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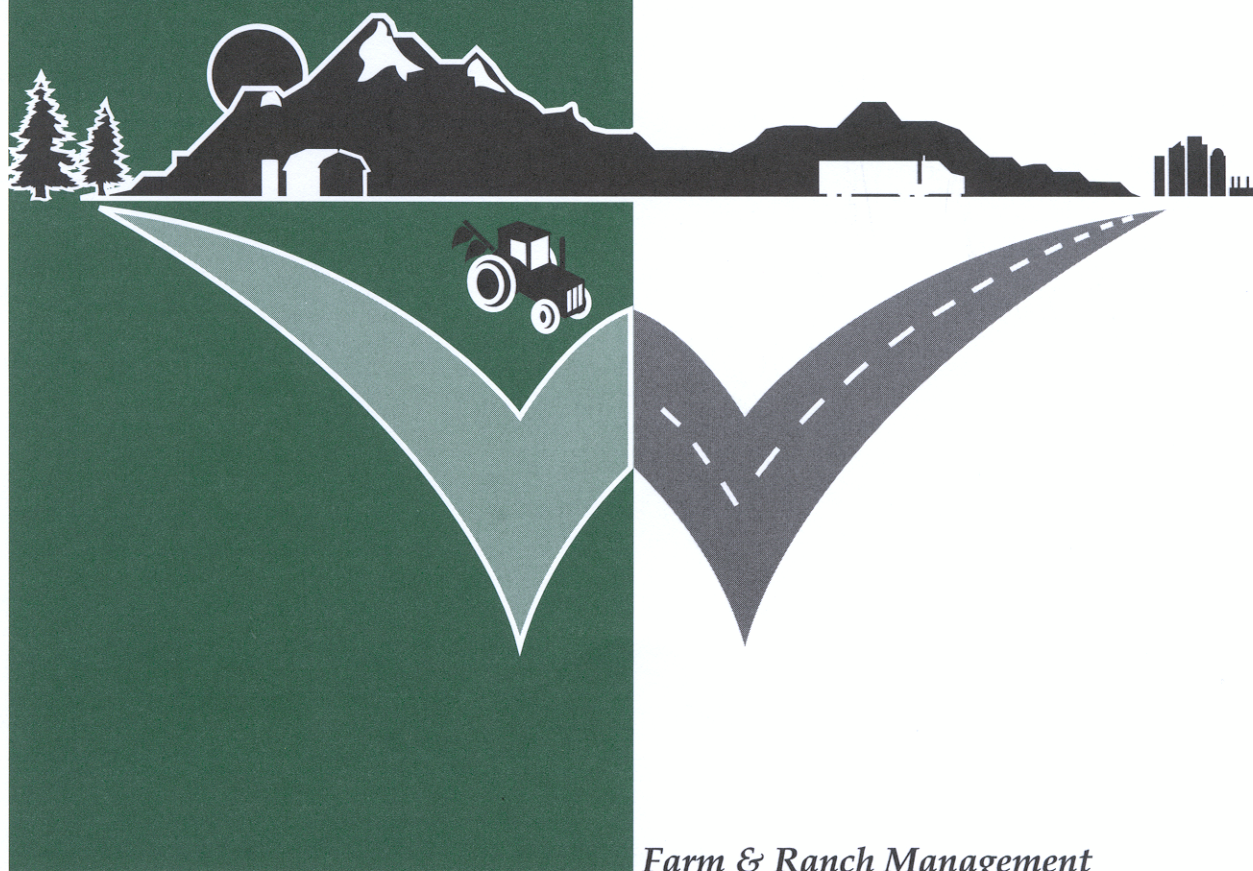
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SAY HAY AND HAY WEST: CHARITY, GOVERNMENT AND FARMER RESPONSES TO THE 2002 DROUGHT IN WESTERN CANADA

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The drought that hit western Canada in the summer of 2002 was one of the most devastating ever recorded on the Canadian prairies. Though 1961 stands out as the worst drought year in Saskatchewan, the 2002 drought affected a vast area of the northern and central part of the grain belt in Saskatchewan and Alberta, an area that normally has adequate precipitation and is immune to the worst effects of droughts. Grasshopper populations soared as a result of the persistent dryness and many producers abandoned hopes of harvesting a crop by early July. Although some moisture was received in late July and August, it was considered too late for most drought-stricken areas in central and northern Alberta and Saskatchewan, where many crops were already written off and used for grazing or harvested for livestock feed.

