	No.	%
Farming Operation				
0 to 25%	53	39	119	63
26 to 49%	25	19	21	11
50 to 74%	25	19	11	6
75 to 100%	27	20	8	4
Not applicable	5	4	30	16
Total	135	100	189	100
Household Expenditures				
0 to 25%	50	37	36	18
26 to 49%	44	33	53	27
50 to 74%	13	10	52	27
75 to 100%	19	14	47	24
Not applicable	9	7	8	4
Total	135	100	196	100
Discretionary Spending				
0 to 25%	78	62	93	51
26 to 49%	20	16	35	19
50 to 74%	10	8	27	15
75 to 100%	10	8	18	10
Not applicable	7	6	11	6
Total	125	100	184	100

Results indicate budgeting which roughly parallels a traditional division of labor within the farm household. That is, males' efforts, both on and off the farm, are primarily directed toward the maintenance of the business side of the farming enterprise. Conversely, spouses' incomes are concentrated on daily household finances and life-style maintenance. These fiscal arrangements in male and female contributions of off-farm income may represent somewhat arbitrary distinctions within the overall economic functioning of the farm household. This information provides a better understanding of farm financial operations and the motivational factors which encourage household members to become involved in and maintain off-farm employment.

We noted that more males than females intend to suspend off-farm activities in the foreseeable future. That is, once the main operator perceives the farm operation to be less dependent on external sources of income, this form of employment will be perceived as less essential. Spouses seem less inclined to terminate their off-farm work, at least in the near future. Perhaps farm women consider that their off-farm activities will continue to play a significant role in the household and discretionary components of the total farm income, irrespective of the main operators' off-farm activities.

In total, the respondents' intentions to continue working off the farm are confirmed by their perceptions of job satisfaction and the financial contributions of this income to overall operation of the farm household. The relevance of off-farm sources of income continues to lie in various aspects of the farm household economy. The attitudes expressed in the answers to these questions imply that off-farm income is heavily embedded in existing fiscal operations. Even if main operators reduce or suspend their off-farm activities, their spouses are likely to continue for some time. If this occurs, lifestyle issues become more significant as predictors of off-farm work than simply the maintenance of a successful farming enterprise.

Prior Involvement in Off-Farm Work While Active in Agriculture

Several questions were asked of farm family members who had **previously** been involved in off-farm work. There were 79 males and 67 females in the sample who had, at one time or another, worked off the farm, but who had later suspended these activities (Table 5). Respondents were asked to reflect on the last twelve months of their off-farm employment just prior to leaving the labor force. Table 8 presents information concerning the type of occupation, number of months worked during the final year and employment status. Employment among farm operators previously working off the farm parallel present conditions.

Perhaps more important are the reasons for ceasing off-farm work. In response to this question, main operators indicate a number of primary factors: lack of spare time, expansion of farm operations, lost job/laid off, lack of employment opportunities and distance commuted. In a similar vein, spouses itemize such variables as child-rearing responsibilities, short-term or seasonal employment and time-scheduling problems.

Additional questions attempted to establish if farm household members would consider **re-entering** the labor market at some future date. Among main operators answering this question, 40 (65 percent) indicate that this was not an option at the present time, largely because of time restrictions. The remaining 22 (35 percent) concede the possibility in order to acquire additional income and as a response to economic necessity. Spouses, by comparison, are almost equally divided on this issue with 29 (51 percent) answering in the affirmative and 28 (49 percent) suggesting that they would not consider working off the farm. Again, time was noted as a critical factor in discouraging participation in off-farm employment, primarily owing to the demands of the farming operation itself and looking after children. Among spouses who indicate the potential for rejoining the work force, the most important reason appears to be supplementary income. Several respondents, however, mentioned the benefits of the social aspects of work force participation.

Table 8. Type, duration and intensity of previous off-farm work

Category	Main operators		Spouses	
	No.	%	No.	%
Type of Employment				
Professional/Semi-professional	4	6	6	9
Self-employed/Manager	2	3	2	3
White-collar	4	6	3	5
Health care	-	-	7	11
Clerical/Sales	8	12	-	-
Secretarial/Office Work	-	-	27	42
Technical/Trades	17	25	9	14
Unskilled/Labor	16	23	11	17
Trucking/School Bus	18	26	-	-
Total	69	100	65	100
Duration				
1 to 3 months	16	25	7	11
4 to 6 months	13	21	6	10
7 to 9 months	4	6	4	7
10 to 12 months	30	48	45	73
Total	63	100	62	100
Employment Status				
Part-time (# hrs/wk)	19	30	26	42
Full-time (35 hrs/wk)	44	70	36	58
Total	63	100	62	100

Main operator or spousal involvement in off-farm employment is presumed to have some effect on the operation of the farm enterprise, particularly with respect to management and labor-related issues. Both male and female respondents whose spouses worked off the farm were, therefore, asked whether these activities affected the amount of time they contributed to the farming operation. Males in households composed of dual off-farm workers indicate that their on-farm activities are less likely to be affected by additional work than are activities of their female counterparts. Specifically, 23 percent of the male operators answering this question suggest that their time commitments on farms are affected by spousal off-farm work, as compared to 40 percent of the females. From the perspective of the main operator, this means carrying out more household activities, caring for the children, assisting the spouse with aspects of her off-farm employment and performing some of her farm-related chores. Females suggest that their daily lives on the farm are most affected in the areas of increased chores (especially around harvest time), running errands and keeping accounts.

In simple terms, when either or both primary members of the farm household become involved in off-farm employment there are consequent shifts in the nature of the on-farm division of labor and time contributions. This implies significant alterations in who carries out which tasks and how much time is spent on these activities. Diversification of skills and energy is an outcome or effect of ensuring that both forms of economic activity co-exist in the farming operation. When spouses and children take up off-farm work, the need for re-defining the management and execution of daily farming tasks becomes essential to the survival of the farming operation and maintenance of a diversified household economic unit.

Current Off-Farm Activity Related to Characteristics of Agricultural Operations and Farm Operators

Census information reported earlier indicates that there is patterned differentiation in off-farm activity based on such factors as size (acreage) of holding and age of operator. Owing to limitations in the questions asked in census surveys and the lack of comparability across the different collection years, this analysis was limited.

The *interaction* of **current** off-farm activity (for main operators and spouses) with a number of variables was assessed for information from this project (Table 9). The coefficients reported are correlation values which reflect the **direction** (positive or negative) and **strength of association** (0.0 to 1.0) between two variables. The larger the absolute value of the correlation and the greater the sample size upon which it is based (specified as N), the greater its statistical significance. Statistical significance relates to the presumed validity of the measure, that is, the probability that it has occurred by chance or error. To aid the interpretation of results, moderately significant coefficients ($p < 0.05$) are *italicized*, while those printed in **boldface** are highly significant ($p < 0.01$). These values signify that observed relationships would occur by chance less than 5 times per 100 observations, or 1 time per 100 observations, respectively.

Table 9. Cross-classification analysis of off-farm activity with structural and socio-demographic variables

Category	Main operators		Spouses	
	Correlation coefficient	N	Correlation coefficient	N
Characteristics of Agricultural Holding				
Total acres owned	-0.23 ¹	363	-0.05	342
Gross value products sold	-0.34	304	<i>-0.12</i>	281
Market value of all assets	-0.30	304	-0.10	280
Percent beef production	0.32	182	<i>0.16</i>	166
Percent of cereal/oil seed	<i>0.13</i>	289	0.02	269
Percent swine production	0.14	37	-0.11	35
Percent dairy production	-0.01	54	-0.15	51
Percent special crops	0.01	108	0.04	103
Socio-demographic Factors				
Age of operator	-0.31	381	-0.10	363
Education level	0.24	377	0.26	353
Years active farming	-0.34	372	-0.09	337
Children living in home	0.13	377	-0.02	353
Total number of children	-0.10	247	-0.19	236

¹ Bold numbers represent $p < 0.01$; italicized numbers represent $p < 0.05$.

