A New Safety Net Program for Canadian Agriculture: GRIP

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In 1989 the Canadian government set up a Federal-Provincial committee to develop terms of reference for the future development of agricultural policy. In their report, *Growing Together*, the committee defined four Policy Pillars or Principles for Action in future Canadian agricultural policy:

- Improved market responsiveness
- Greater self reliance in the agri-food sector
- A national policy which recognizes regional diversity, and
- Increased environmental sustainability

Following this report several more committees were created to design policies to deal with more specific issues within this broad set of guidelines. The Grains and Oilseeds Farm Safety Net Committee, made up of Federal and Provincial representatives and farm leaders, was charged to design an income stabilization program for the grain sector. In a report released in August 1990, the Committee recommended two new programs: the Gross Revenue Insurance Program (GRIP), and the Net Income Stabilization Account (NISA). Early in 1991, a Federal-Provincial agreement was reached with most provinces to implement the GRIP program in the 1991 crop year. This article focuses on GRIP as it was announced and applied in Saskatchewan. Other provinces have made slight to moderate modifications for 1991.

➢ The Gross Revenue Insurance Program (GRIP) may represent the most significant Canadian Agricultural Legislation in the last fifty years. However, the program is fraught with major difficulties. If not modified, the program could create large market distortions and lead to major economic inefficiencies. Such outcomes would directly conflict with principles set forth in the Agriculture Canada 1989 report which set the stage for designing this program.

With GRIP, producers can insure a target revenue per acre for virtually any grain or oilseed crop grown. The insured level of gross revenue is derived by multiplying (1) the producers' long term average yields for each crop planted by (2) the respective target prices for each crop. In Saskatchewan, for example, the target price for each commodity is equal to 70 percent of a fifteen year indexed moving average price (IMAP). To calculate the 1991 guaranteed prices, the 1975 to 1989 prices are indexed to 1991 dollars via a farm input price index, averaged, and then multiplied by 70 percent. The producer pays 33 percent of the premium cost of the program, the Federal Government 42 percent and each Provincial Government 25 percent. A crop specific payout is made to a producer when his actual production multiplied by the crop year average market price is less than his guaranteed revenue.

Implications for Efficiency

GRIP is designed to provide income support for agricultural producers across Canada in response to the unprecedented low incomes of grain producers. However, we conclude that GRIP in its current form has three serious farm implications for production efficiency. In particular, the program will lead to inefficiencies by affecting:

- Crop choices within the grain sector,
- Use of inputs, and
- Land use and the environment.

Crop Choice. GRIP provides the incentive to seed crops on a particular farm which earn the highest target revenue per acre net of cash costs of production. There is strong evidence that relative prices based on 15 year averages of price will, in many years, not be consistent with actual relative prices in any one year. For example, in Manitoba, IMAP prices for canola and flax are $289 and $284 per tonne, respectively. Thus, on average for the past 15 years the flax price has been nearly equal to canola prices. However, during the past 15 years the price of flax has been as high as 40 percent above canola prices and as low as 30 percent below. The relative price differences reflect differing market conditions including crop inventories, expected production, and utilization. Thus, the probability is extremely low that the indexed average prices of the last 15 years used to calculate payments will reflect the current relative economic values.

The problem of crop choice is particularly important for crops where Canadian acreage and production has a major influence on prices of crops. Lentils, durum wheat, flaxseed, peas, mustard, and canary seed are examples. In these crops, an increase in Canadian acreage may drive the price of the crop to an extremely low level, but this low level will not discourage the production of the crop in the following crop year because revenue of farmers will again be guaranteed by the GRIP. This feature has direct implications for program costs. When producer returns are not directly affected by production as in the case with GRIP, it is extremely difficult for program administrators to control or estimate the potential costs of the program. For instance, suppose the program provides an incentive to grow lentils and, as a result, lentil acreage increases significantly. The resulting higher production leads to lower lentil prices and forces the GRIP to pay larger indemnities on larger acres thus increasing overall program costs.

A hidden cost to the Canadian economy is that the program will discourage production of some crops because the revenue guarantee under GRIP is low. The guarantee may reflect circumstances of the last 15 years but be below levels consistent with today's demand and supply situation. This is particularly true for commodities which have undergone recent price increases due to market development efforts. In these commodities, farm organizations, grain companies and the Canadian Wheat Board have worked hard to expand domestic and export sales. However, with GRIP, supplies of these historically less attractive crops may be reduced in 1991. In turn, some orders will not be filled and some customers will turn to alternative suppliers. Assuming that GRIP will again be a factor that distorts market signals in 1992, buyers may dismiss Canada as a reliable supplier of these crops.

Input Use. The Gross Revenue Insurance Program also creates a "moral hazard." GRIP target revenues are higher than expected market revenues for all crops for 1991. Therefore, producers have an incentive to minimize the use of fertilizers and other inputs. The expected value of marginal product of any input is nearly zero in 1991 for many crops. A producer can increase short run net income by cutting back on input costs and receiving the gross revenue guarantee. Admittedly, if a producer intends to have GRIP on a particular crop in the future, there is some incentive for the producer to maintain or increase their average yield. However, individual producers may not intend to insure the crop in the future and therefore will practice moral hazard if:

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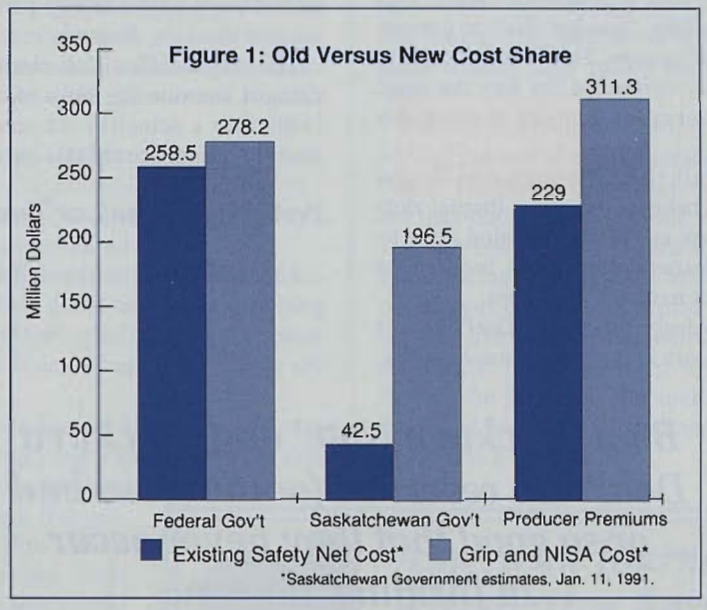
- They grow a non-traditional crop on their farm,
- They expect to leave GRIP in three years,
- They rent land and intend to give up the lease,
- They plan to sell the land, or
- Their financial situation dictates that they maximize short run returns.

These actions could greatly increase program costs. For example, a 2 percent decrease in Canadian crop yields could increase payouts $100 million each year. Thus, paradoxically, with moral hazard, higher subsidies are related to lower production levels.

Land Use and the Environment. Forage and pasture land is not included on the list of eligible crops covered by the program. Given the large implicit subsidy of the program, these omissions create an incentive to produce annual crops over the more environmentally friendly pasture and forage production. While the government has some conservation policies that encourage soil conservation, it is clear that GRIP provides the opposite incentive.

Program designers recognized this incentive and included a rule that caps "total seeded acreage" for each producer at 110 percent over the previous three year average of seeded acreage.



Equity Issues

There are two important equity issues associated with GRIP. One relates to the transfer of some of the Federal responsibility for agriculture to Provincial taxpayers. The second relates to GRIP's support of individual farmers who have incomes that are well above the income of most Canadian taxpayers.

The introduction of GRIP involves a major shift in the funding of support programs for agriculture. Our estimates illustrated in figure 1 show, for Saskatchewan, the Federal support increasing from $258 million to $278 million, a meager 8 percent. In contrast, Saskatchewan's contribution increases 355 percent from $42 million to nearly $200 million. This increase is equivalent to $146 per year for each citizen of Saskatchewan. This increased tax burden on Saskatchewan comes at a time when the international grain trade war has already depressed grain prices and the provincial economy.

The second equity issue is the amount of program benefits an individual producer can receive. There are no payment caps for GRIP. In the 1991-92 crop year, a farmer seeding 5,000 acres may receive a payment as large as $250,000 from GRIP. The Federal and Provincial governments together pay approximately a $20/acre premium subsidy in this case. Assuming the program is actuarially sound, this subsidy could be considered as the annual subsidy to this individual. This type of large individual subsidy may reduce the long run political support for the program by urban voters.

There are at least two ways to limit individual subsidies. Acreage eligible for coverage by any one individual could be limited. Alternate payments could be "grossed up" by a percentage for the purposes of income taxation. For example, with this approach, each dollar of GRIP payment might be taxed as if it were $1.10. Thus, producers with high incomes would receive reduced after-tax benefits from the program.

For more detail regarding the development of the GRIP program, see *Growing Together: A vision for Canada's agri-food industry,* and *Growing Together: A report of the Grains and Oilseed Safety Net Committee,* both available free of charge from the Communications Branch, Agriculture Canada, Ottawa, K1A OC7. For details of the Saskatchewan GRIP program, contact Saskatchewan Crop Insurance, P.O. Box 3000, Melville, Saskatchewan, SOA 2P0.

Recommendations and Assessments

There is a need to develop programs that, at a minimum, address the efficiency issues. One approach would be to adopt "area based" GRIP programs whereby all crops (including forage and conserving use) and all producers on the same soil, receive the same payment per acre. Each year, the area payment could be based on gross revenue for the area, rather than the gross revenue of the individual producer. Thus, individual payments would not be linked to individual actions. Each producer's payment would, in effect, be a lump sum payment which he could not directly affect in a significant way. This area based program would maintain the producer's incentive to maximize returns from the market and virtually eliminate efficiency losses from the program.

Clearly GRIP provides an income safety net far more comprehensive than existed in previous programs. Targeting gross revenue, rather than either price or yield, makes a great deal of sense. Unfortunately, while the concept of moving from these earlier approaches to individual revenue coverage is appealing, the shift cannot be made operational with the current GRIP program without creating considerable misallocation of resources in the sector.

In our assessment, GRIP fails to meet the Policy Pillars and Principles for Action. As we have demonstrated, GRIP is not market responsive. When market prices are much lower than support levels, changes in the relative prices of crops will have little impact on the choice of crops grown by producers so that producers may add production to already glutted markets. GRIP does not encourage self-reliance as the payout from the program is more important than the level of grain output achieved. GRIP does not recognize regional diversity. GRIP off-loads much of the cost of the support for the agricultural sector to the taxpayers in the regions that produce grain. Given the size of the agricultural sector in these regions, the additional tax burden comes when these regional economies can least afford it. Finally, GRIP is not environmentally sound. The large expected payout for grains and oilseeds reduces the incentive to use marginal land to grow more environmentally friendly forage and pasture crops.

It will be interesting to observe the eventual reconciliation of the program and the Policy Pillars. The critical question is whether the Pillars will be changed or whether GRIP will be modified to meet the existing Pillars. In the interest of improved efficiency, environmental quality and equity, GRIP should be modified now.