Droughts are not uncommon in the arid and semi-arid parts of the prairies and, while the impacts of drought in those regions also can be devastating, farmers there have adopted management techniques (such as trying to keep at least one year of stored feed on hand) that somewhat mitigate the impacts of a drought. However, farmers in the northern and central regions have not adopted such cautious habits. Many sold excess feed they harvested the previous year when the southern region was experiencing its third consecutive year of drought and sold hay at premium prices. These actions left the northern and central producers with few choices when the drought struck in their region so suddenly (and with such a vengeance) in the spring of 2002.

Impacts of the Drought

Early reports of a developing drought were widespread and caused major anxiety in both rural and urban areas. Despite using immature cereal crops for grazing, many cattle producers encountered severe shortages of feed for their livestock and were forced to either buy additional feed or remove some of their breeding livestock. Reports of beef cattle producers disposing of breeding stock after spending decades on genetic improvements were heart wrenching. Cattle were moved to leased pastures in the southern parts of the prairie. By July, sales volumes at livestock auction sales were three to four times normal in drought areas (Duckworth 2002a).

Tame hay yields and production in the drought-affected regions of Saskatchewan and Alberta were far below average. To compensate for low tame hay production, producers harvested an unusually high area of annual crops as green-feed or silage. Total 2002 production of major grains and oilseeds in Alberta was about 45% of the previous 5-year average, according to the November 2002 estimate by Statistics Canada (Government of Alberta). Poor yields and a reduced area harvested led to low production. Total area of field crops planted in Alberta 2002 was about 24.2 million acres, relatively unchanged from 2001 and the 5-year average. However, total harvested area in 2002 was estimated at only 15.1 million acres, 69% of the 5-year average acreage (Government of Alberta).

The poor growing conditions and the shortage of forage supplies contributed to a large area that was harvested for forage, grazed by livestock, or abandoned outright. An estimated 4.5 million acres or 25% of 2002 grain/oilseed crops in Alberta were harvested as forages, three times the 5-year average of 1.5 million acres (Government of Alberta).

Total production of wheat in Alberta was estimated at 3.5 million tonnes, 49% below the 5-year average and the lowest production since 1977. Barley production in Alberta was 56% below the 5-year average and the lowest since 1964. Oats production was 63% below the 5-year average and 52%

lower than the previous year. Canola production was 65% below the 5-year average. Tame hay production was estimated at 41% below the 5-year average (Government of Alberta).

The low crop production in 2002 led to a severe shortage and high prices of feed grains and forages in the drought affected region. To secure winter supplies, many producers purchased feed grains and/or forages from Manitoba, southern Saskatchewan, Ontario, British Columbia and the United States (Government of Alberta). Corn imports from the United States increased substantially and may reach a record high in the crop year of 2002/03.

Responses By Governments

The federal government has a number of farm programs that support agriculture during difficult economic times. These programs (summarized in Table 1) include the Net Income Stabilization Account (NISA), Crop Insurance and the Canadian Farm Income Program (CFIP).

The main response to the 2002 drought by the federal government was the establishment of the Drought Watch program. Its goals were to provide timely information on the impacts of climatic variability on water supply and agriculture on the prairies and to promote practices that reduce drought vulnerability. To realize the program's goals, the federal government posted a web page (http://www.agr.gc.ca/pfra/drought/index_e.htm) that contains updated information on precipitation, climate profiles, farm stress telephone lines, and links to other federal resources such as the advanced payments program¹, the rural water development program² and the tax deferral program³.

Since provincial governments in Canada share responsibility for agriculture with the federal government, a lot of political pressure was placed on the governments of Alberta and Saskatchewan to provide assistance to drought stricken farmers. The Alberta government announced a special drought assistance program whereby farmers and ranchers were eligible to receive acreage payments for crop and forage land as well as some financial assistance for farm-water development and fighting the grasshopper outbreak. The Saskatchewan government provided per head payments for breeding livestock with the level of payment dependent on the severity of the drought condition.

Charity for Western Farmers

Stories in the media of drought distress generated a large response from urban dwellers and farmers in eastern Canada. One of the most generous and well-meaning responses was the "Hay West" initiative, launched by farmers from Navan, Ontario to help prairie farmers keep their livestock during the drought.