Several factors exhibit moderate, negative correlations with the incidence of current off-farm activity among main operators (Table 9). Two coefficients indicate that off-farm participation declines as the gross value of all products sold in 1991 and the market value of all capital farm assets (including land, buildings, machinery and livestock) increase. A related variable, the total number of acres owned, exhibits a somewhat smaller, but significant, inverse relationship, further supporting the pattern of association between economic class/size and off-farm work.

Age and the total number of years of active involvement in farming also are correlated negatively with off-farm employment. The coefficients are large enough to support earlier suggestions that off-farm work is linked to both the operators' age and the life cycle of the farming enterprise. Such results can be explained partially by aging, but it is also likely that the necessity of such earnings is declining. It is unlikely, for example, that operators in their later years will be expanding or capitalizing their enterprises.

There also are several significant positive correlations. As the level or intensity of beef production increases, there is a direct increase in the likelihood of off-farm activity. A similar, but weaker pattern is noticed for cereal/oil seed and swine production. It appears that increased concentration or specialization in these particular aspects of agriculture allows either for greater opportunities to pursue or necessitates income from off-farm employment. The presence of children in the household also has a small, but positive, impact on off-farm activities, most likely because of their contributions to the farm labor pool. Finally, educational attainment is, for both males and females, moderately associated with off-farm work. This is partially a reflection of general increases in education levels among farm operators, and the gradual withdrawal of older, less-educated producers from off-farm labor markets. Increased education also affords occupational opportunities, changes lifestyle preferences and increases accessibility to employment.

Correlations between the same factors and spousal (female) off-farm work are parallel to those reported above, but generally at lower values. Although gross and capital values are negatively associated with the incidence of spousal off-farm employment, their absolute values are low. That is, females' off-farm participation rates are relatively consistent, irrespective of variation in economic class. Interestingly, involvement in beef (0.16) and dairy production (-0.15) demonstrates similar levels of association with off-farm work, but in reverse directions. Females in households concentrated in beef production are slightly more apt to work off the farm, while the reverse is true of predominantly dairy farms. Age and years of involvement in farming are weakly (and negatively) related to off-farm work, while the total number of children in the household acts as a more significant restriction on such employment activities by females.

Motivational Factors and Decisions to Work Off the Farm

Both male and female members of farm households were asked to rate the importance of 18 items that may impact on decisions to work off the farm. This question was posed to **all** respondents, regardless of their off-farm employment status. The rating scale ranged from 1 ('*very unimportant*'), to 5 ('*very important*') in respondents' decision-making processes. The most common method of analyzing the relative importance of such factors is to calculate means or averages for each item and then compare these scores *within* and *across* different groups of respondents. Individual item ratings can be combined within specific sub-samples, such as males and females, in order to contrast how different groups of farm operators perceive motivational variables.

Two types of inter-group comparisons are used to depict the importance that respondents accord these 18 motivational items as factors influencing involvement in non-farm employment sectors. First, mean scores are defined for household members (both main operators and spouses) **currently** working off the farm versus those who are not so employed. Analysis of means indicates the extent to which *active* and *non-active* off-farm workers (of both genders) differ in terms of their perceptions of various conditions associated with the incidence of off-farm employment. Second, males' and females' perceptions of these same factors are compared to determine the degree of variation between the genders on an item-by-item basis.

The 18 motivational factors are assessed by average scores for both male and female respondents, classified according to their current employment status (Table 10). The two columns in Table 10 labelled '*Difference*' are essential to analysis as they represent the extent of deviation among the mean scores for active and non-active farm operators. Positive differences reflect situations in which the average scores for respondents currently employed off the farm are larger than those for non-active farm operators; negative values express

the reverse situation. The **magnitude** of deviations are direct indications of the extent to which the sub-samples differ in terms of their perceptions of the importance of particular motivational factors. To aid the interpretation, *italicized* values represent moderate differences ($p<0.05$), while deviations of greater significance ($p<0.01$) are printed in **boldface** type.

Twelve of the 18 paired item means are statistically different. Further, 10 of the deviations are positive values, indicating that main operators who currently work off the farm ("yes") collectively rate these factors as more important in their decisions to work off the farm. Compared to main operators who are **not** presently involved in non-farm employment sectors ("no"), **active** off-farm workers are significantly more apt to:

- link off-farm work to the fulfilment of their personal goals
- enjoy the kind of work they do off the farm
- want to improve their overall lifestyles
- appreciate some variety in their work
- view off-farm income as a useful contribution to household/family necessities and reduced financial risks
- value these activities as an additional source of capital for expansion and operating expenses
- interpret off-farm work as a way of using training or skills

The cost and availability of farm labor are of significantly greater importance to main operators who are not currently employed, suggesting that these factors can represent barriers to off-farm participation.

Table 10. Differences between average motivational scores for males and females based on current off-farm employment status

Motivational factor	Main Operators			Spouses		
	*Yes (\bar{X})	No (\bar{X})	Difference	Yes (\bar{X})	No(\bar{X})	Difference
Additional income for farm operation	4.01	3.57	0.44 ¹	3.19	3.57	-0.38 ²
Help reduce financial risks	4.09	3.59	0.50	3.60	3.60	0.00
Help provide household and family necessities	4.07	3.56	0.51	4.15	3.83	0.32
Help reduce farm debt	3.49	3.29	0.20	2.93	3.27	-0.34
Not enough capital to expand	3.34	2.87	0.47	2.63	2.87	-0.24
Job benefits: pension/insurance	2.99	2.89	0.10	3.17	3.01	0.16
Not enough good land available	2.18	2.22	-0.04	2.03	2.18	-0.15
Help pay for children's post-secondary education	3.04	3.06	-0.02	3.43	3.35	0.08
Wanted to improve lifestyle	3.34	2.79	0.55	3.57	2.77	0.80
Make better use of extra time	2.38	2.00	0.38	2.55	2.13	0.42
Wanted some variety in work	2.63	2.11	0.52	2.82	2.31	0.51
Like the kind of work done off the farm	3.33	2.54	0.79	3.75	2.77	0.98
Develop skills to leave farming	2.01	2.14	-0.13	1.92	2.04	-0.12
Make use of training/skills	2.79	2.37	0.42	3.32	2.63	0.69
Fulfil personal goals	3.15	2.22	0.93	3.36	2.44	0.92
Spouse/family did not like farming	1.62	1.64	-0.02	1.60	1.67	-0.07
Availability of good farm labor	1.92	2.31	-0.39	1.88	2.13	-0.25
Cost of farm labor	1.96	2.49	-0.53	1.88	2.26	-0.38

¹ Bold face differences ($p<0.01$)

² Italicized differences ($p<0.05$)

* "Yes" = do work off-farm; "No" = do not work off-farm

Spouses who work off the farm also differ in terms of how much importance they accord motivational factors (Table 10). Noting only those items which exhibit the greatest deviations, currently-employed farm spouses are somewhat more likely to enjoy their off-farm work; that is, they associate these activities with personal self-fulfilment, the improvement of their lifestyles, the use of training/skills and increased variety in their work experiences. Female members of farm households who work off-farm also acknowledge the importance of offsetting household and operational expenses; however, these more pragmatic factors are less important in differentiating between spouses who are active and non-active in the labour force.

Variation between the means for currently employed males and females are remarkably similar, both in terms of the types of motivational items and the magnitude of differences. Employment status has a significant effect on the way in which respondents perceive the importance of many of the motivational factors regardless of gender. If, as is indicated above, current participation in off-farm markets is associated with differential ratings of key motivational variables, it is possible to extrapolate that these same factors operate as inhibiting conditions for those who are contemplating such activity. It also is clear that involvement in off-farm work is correlated with positive perceptions of this form of employment, beyond the rather obvious financial advantages. Operators either perceive off-farm employment more favourably from the outset, or develop more positive evaluations of these experiences over time. Hence, off-farm work becomes more heavily embedded in the personal and affective processes of decision-making, as opposed to the purely rational and economic.

A second method of analyzing the impact of motivational variables involves comparing the levels of importance which main operators' and spouses' attribute to these factors in deciding to work off the farm (Table 11). Means are based on **paired** observations for **households** in which both spouses rated a particular item. To the extent that this statistical procedure includes *only* those households for which there is matched data for both household members, there is a reduction in the total number of cases used. These findings, however, are of added significance insofar as they indicate the degree of cumulative variation between household members' perceptions of different situational and motivational contexts.

The 18 motivational factors included are listed in **descending** order of importance, based on the average scores for *male operators* (Table 11). The item means among spouses reveal that males and females share similar perceptions of the importance of these factors in deciding to work off the farm. Although the averages for the respective paired sub-samples differ in varying degrees (depicted as '*Difference*') the overall ordering of average scores is reasonably consistent. The two most highly-rated items relate to reducing financial risks and providing household/family necessities. A number of other factors that relate to the fiscal operation of the farm are rated highly by both males and females, including the provision of additional income, reducing farm debt and assisting in expansion efforts. Off-farm income also is an important source of support for children's post-secondary education and helping to improve the general family lifestyle.

There can be little doubt, after assessing this and earlier information, that farm operators have integrated off-farm income into the core of their farm household economies. In spite of these conclusions, it may not be fair to suggest that economic survival is the sole driving force behind off-farm activity. The strength and uniformity of the mean scores for financial items, however, makes a strong case for the economic importance of this income in a wide range of short and long-term budgetary considerations.

Several items in Table 11 identify issues related to *personal development*. Although these factors are rated somewhat lower than economic concerns, off-farm employment does offer opportunities for operators to explore and benefit from other work experiences. Employment activities off the farm may involve individuals in social and occupational settings which require the adaptation of new and existing job skills. Being able to make use of a wider range or different array of personal capabilities provides new avenues of personal expression through work.

A final important theme relates to the idea that farm operators become involved in off-farm work as a transition out of agriculture (developing skills to leave agriculture and not being emotionally committed to farming; Table 11). These two motivational items are among the three least important factors influencing decisions to work off the farm. Clearly, within this sample of respondents, off-farm employment is deemed an important mechanism for subsidizing the continuance of the farming operation and the household; it is not generally perceived as a primary factor leading to migration out of agriculture.

The right-hand column in Table 11 provides numeric values which represent the **magnitude** of differences between rankings by main operators and spouses. The significance of differences between respective means are reflected in the typeface: *italics* for moderate variation ($p<0.05$) and **bold** for highly significant differences ($p<0.01$). Negative numbers occur when the means for spouses exceed those of their main operator counterparts, while positive values indicate that the main operators rate factors higher than their spouses. Overall, 11 of the 18 differences are negative, suggesting that women, on average, attribute greater importance to these items.

Table 11. Average importance ratings for motivational factors affecting farm men's and women's decisions to work off the farm

Motivational factor	Main operator	Spouse	Difference
Reduce financial risks	3.85 ¹	3.69	0.16
Provide household/family necessities	3.84	4.11	-0.27 ²
Additional income for farm	3.76	3.40	0.36
Reduce farm debt	3.38	3.19	0.19
Children's post-secondary education	3.16	3.51	-0.35
Not enough capital to expand	3.09	2.85	0.24
Improve lifestyle	3.01	3.40	-0.39
Employment benefits	2.93	3.21	-0.28
Like off-farm work	2.93	3.43	-0.50
Fulfil personal goals	2.66	3.10	-0.44
Make use of training/skills	2.55	3.14	-0.59
Wanted variety in work	2.32	2.60	-0.28
Not enough land	2.15	2.12	0.03
Cost of farm labor	2.15	2.06	0.09
Better use of free time	2.13	2.44	-0.31
Develop skills to leave farming	2.06	1.97	0.09
Availability of farm labor	2.00	2.02	-0.02
Spouse/family did not like farming	1.58	1.64	-0.06

¹ Averages are based on a five-point scale ranging from very unimportant (1.0), to very important (5.0).

² Bold numbers = $p<0.01$; italicized numbers = $p<0.05$.

The highest positive differences (where importance ratings by males exceed those of females) are associated with main operators' perceptions of off-farm employment as a primary source of additional income (0.36) and expansion capital (0.24). The largest negative values (factors rated more highly by females) involve the use of training (-0.59), enjoying work (-0.50), fulfilling personal goals (-0.44), financing children's post-secondary education (-0.35), better use of free time (-0.31), employment benefits (-0.28), variety of work (-0.28) and providing household necessities (-0.27). As noted earlier, main operators attach greater significance to the financial role of off-farm income in the operation of the farm economy, while

spouses emphasize its contribution to the household, children's educational plans and personal development. Data clearly suggest that females are more inclined to acknowledge the less (fiscally) pragmatic aspects of off-farm employment.

It is evident that main operators and spouses share similar perceptions of certain motivational factors, while differing significantly with regard to others. Further, correlation analysis of these 18 motivational variables with males and females currently employed verifies the patterns observed in Tables 10 and 11. Rather than present the entire list of 18 items, we examine only those factors that demonstrate statistically significant correlations with the active involvement of males and females in non-farm sectors (Table 12). Similar motivational conditions are emphasized by both groups of respondents, but with slightly different levels of emphasis and significance. It should be noted that although these correlations are statistically significant, they are of modest size, and one cannot say with certainty that specific motivational conditions lead farmers to work off the farm. The correlations do, however, indicate what types of situational conditions in farming and in operators' work lives increase the probability of off-farm activity.

The two factors that exhibit the strongest relationships with current off-farm employment among both main operators and spouses are the fulfilment of personal goals and the enjoyment of the kind(s) of work activities performed off the farm. Both items deal with the importance of off-farm employment as an element of self-actualization and personal development. Even if one accepts the fact that the first factor can, by virtue of the ambiguity in wording, include the achievement of farm-related goals, the second motivational variable is linked exclusively to acquiring some sense of satisfaction from off-farm work experiences. Indeed, the issue of variety in one's work life also seems to play a modest role in the employment of the male and female farm operators. Making use of training or skills also is of some explanatory value, but this factor plays a more prominent role in the work lives of spouses.