By September 23rd, almost 1800 individuals from Ontario, Québec, New Brunswick, Nova Scotia and Prince Edward Island had donated nearly 100,000 large square and round bales and 5,000 small square bales. Although farmers donated this hay, someone else had to pay for loading, fumigating, rail or truck transportation, and distribution of the hay. Seeing a public-relations opportunity, the two transcontinental railways donated the costs of transporting hay on 187 rail cars. The federal government agreed to pay transportation costs on 377 rail cars of hay, and private donors covered the cost of shipping 72 rail cars of hay. In total, Hay West loaded 736 rail cars and 150 large trucks with large hay bales (Duckworth 2002b).

¹ The Advance Payments Program (APP) allows farmers to receive cash advances of up to \$250,000 for crops in storage.

² This program is designed to contribute to the stability and development of prairie rural areas by improving the security of good quality water in agricultural areas in Manitoba, Saskatchewan, Alberta and the Peace River region of British Columbia.

³ Under the program, owners of breeding livestock in designated areas who are forced to sell all or part of their breeding herd due to drought conditions are eligible for a one-year tax deferral on income from those sales.

While this operation began as a heartfelt symbol of the best in Canadian spirit, it provided an excellent example of unintended economic consequences of government interference in agricultural markets. The undertaking was costly. Shipping costs alone were about \$1000 per rail car from Ottawa, Ontario to Wainwright, Alberta (a distance of more than 2000 miles) – two to three times the value of the hay. The federal government paid \$3.8 million to cover the transportation and fumigation costs of the donated hay, and the costs of an administrative office and staff. Remaining costs were covered by private donations of individuals, provincial governments and corporations. The federal government also donated 1,100 large bales of hay grown at the Canadian Food Inspection Agency's research institute.

Lost in all the hay and money traveling around the country was the fact that the severe drought conditions occurred only in the Saskatoon-Edmonton corridor (an area roughly 500 miles long and 150 miles wide) and that hay yields generally were good south of there. Local hay prices adjusted in response to the increased demand in drought areas and abundant supply in the south. However, farmers in drought areas who were willing to sell hay for C\$120/ton in a normal year seemed unwilling to pay that price plus transportation costs for hay in 2002. Prominent politicians leveled charges of price gouging and these allegations provided ready fodder for the easily excitable press.

Rather than pay a higher price for hay, many farmers liquidated their herds or relied on a lottery for donated hay. By October 25th, 525 farmers in Alberta and 300 farmers in Saskatchewan had won 35-40 large bales each in the lotteries. Though the gesture was commendable and received much admiration, it did not make a significant difference to the hay shortage on the prairies. A prominent farm newspaper recently listed 275 advertisements of hay for sale (eight columns in the classified advertisements section), indicating that the “hay shortage” was more fiction than reality.

In addition, other charities held fund raising events, including: a fundraising Canadian Football League game between the Calgary Stampeders and the Ottawa Renegades, a Hay West Stomp Dance and Fundraiser in Pembroke, Ontario, and Say Hay Benefit Concerts in Edmonton and Calgary. Proceeds from donations and fundraising activities totaled nearly \$2 million (Duckworth, 2002c). More than 1,600 farmers applied for the money raised in the charity events. A ten-member committee, selected by the 4-H Foundation of Alberta, devised a ten point system to distribute donated money to feed-short farmers. Criteria used to distribute *Say Hay* funds included the number of breeding animals with current year offspring, land base, herd size, previous feed history feed on hand, other secured sources of feed and sources of off-farm income. About half the applicants for the charity were selected to receive a grant to purchase feed but many who did not receive the grant cried foul.

Overall Impacts of the 2002 Drought

The 2002 drought ravaged crop and pasture production in a wide area of Saskatchewan and Alberta. Table 2 reveals that, in spite of the drought, overall farm cash receipts were only modestly reduced from the previous year and were, in fact, substantially higher than the previous five-year average. When increased program payments were taken into account, farm cash receipts were only one percent lower than the previous year in Alberta and only 4.3 percent lower in Saskatchewan.