Table 12. Correlations between current employment status and selected motivational variables

Motivational variable	Main operators	Spouses
Fulfil personal goals	0.32	0.29
Enjoy off-farm work	0.28	0.34
Improve lifestyle	0.20	0.27
Increase variety in work	0.19	0.17
Provide for household/family necessities	0.19	0.12
Reduce financial risks	0.18	0.00
Provide expansion capital	0.16	-0.08
Make use of training/skills	0.15	0.22

The remaining items listed in Table 12 are of a more economic nature. It is clear that female participation in off-farm labor markets is much less strongly governed by financial considerations, with the exception of offsetting household expenditures. These results reinforce a pattern that has been identified several times in this report. Off-farm work among farm spouses is conditioned to some extent by a desire to provide for family needs, as distinct from subsidizing the agricultural operation itself. Both spouses share perceptual differences between the household and farm spheres, which roughly parallels traditional gender roles. Traditionalism apparently extends into the motivational conditions stimulating involvement in off-farm work. It also is important to note that, despite this somewhat arbitrary division of household/farm economic roles, both the males and females who are involved in agriculture acknowledge the importance of off-farm employment to developmental processes. Whatever the primary reasons for becoming involved in off-farm employment, respondents are inclined to view these activities as at least tangentially related to increased variety in their work experiences and realization of personal goals.

Perceived Barriers to Participation in Off-Farm Employment

Perceived barriers to off-farm employment are closely related to the discussion of motivational variables. Respondents were asked to evaluate 11 situations in terms of their importance in deciding whether or not to participate in off-farm work. A numerical value of 1 was used to rate items as 'very unimportant,' while 5 was used to represent factors as 'very important.' The items included dealt with fundamental issues presumed to impact on farm operators' involvement in off-farm labor markets: day-care services, training, lending policies, employment opportunities, farm labor and time restrictions. To the extent that both principal members of farm households provided ratings for the same set of items, data are comparable across male and female sub-samples.

Items (or barriers) are presented in descending order based on rated importance among main operators (Table 13). This allows for direct comparisons across the male and female sub-samples. Rankings of item means for main operators and spouses reveals some disparity in the levels of significance the two groups of respondents attach to various barriers. Overall, however, main operators and spouses share similar perceptions of the 11 factors. The two most highly-rated items relate to time restrictions and the availability of employment opportunities. Consistent with earlier sections of the report, main operators identify the time factor as imposing the greatest restriction on their off-farm activities. All remaining means are less than 3.0 (which reflects an average importance rating), suggesting that the related barriers have, at most, a moderate impact on farm operators' decisions to work off the farm.

Main operators also attribute some importance to the availability and cost of farm labor, which is related to time considerations. Off-farm employment often is feasible only if operators can hire farm labor at rates lower than they can attain off the farm. Otherwise, the off-farm activities of either or both spouses require the re-organization of human resources within the operation. At best, off-farm employment becomes highly-fragmented and seasonal, depending on the size and nature of the agricultural operation.

Training-related issues, such as accessibility, finances and lack of job skills, receive only modest ratings by the respondents. Women rate these barriers to off-farm work somewhat higher, but the low mean scores are consistent with earlier information. The perceived need for additional training is closely linked to individuals' farm and off-farm employment goals such as financial needs, occupational aspirations, use of skills/talents, chances for advancement, geographic mobility, and personal development.

Table 13. Average importance ratings for perceived barriers to participation in off-farm employment

Perceived barrier	Main operator	Spouse	Difference
Time restrictions	3.55 ¹	3.11	0.44
Available employment	3.03	3.23	-0.20
Available farm labor	2.56	2.34	0.22
Cost of farm labor	2.54	2.32	0.22
Finances for training	2.32	2.50	-0.18
Access to training	2.28	2.53	-0.25
Lack of job skills	2.16	2.22	-0.06
Federal lending policies	2.14	1.92	0.22
Provincial lending policies	2.12	1.91	0.21
Available day care	1.71	2.03	-0.32
Cost of day care	1.69	2.11	-0.42

¹ Averages are based on a five-point scale ranging from very unimportant (1.0), to very important (5.0).

An operators' perceptions of the role of off-farm employment in the overall agricultural operation and the nature of the local economy are essential aspects in the relationship between training and off-farm work. A balance probably occurs between the types and sizes of farms and the availability of off-farm employment in rural communities. This balance, however, reflects farm operators' interests in pursuing employment opportunities off the farm not as a competing source of income, but as a form of supplementary income within the larger household economy. Apparently, this does imply intention to expand off-farm efforts through the pursuit of additional training, as this path leads further away from self-sufficient agriculture. It also is essential that training initiatives coordinate with local labor markets and community economic development, otherwise operators would be ill-advised to invest time and finances into activities which would not improve their financial returns either on or off the farm.

Regional Comparisons

The ten communities selected as data collection sites are distributed throughout southern Manitoba. For the purposes of making regional comparisons, the study communities are grouped into four categories (see Table 2). **Throughout this section of the report, unless otherwise stated, the order of percentage comparisons is always southwest, central, northwest and eastern/interlake.** Information was collected concerning main operators' and spouses' *current* and *previous* involvement in off-farm labor markets. The numbers (N) represent the total numbers of cases upon which the percentage calculations are based (Table 14).

Table 14. Regional variation in current and previous off-farm employment: main operators and spouses

Category	Main operators		Spouses	
	%	N	%	N
Currently Employed				
Southwest	38	97	58	85
Central	18	73	48	75
Northwest	45	107	64	104
Eastern/Interlake	37	122	48	106
Total	36	399	55	370
Previously Employed				
Southwest	36	62	32	41
Central	13	63	25	36
Northwest	37	78	50	40
Eastern/Interlake	25	81	38	66
Total	28	284	37	183

The most obvious point of comparison concerns respondents' off-farm employment histories within the four study regions (Table 14). The proportions of main operators currently working off the farm in the southwestern and eastern/interlake areas of Manitoba closely approximate that for the province as a whole. Communities in the northwestern region exhibit slightly higher off-farm participation rates, while those in the central area have uncharacteristically low levels of off-farm activity. By comparison, off-farm employment among spouses in all four regions clusters around the overall percentage, with the northwestern Manitoba values being most deviant (higher rate).

Regional data concerning the proportions of respondents indicating that they had, at some time, been simultaneously engaged in farm and off-farm activities are more variable for both main operators and spouses (Table 14). Farm residents in the central region again exhibit the lowest levels of previous involvement in off-farm work, while those situated in the northwestern part of the province report much higher participation rates for both males and females.

Main operators also were asked if they had worked off the farm prior to involvement in agriculture. This question partially tests the thesis that off-farm work represents a significant source of start-up capital for aspiring farmers. Forty-five percent of the main operators answering this question report some prior involvement in off-farm employment, with modest levels of regional variation: southwest - 40 percent, central - 31 percent, northwest - 45 percent and eastern/interlake - 57 percent. Regional patterns of previous off-farm employment closely parallel those observed among currently-employed farm men and women. Regional distinctions provide only descriptive information concerning differential levels of off-farm activity. As the literature review illustrated, education levels, farm production type, size of operation and local job opportunities are much more significant explanatory variables.

The involvement of family members in off-farm pursuits is another topic of growing concern in the literature. As reported in Table 5, 58 percent of the main operators belong to farm households in which other members work off the farm. When regional data are examined, it is clear that the southwestern, central and northwestern areas of the province range around the 60 percent level (60 percent, 61 percent and 68 percent, respectively), while the eastern/interlake district is slightly lower at 45 percent. Data suggest that off-farm work is a well-established phenomenon among farm households of all regions of Manitoba and this pattern extends to multiple-member participation in off-farm labor markets. Many aspects of agricultural production and farm family lifestyles are becoming increasingly reliant on off-farm inputs, irrespective of regional location.

The issue of why farm men and women become involved in off-farm employment is a matter of continued debate; however, two often-mentioned arguments are based on its support for the farming operation or the family's standard of living. Males and females currently working off the farm were asked to rate the financial contribution of this source of income to the *farming enterprise* and the *family's overall lifestyle*. Although this issue has been addressed in several different sections of this report, here we disaggregate data by regions (Table 15).

Table 15. Regional analysis of main operators' and spouses' perceptions of the importance of off-farm work for the farm and family lifestyle

Reason for employment	Main operators		Spouses	
	%	N	%	N
Support farming enterprise				
Southwest	80	36	49	47
Central	85	13	39	38
Northwest	73	48	66	65
Eastern/Interlake	82	45	51	49
Total	79	142	53	199
Support family's overall lifestyle				
Southwest	83	36	67	48
Central	85	13	58	38
Northwest	73	48	73	66
Eastern/Interlake	82	45	76	50
Total	80	142	69	202

Table 15 combines respondents who rate the financial contributions of off-farm work either as 'important' or 'very important.' The numbers (N) represent the total numbers of respondents in each region who are currently employed in some fashion off the farm. For example, 36 main operators in the southwestern Manitoba sub-sample are involved in off-farm work. Of this number, 80 percent rate its financial contribution to the farming enterprise as important or very important. The responses provided by main operators of all four regions are consistent in their indications of the importance of this employment for farm finances. Regional comparisons among spouses are less consistent and lower in perceived significance.

Off-farm work also supports family lifestyle decisions. Among main operators this issue is no less important than maintenance of the farming enterprise. Farm women, however, attach somewhat greater value to their off-farm efforts as a method of buttressing day-to-day lifestyle considerations, as compared to subsidizing the farm. It would appear that men do not distinguish greatly between these two aspects of financial contribution, while women are more likely to emphasize the importance of their off-farm employment in the maintenance of the farm household. There is little variation that can be attributed to regionalization.

We also examined the regional distribution of the impact of various characteristics of the farm or its operator(s) on the incidence of off-farm work. Among structural features of agricultural holdings, there are significant regional differences in the average acreage of farms included in this study: southwest - 819, central - 1066, northwest - 801 and eastern/ interlake - 541. The off-farm work participation rate in the central sub-sample is the lowest of the four areas; and the average number of acres operated is largest in this region.

Gross farm sales and total market value of capital assets also are indicators of farm size. Approximately 75 percent of the total sample of respondents answered these two questions (308 and 309 respectively). Data were separated by region to examine the response patterns. Farm operators in central Manitoba are least apt to provide financial information; their response rate was 33 percent, while those for the remaining three geographic areas clustered around the 90 percent mark. The major category for gross sales of agricultural products is consistent across all four regions: \$100,000 to \$249,000. The second most frequent sales class is that ranging between \$50,000 and \$99,999. When combined, these two categories account for more than 50 percent of the farm operations in each of the study locations (69 percent, 62 percent, 58 percent and 51 percent, respectively). These percentages also indicate that respondents from the southwestern and central regions are concentrated in these two sales classes. Despite these observations, however, analysis of the eight gross sales categories used to collect information indicates no statistically significant variation across the regions.

The distribution of farm operations according to total market value of capital farm assets (including machinery, buildings, land and livestock) is somewhat concentrated in the two categories of \$200,000 to \$499,999 and \$500,000 to \$999,999 (this being the most frequent) in all four regions (63 percent, 70 percent, 60 percent and 53 percent, respectively). The samples in southwestern and central Manitoba are, therefore, not as widely dispersed across the various classifications of capital value. There is sufficient cumulative variation across the cells in this four (regions) x eight (market value class) comparison to suggest that regional differences are associated with the total value of capital assets.

Not surprisingly, product type also varies significantly among the four study areas. Of 407 sampling units, 334 (82 percent) are involved in producing cereal grains, 229 (56 percent) oil seeds, 209 (51 percent) beef, 59 (14 percent) dairy and 38 (9 percent) swine. Information concerning the degree of involvement in various forms of production was collected by asking operators to indicate the percentage of their total farm sales related to cereal/oil seeds, special crops, beef, dairy and swine production. These data were reclassified to form four equal categories of 25 percent each, to determine the relative concentrations of types of produce among area farmers.

The greatest proportions of those who rely on cereals and oil seeds for more than 75 percent of their farm sales are located in the northwest and southwest (50 percent and 46 percent), followed by the central and eastern/interlake regions (28 percent and 25 percent). Percentages of beef growers varied significantly among the study sub-samples. The eastern/interlake area has the greatest proportion of operations with beef sales exceeding 75 percent of total farm revenue, while beef production in the other three regions is more likely to account for 50 percent or less of farm sales. Degree or percentage of involvement in the swine industry does not vary significantly across the four regions. Finally, operations with more than 75 percent of farm sales drawn from dairy production are concentrated in the eastern/interlake area of the province (43/59 farms).

Characteristics of respondents also affect regional off-farm activities. Most notable is education. The greatest proportions of main operators in each of the four regions possess between 8 and 12 years of formal schooling (southwest - 66 percent, central- 74 percent, northwest - 63 percent and eastern/interlake - 62 percent). There are similar percentages of farm men in the lowest education level in all geographic regions, but slightly more regional variation among those with at least some university (20 percent, 15 percent, 23 percent and 18 percent, respectively). Participation in community colleges is consistent across the regions. In essence, there is insufficient variation in this comparison to conclude that region has any significant association with the educational attainment of farm operators in this sample.

By comparison, farm women possess more years of formal schooling and there are significant regional differences in acquired education levels. For instance, the combination of females with grade 12 and those who have taken some community college training varies as follows across the four regions: 46 percent, 70 percent, 59 percent and 52 percent, respectively. The sample drawn from southwestern Manitoba has the highest proportion of farm women with some university education (28 percent), followed by central (21 percent), northwest (19 percent) and eastern/interlake (19 percent).

Motivational factors and perceived barriers to employment also can affect involvement in off-farm labor markets (Tables 11, 12 and 13). Data were sorted according to both region and gender. Analysis of variance was used to test the extent of differences between the mean importance rating for the motivation and barrier items across the four geographic areas. Regional comparisons among main operators yielded only two items for which the means were significantly different. First, farm operators' perceptions of off-farm work as a mechanism of fulfilling personal goals differed among regions (regional averages are 2.9, 2.1, 2.7 and 2.5, respectively). Farmers in the central sub-sample are significantly less likely to view their work as personally satisfying than are those in southwestern Manitoba. Second, there was a significant degree of regional variation among main operators' ratings of the impact of time restrictions on their decisions to work off the farm (regional averages are 3.6, 2.9, 3.6 and 3.8). Again, the lowest mean importance rating is found in the central sub-sample, which differs significantly from all others.

Analysis of variance among responses from farm women, however, reveal many points of significant variation across the four regions of Manitoba (Table 16). Data include the regional averages of the perceived importance that spouses associate with selected motivational factors and barriers to off-farm work. To aid interpretation the highest mean for each item is printed in **boldfaced** type, while the lowest average is *italicized*.

The first obvious pattern occurs in the lower average scores in the central region. Further, farm women in the northwest region rate financial matters more highly than do other respondents, although only slightly more so than those in the southwest. Although the desire for variety in work varies significantly among regions, the means indicate that the northwest sub-sample is polarized from the other three sectors with respect to its relatively low rating for this item. Farm labor is a somewhat more significant issue among women from the southwestern and the eastern/interlake areas. By comparison, female respondents in the eastern/interlake area attach greater significance to the availability and cost of day-care facilities, as well as time restrictions and provincial lending policies, in making decisions to work off the farm.

Data provide insights into regional variations in the way that farm women view the impact of motivational factors and potential barriers on off-farm employment. What is perhaps most important is the high degree of consistency in the main operators' responses patterns for most factors, irrespective of regional location, but the obvious variations in responses from their spouses.