Despite widespread concern in the media over the possible multiplier effects of reductions in crop and hay yields, they are likely to be modest. This should come as little surprise since it is well known that Canadian farmers now receive more than three-quarters of their family incomes from non-farm sources (Culver et al., 2001). In fact, the smallest farmers (the ones who most likely suffered the most from low farm yields), on average, get virtually all of their family incomes from non-farm sources. Of course, there were many heartbreaking stories of individuals who were forced out of their chosen way of life or had to make painful adjustments of selling breeding herds. However, these were anecdotes and do not reflect the overall economic and financial consequences of the 2002 drought on the Canadian prairies. Even in the most sparsely populated agricultural region of western Canada, it takes much more than a bad year or two in agriculture to seriously affect the overall economy.

Concluding Remarks

Two outcomes from the 2002 drought warrant a final comment. First, safety net programs like NISA, Crop Insurance and CFIP are designed to assist farmers in disaster years. In response to political pressure and despite the availability of the safety net programs, the Alberta and Saskatchewan governments provided additional assistance in the form of ad hoc transfer programs tied to acreage or production. As a result, large landowners and large producers received most of the assistance. While the Saskatchewan government transferred less money to farmers than did Alberta, it did so in a more rational fashion. Transfers in Saskatchewan were based on drought severity in local districts. In contrast, all producers in Alberta were eligible for ad hoc assistance whether they were in a drought area or not.

Second, recipients of donated hay from the Hay West campaign were picked by lottery. Government assistance to fumigate, transport and distribute the charity hay benefited only a handful of lucky individuals in Western Canada while most received no assistance at all. It is highly unusual (and there is no justification) for distributing public funds by lottery.

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Table 1: Federal Safety Net Programs

Title	Description
Net Income Stabilization Account	NISA is a national program available in all provinces. Its purpose is to encourage producers to save a portion of their income for use during periods of reduced income. The calculation of the amount that a producer may contribute is based on gross sales of qualifying commodities less the purchases of qualifying commodities. Most agricultural products (except the supply-managed commodities of milk, chicken, eggs, and turkey) are included in the program. Producers deposit up to three percent of eligible net sales into their NISA accounts. The federal government then matches two-thirds and the provincial government matches one-third of the farmer contribution. In addition, the federal and provincial governments pay bonus interest of three percent above the interest paid by the financial institution where the account is held.
Crop Insurance	The crop insurance program is designed and delivered provincially. It provides insurance protection against production and quality losses caused by natural disasters. Insurance is provided under a two-tier system, where governments pay 80% of the premiums for the first 50% coverage plus all administrative costs and producers pay the remaining 20%. Producers may then choose to purchase additional coverage up to the 80% level (90% for low-risk crops); premiums for the higher coverage are shared 50% by producers, 25% by the federal government and 25% by the provincial governments.
Canadian Farm Income Protection	The Canadian Farm Income Protection (CFIP) program provides producers with ongoing protection against dramatic drops in farm income. The program is designed to cover all agricultural production by providing income stabilization at 70% of an historic average. The claim-year margin is based on income tax figures. Eligible expenditures include farming expenses incurred and reported for a claim year. The historic reference period margin is based on combined historic NISA and income tax data. Using such a reference period as the basis for payment increases CFIP's ability to provide funding to those who need it most and ensures that all producers are treated equitably, regardless of the commodities they produce. CFIP complements the NISA and crop insurance programs. Although those eligible for CFIP are not required to participate in NISA, a number of linkages exist between NISA and CFIP to avoid duplicate support payments. Farmers had until February 28, 2003 to apply for assistance for the 2002 CFIP program and the extent of the claims was not known at the time this article was written.

Source: Culver, et al. 2001.

Table 2: Farm Cash Receipts by Province

	Avg 97-01 \$ million	2001 \$ million	2002 \$ million	02 vs. 01 % change	02 vs. Avg % change
British Columbia	1,968	2,236	2,200	-1.6%	11.7%
Alberta	7,043	8,307	8,227	-1.0%	16.8%
Saskatchewan	5,871	6,550	6,270	-4.3%	6.8%
Manitoba	3,165	3,648	3,755	2.9%	18.7%
Ontario	7,517	8,534	8,471	-0.7%	12.7%
Quebec	5,196	5,729	5,485	-4.3%	5.6%
All other provinces	1,157	1,250	1,289	3.1%	11.4%
CANADA	31,916	36,254	35,697	-1.5%	11.8%

Source: Agriculture and Agri-food Canada.