Table 16. Regional differences in motivational factors and barriers to off-farm work among farm women

Motivational factor/barrier	Southwest	Central	Northwest	Eastern/Interlake
Additional income for farm	3.49	3.06	3.57	3.02
Help reduce financial risks	3.70	3.16	3.90	3.43
Job benefits: pensions/Insurance	2.96	2.60	3.49	3.08
Help pay for children's education	3.53	3.02	3.72	3.09
Wanted some variety in work	2.62	2.93	2.29	2.81
Availability of good farm labor	2.23	1.63	1.84	2.10
Availability of day-care facilities	1.77	1.69	2.18	2.35
Cost of day-care facilities	1.80	1.67	2.20	2.53
Time restrictions	3.26	2.53	3.03	3.29
Provincial lending policies	1.70	1.73	1.92	2.20

Finally, regional employment opportunities constitute one of the most often mentioned factors in considering off-farm employment. Indeed, some suggest that this represents the single most important explanatory variable, as there is a presumption that the majority of farm household members are interested in securing off-farm work. Although this may reflect an extreme viewpoint, there is little doubt that the availability of jobs in local labor markets does impact off-farm participation rates. Male and female respondents in this study were asked to indicate how accessible employment was to farm operators and spouses within their own particular geographic areas. The main operators of all regions were reasonably uniform in their view that opportunities were restricted. Respondents were asked to answer this question based on a four-point scale, where **3** meant 'rather difficult' and **4** referred to 'not available.' The combination of these two negative responses account for 60 percent or more of farm men in the four study sub-samples (71 percent, 63 percent, 68 percent and 60 percent, respectively). Using the same analytical technique, we find similar percentages among the farm women within these same study regions (74 percent, 64 percent, 77 percent and 65 percent). Statistical comparisons (4 regions by 4 employment opportunity levels) suggest no significant differences. That is, regional location is not associated with perceptions of off-farm employment chances by either gender. Respondents of both genders perceive serious limitations in local labor markets.

Government Programs and Off-farm Employment

A number of factors can play a role in the availability of off-farm employment. The local economic conditions, traditional industries in the region, the skills and training needs of farm family members, and policies that relate to farm family income are among the most important. The availability of jobs was assessed partially in a related project, with 7 of the 10 rural communities surveyed in this report responding to a survey regarding employment opportunities in the towns. In addition, the lending policies of the Farm Credit Corporation (FCC) and The Manitoba Agricultural Credit Corporation (MACC) are reviewed as to impact for off-farm employment. The allocation process of Manitoba Agricultural Crown Lands also has farm family income criteria. Finally, the Canadian Rural Transition Program (CRTP) and the Manitoba Agricultural Training Project (MATP) are reviewed in light of off-farm employment.

Community-based Job Opportunities

Seven of the 10 communities surveyed in this project responded to a survey of available work opportunities in another research project³. Four communities, however, did not list any available positions (Altona, Souris, Steinbach and Stonewall). The Village of Arborg listed expansion of a car dealership and a new lumber yard as requiring new labour. Russell listed the potential of nearly 200 temporary construction and tourism industry jobs relating to development of a ski resort and overall tourism expansion. Swan River said only that large PMU operators in the area required additional farm labour. This research was completed before announcement of a planned major forest industry in the Swan River region. In general, however, either Manitoba community leaders are not aware of employment opportunities, or there are few opportunities available.

Farm Credit Corporation (FCC)

The Farm Credit Corporation is a federal farm lending and assistance program. FCC has no policy regarding lending that specifically addresses the issue of off-farm employment and income. As with any lending program, other income may come into play on repayment schedules. Recent awareness of the importance of off-farm income in farm family finances has led FCC to encourage part-time farmers to approach the agency for assistance.

Manitoba Agricultural Credit Corporation (MACC)

MACC, beginning in 1959, has provided new opportunities for farming through loans, guarantees and other services. It serves as a stepping stone for farmers with limited equity who plan to get into farming, diversify operations, or expand operations. Direct loans, stocker programs and operating loan guarantees are available. Features within these programs include young farmer rebates, annual compounding of interest, competitive interest rates, amortization flexibility, fixed interest rates, penalty-free pre-payment and payout privileges, and convenient repayment schedules.

Until January 1994, eligibility requirements included a criterion that "principle occupation must be farming (or become so upon receiving the loan)." This policy directly impacted the relationship between off-farm employment and eligibility for farm loans. Specifically, part-time farmers were not eligible for the young farmer rebate program. Since January 1994, this criterion was relaxed. The current regulation is that "the combined annual off-farm income of the applicant and spouse may not exceed \$60,000 at time of application." Other criteria apply, but do not relate to off-farm work.

Manitoba Agricultural Crown Lands

The objective of agricultural Crown land programs is "to support the establishment of viable livestock enterprises in Manitoba by making Crown land available to resident farmers and ranchers who derive a significant portion of their farm income from livestock production." Land allocation is targeted to farmers and ranchers working toward an optimum livestock operation of 3000 Animal Unit Months (AUM's), or

3 The project entitled "Social and Economic Opportunities for Immigrants in Rural Manitoba" is on-going at the Rural Development Institute.

approximately 125 beef cows, and complementary management options. These options include cow-calf, cow-calf-stocker, and cow-calf-stocker-finish management programs. Programs involving dairy cattle, bison, horses, sheep and goats also are considered.

Available Crown lands are allocated through a competitive complex point system. Points are allocated under the following criteria:

- 1) AUMs Available on the applicant's and spouse's existing farm unit (owned land, rented lands, other use privileges);
- 2) AUMs Required as based on the livestock owned during the last full year prior to application, plus planned future expansion;
- 3) AUMs Actual Need, derived by subtracting AUMs Required from AUMs Available; points are allocated for Actual Need;
- 4) Herd Size receives bonus points on a decreasing scale (from 550 to 3,050 AUMs);
- 5) Age Bonus is allowed for young farmers (18-40 years);
- 6) Proximity points are allocated according to the number of common, unobstructed boundaries between an applicant's property and available Crown Land;
- 7) Distance points are allocated according to relationships between farm headquarters, other owned lands, and the location of Crown Lands;
- 8) Off-farm Income enters the point allocation by totalling the applicant's and the spouse's combined net self-employed, gross salaried, pension, unemployment insurance and interest income as reported to Revenue Canada, averaged over the last three years. Points are allocated according to the following scale:

0 - \$20,000 - no deduction
\$20,001 - \$25,000 - 1/2 point per \$1000
\$25,001 - \$45,000 - 1 point per \$1000
\$45,000+ - 2 points per \$1000

In theory, off-farm income may reduce a farmer's chances of being allocated a permit to utilize Crown lands. With few exceptions, as outlined in the policy, nearly all Crown lands are advertised to the public before they are allocated. Advertising and allocation normally are carried out annually during September through February. Lands are advertised as "parcels" which usually are quarter sections.

In 1993-94, 289 parcels of Crown land were advertised. Of these, 196 were allocated, with 95 going to single applicants (uncontested) and 91 by competition. The off-farm income criterion influenced allocation of 6 parcels, which is 3 percent of all parcels allocated, or 7 percent of contested parcels. The off-farm income criterion, therefore, does not affect disposition of agricultural Crown land to any great extent.

Canadian Rural Transition Program

The Canadian Rural Transition Program (CRTP) was designed to assist farm families leaving farming because of financial difficulties. Rural residents are eligible to participate if:

- 1) they have, or are about to quit, operating a commercial farm owing to financial difficulties;
- 2) they do not have full-time permanent employment;
- 3) they are legally entitled to work in Canada;
- 4) they are seeking employment or self-employment; and
- 5) they are not receiving Unemployment Insurance benefits.

During the first of two phases, approved candidates received a Transition Grant for the first four weeks on the program, and Supplementing Transition Assistance for up to 22 additional weeks. Employment and Career Counselling, Personal Counselling and Legal and Financial Counselling also are available. Once a course of action is defined, the second phase begins, providing some or all of the following services: job placement services, training or retraining, self-employment grants, wage reimbursement and travel assistance. The program is voluntary.

Off-farm employment does not enter the evaluation unless one of two situations exist: 1) if a person works more than 24 hours per week, prior to quitting farming, and if this employment continues, they are not entitled to the Supplementary Transition Assistance, and 2) if off-farm work carries over as full-time, permanent employment after farming ceases, they are not eligible for any CRTP support. Technically, therefore, off-farm employment ceases once the farm is lost, and becomes non-farm employment. The relationship between off-farm employment and CRTP, therefore, is indirect, and may not exist at all.

Manitoba Agricultural Training Project (MATP)

The Manitoba Agricultural Training Project (MATP) is designed to improve the management and viability of Manitoba farms. It was established by Keystone Agricultural Producers Inc. in 1989, in concert with Employment and Immigration Canada and Manitoba Agriculture. More than 7000 farmers have been sponsored in farm business management and production skills training since fall, 1989. Training needs are identified through the Farm Training Needs Assessment questionnaire, and the program sponsors up to 80 percent of the training costs for farmers. Farmers pay a \$95 registration fee towards the total training cost of \$473.

Training is a process of learning or improving and applying a specific agricultural skill whereby the producer increases his/her competitiveness in the market place. Training is available either in local communities or at home through distance education (home study and teleconference) in the following eight topical areas:

- 1) Farm business management
- 2) Computers in farm management
- 3) Beef production
- 4) Soils and crops
- 5) Grain/livestock marketing
- 6) Farm machinery/building maintenance
- 7) Basic training for agricultural producers
- 8) Human resource management

Applicants must be a farm owner/operator who is involved in the management and operational decisions of the farm business, or a farm employee of an owner/operator. Any applicant must be over 16 years of age and out of the school system for at least one year, and a Canadian citizen, landed immigrant, or permanent resident.

MATP has great potential impact on the off-farm employment needs and aspirations of rural residents. First, increased efficiency in farm management may reduce the need for off-farm income. Second, knowledge acquired may help diversify agriculturally-related activity, creating either new opportunities for on-farm endeavours, or employment for others. Third, training may provide the skills necessary to work for others in agriculture. Fourth, new skills may help farm-family members attain employment in other industries. Of particular importance here are the courses in computers in farm management and human resource management, both of which have broad application beyond agriculture.

In 1992-1993, 1,987 people signed up for courses in Manitoba. Of these, 67 percent were males and 33 percent were females. Thirty different courses were offered in 180 locations.

In 1993-1994, 1,440 registrants took courses. Of these 897 (62 percent) were males, and 543 (38 percent) were females, and 930 were sponsored by Farm Business Management Program/Agriculture and Agri-Food Canada (476 males (51 percent) and 454 females (49 percent)). A total of 74 sections in 17 different courses were taught. Fifty-two sections were delivered in communities and 22 by distance education. In addition, Human Resources Canada sponsored 510 registrants (421 male (83 percent), and 89 females (17 percent)). Forty-three sections of 18 different courses were delivered (36 in communities and 7 by distance education) (Table 17).

Sixty-two courses were offered to 682 registrants in MATP in 1992-93 and 1993-94 in the 10 rural communities we surveyed in this report (Table 17). As many as 11 courses (Pilot Mound) and as few as 3 courses (Altona) were available. Sixty-eight courses were cancelled in the same 10 communities. Overall, 191 registrants (28 percent) were women and 491 were men (72 percent). The number of registrants per course varied from 1 to 35, with an average of about 10.

Computer courses are by far the most popular selections, with 44 percent of all students enrolling in six different courses offered. Rural women dominated total enrolments (58 percent), and were even more prevalent in higher application courses (e.g. DOS, spreadsheets).

Conversely, men dominated all other categories of training, accounting for between 89-100 percent of registrants. Traditional production-related, marketing, and farm maintenance and management training remain male-oriented (Table 17). No regional variations in accessing of training are apparent.

Respondents, Farm Skills and Training Assessments

Both main operators and spouses were asked to respond to a question concerning their assessment of their present skills and the need for training. Both males and females generally are satisfied with their skills relating to farming (Table 18). Similarly, skill ratings do not vary greatly between those who worked off-farm and those who did not. In all instances, approximately 4 out of 5 respondents felt adequately trained.

Three major areas of farm-related skills are mentioned by those who express a need for further training: computer skills, marketing skills and business management. Computer training is most frequently mentioned by men who do not work off-farm. Marketing skills are most often listed by both men and women who do work off-farm. Other training needs are evenly distributed among categories.

Table 17. Manitoba Agricultural Training Project information for the 10 communities in this report, 1992-93 and 1993-94

Training categories and courses	No. courses	No. registrants	Gender registrants				Communities involved
			Female		Male		
			No.	%	No.	%	
Computer courses							
Introduction to computers	12	159	79	50	80	50	Swan River (2), Neepawa, Souris, Arborg, Altona (2), Pilot Mound (2), Steinbach, Stonewall
Using Windows	4	39	28	60	11	40	Swan River, Souris, Pilot Mound, Steinbach
DOS - level 1	3	41	26	63	15	37	Dauphin, Steinbach
Spreadsheet	2	24	17	71	7	29	Dauphin, Russell, Swan River
Farm accounting with computers	2	20	14	70	6	30	Neepawa, Pilot Mound, Stonewall
Farm accounting software	2	19	10	53	9	47	Arborg
Sub-totals	25	302	174	58	128	42	
Cattle production							
Artificial insemination	7	89	3	3	86	97	Dauphin, Swan River, Souris, Arborg, Pilot Mound, Stonewall, Steinbach
Genetics	1	13	4	31	9	69	Dauphin
Beef health	1	12	4	33	8	67	Dauphin
Sub-totals	9	114	11	10	103	90	
Canadian grain marketing							
Grain marketing	3	35	3	9	32	91	Souris, Altona, Stonewall
Advanced grain marketing	2	22	0	0	22	100	Dauphin, Pilot Mound
Options trading	1	10	0	0	10	100	Dauphin
Sub-totals	6	67	3	4	64	96	
Farm machinery and buildings							
Welding	7	68	0	0	68	100	Russell, Swan River, Neepawa (2), Arborg, Pilot Mound (2)
Hydraulics	2	17	0	0	17	100	Russell, Pilot Mound
Electrical systems	2	19	0	0	19	100	Souris, Stonewall
Farm maintenance	1	11	0	0	11	100	Swan River
Sub-totals	12	115	0	0	115	100	
Soils and crops							
Agricultural chemicals	8	66	2	3	64	97	Dauphin, Russell, Neepawa, Souris, Arborg, Steinbach, Stonewall, Pilot Mound
Pasture Management	1	9	0	0	9	100	Pilot Mound
Sub-totals	9	75	2	3	73	97	
Farm business management							
Farm management	1	9	1	11	8	89	Souris
Sub-totals	1	9	1	11	8	89	
Program totals	62	682	191	28	491	72	

Table 18. Need for and type of training relating to skills to carry out farm-related activities

Category	Farm men		Farm women	
	No off-farm work	Off-farm work	No off-farm work	Off-farm work
Farm skill adequacy				
Yes	192 (82%)	103 (78%)	125 (82%)	152 (81%)
No	42 (81%)	29 (22%)	27 (18%)	36 (19%)
Type of training desired				
Computer	11 (20%)	5 (13%)	6 (19%)	8 (15%)
Marketing	8 (15%)	11 (28%)	5 (16%)	13 (25%)
Business management	7 (13%)	4 (10%)	4 (13%)	6 (12%)
Training delivery method				
Seminars	22	14	16	19
Short courses	22	17	14	20
Time of training				
Evenings	20	20	13	21
Weekends	2	2	1	2
Weekdays	16	7	10	11
Winter	7	4	6	6
Average travel distance (one-way)				
	35 km	49 km	33 km	44 km

Any training courses offered should be available during evenings and on week days. Weekends are not preferred training times. There was little differentiation between seminars and short courses among respondents. Although a question did not ask for seasonality, about 20 percent of the respondents specified that winter was the best time for any training sessions.

Most rural people are used to travelling to access services. When asked how far they are willing to travel to obtain training, a distinct difference occurred between those who do and those who do not work off-farm (Table 18). Both men and women who do not work off-farm are willing to travel an average of 33 km (approximately 20 miles), while those who do work off-farm are willing to travel an average of 47 km (approximately 30 miles). This difference may be important. Those who do not work off-farm obviously would like to access training in the closest community. Conversely, those who do work off-farm may be willing to travel to one of several surrounding communities, or to a regional centre. These values correspond reasonably well with travel patterns reported earlier (see Page 21).

MATP data both conforms to and differs from some survey results. First, computer training is consistently high in demand in both data sources. Our questionnaires, however, suggest that marketing was also a principal area of concern, but MATP enrolments suggest that marketing is a secondary area of interest (Table 18). Farm management does not receive significant demand in MATP programs, but is ranked third by our respondents. There may be some cross-over between management and computer training, so the difference may relate to how management is perceived by respondents.

Perspective on Policies, Programs and Off-farm Work

Although all programs and policies discussed are oriented toward agriculture, the close relationship between off-farm employment and farm family budgets makes all aspects of farm finance inseparable. Recent changes in MACC's policies relax the penalties previously imposed on farm loans if off-farm income is available. New policies accept the reality of off-farm income and impose limitations on farm loans only if family off-farm work is extensive, thereby no longer penalizing most farm operators.

Although potentially punitive, the regulations concerning off-farm employment and leasing of agricultural Crown lands affects only a small percentage of farmers. If further experience shows continuation of the low percentage impact of off-farm income on lease allocation, the criterion could be dropped without affecting Crown land policy. In this way the apparent but unrealized punitive perception of the criterion would be eliminated.

The strongest association between government policies and off-farm employment undoubtedly occurs in the training and education programs. Although specifically designed to improve agricultural operations, the Manitoba Agricultural Training Project (MATP) undoubtedly creates opportunities to use acquired skills in off-farm situations.

The information presented in this report is consistent with the last two years of MATP programs, and reflects both current and future directions in off-farm employment. For example, main farm operators (predominantly men) often lack the formal educational background necessary to utilize computer technology (e.g. 42 percent with < grade 12) (Table 3). The enrolment of these individuals in the production-oriented and trade skills aspects of MATP signifies two things. First, main farm operators need these skills to be better farmers, and they hope to be out of the off-farm employment market as soon as possible. In the interim, however, they derive a secondary benefit from trades training by securing off-farm employment in the trades and unskilled labour market (Table 6). This pattern was even stronger in the past (Table 8).

Farm spouses (primarily women), on the other hand, are better educated (Table 3) and currently (Table 6) and traditionally (Table 8) have worked in careers in health care, education, secretarial and sales positions. Both their education and experience has allowed greater exposure to modern telecommunications and computers. This is clearly reflected in the gender composition of enrolments in computer courses in the MATP program (58 percent female). Although these courses are designed to improve agricultural operations, the skills learned have broad application and will improve the registrants' abilities to obtain or create employment in off-farm situations as well. The concentration of farm women in computer training and farm men in production agriculture and the trades likely will continue, and potentially accentuate the current patterns of off-farm work.

The MATP program also addresses some of the barriers evident in off-farm employment. First, time restrictions are more problematic to main operators than to spouses (Table 13). Main operators, therefore, will be improving the efficiency of agricultural operations through training. This may result in either better profit margins, which may reduce the need for off-farm work, or in more efficient use of time, which may allow more time for off-farm employment. Similarly, some of the major barriers to off-farm employment by spouses may be overcome by offering of the courses by distance education. Studying in the home, for example, may remove the cost of external childcare.

Perhaps of greater importance is the overall lack of response in this study to identification of training needs either for on-farm or off-farm skills. Training-related issues are not perceived as major barriers to off-farm work (Table 13), which is consistent with the literature. This situation probably will continue as long as most main operators perceive off-farm employment as supplemental to farming.

This gender-related training and employment pattern has far-reaching policy ramifications. First, farmers want to upgrade or add to their farm skills, but when off-farm employment is needed, they want jobs that use their agricultural skills rather than develop new skills. The fact that lack of time was the major barrier to off-farm work probably explains the desire to use skills already attained. Training time would be difficult to allocate. Second, main operators view off-farm work as a short-term necessary evil and plan to quit as soon as the farm situation allows. Under these circumstances, creating basic employment in construction or manufacturing would provide the necessary employment to use trade skills. Also, most farmers are in a position to be employees rather than job-creators. Conversely, farm women are more likely to train for new occupations, are qualified for a broader range of employment, prefer long-term employment, and may be more entrepreneurial. Both training and employment programs aimed at farm families should reflect these realities.

SUMMARY AND CONCLUSIONS

There is ample evidence that off-farm work, among various members of the household unit, has become an integral component of farm life in Manitoba. Despite conventional perceptions that farm men and women only recently have become involved in off-farm labor markets, census information gathered between 1941 and 1991 indicates consistent part-time participation rates and escalating levels of full-time activity. At a time when census farmers are diminishing in numbers and agricultural holdings are increasing in size, we observe ever-increasing levels of full-time, off-farm employment, irrespective of the age of the operator or the size of their farming enterprises. Farm families in which no one works off the farm are becoming the exception.

Some observers characterize this phenomenon as part of a trend toward the joint demise of agriculture and rural existence, at least as it was once known. Perhaps we are lamenting a way of life which disappeared some time ago. By the same token, rural analysts have been anticipating the rapid decline of small communities in Canada since the mid-1960s, yet many still stand in stark contradiction to these predictions. There is no doubt that significant changes have occurred in global and national economies, which have had profound effects on the fortunes of agriculture and rural communities. Language denoting or connoting decay rather than change, however, does not improve our understanding of these very significant social, economic and political processes.

Recent efforts to understand various aspects of rural change in terms of rural-urban integration take advantage of a novel approach to phenomena such as off-farm employment. This mode of explanation draws from the mass society thesis which argues that, over time, differences between rural and urban societies will fade, as residents assume similar value systems and behavioral patterns. Major social institutions such as education, health care, mass communications, and international trade tend to globalize issues, in turn making rural-urban distinctions obsolete. This type of reasoning has found its way into research dealing with off-farm work. Writers such as Barlett (1991) suggest that lifestyle considerations have as great an impact on decisions to work off the farm as does economic necessity. That is, urbanized living standards, expectations and values are being progressively adopted by rural farm residents who pursue off-farm work to help realize these agricultural, personal and familial goals.

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