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ECONOMIC DEVELOPMENT PROSPECTS IN SASKATCHEWAN

One of a series of reports
on development prospects
in the provinces, territories,
and regions of Canada
prepared by *Canada*
the Department of Regional Economic Expansion



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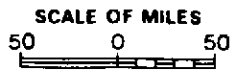
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ECONOMIC DEVELOPMENT PROSPECTS
IN SASKATCHEWAN

SASKATCHEWAN

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PREFACE

In 1973, the Department of Regional Economic Expansion issued a series of reports on the economic circumstances of each of the provinces and their prospects for development. These reports were useful in discussions which led to the successful implementation of a new federal-provincial mechanism, the General Development Agreement, which was designed as a flexible tool to pursue regional development in Canada. This mechanism has as its central objective the formulation of integrated federal-provincial regional development strategies based on the identification and pursuit of development opportunities.

With the aid of hindsight, it now appears that the mid-1970s represented a watershed period in many respects, as fundamental realignments and adjustments occurred internationally and within Canada. These considerations, in conjunction with the recent public discussion concerning the appropriate roles of business, labour and governments in the economy, suggest that this is an opportune time to review in a comprehensive fashion some major economic issues and factors affecting regional development. This report expands upon previous DREE reviews of provincial economic circumstances and opportunities by examining the major factors affecting the provincial economy's performance. In addition, it explores the policy issues and instruments which affect development planning and which have a bearing on the potential for realizing development opportunities.

The analysis begins with a detailed description of factors relating to economic development and an assessment of the economic performance of the province. This section provides a context for the next section which deals with specific development problems facing the province and the issues which bear on its economic development. Federal and provincial approaches to development are then discussed. The following section on development opportunities is the central focus of the report. In this section, the comparative advantages of the province are described and potential economic development opportunities are highlighted.

It is a truism that, over time, regional economic circumstances and development opportunities will continue to change and evolve. In a similar vein, it is apparent that economic development will continue to require an evolving spirit of policy coordination within and between various orders of government. In this context, it is hoped that this report will serve as a backdrop to federal-provincial discussions on the economy and to the further formulation and implementation of integrated federal-provincial development strategies and, at a broader level, contribute a spatial dimension to economic policy-making over the medium term.

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1. OVERVIEW

The performance of the Saskatchewan economy has been and remains heavily dependent on the production of unprocessed natural resources for foreign markets. Traditionally, the narrow agricultural basis has produced uncertain and often highly volatile economic conditions. Changes in international grain markets have caused wide swings in income employment opportunities and the revenue base of the Saskatchewan government. Periodic declines and expansions in population have also occurred in response to these highly variable economic conditions.

Provincial economic prospects have changed markedly in recent years. The discovery and subsequent development of oil and gas, heavy oil, coal, potash and uranium have increased the basis for primary production. These recently developed natural resources now account for approximately one third of primary sector output.

Since 1974, rising energy prices have enhanced Saskatchewan's economic position. Anticipations of sustained demand for the province's fuel and grain production into the early 1980s are now precipitating a development boom. Exploration, initial construction and benefits derived from uranium, heavy oil, coal and potash expansion are being experienced and may continue to substantially transform the structure of Saskatchewan's natural resource economy. The long-term benefits from the uranium sector, however, may be realized more gradually as a result of recent environmental problems and public opinion associated with nuclear generating plant development.

In spite of the resource-generated economic growth, Saskatchewan is making only limited progress towards a more diversified economic structure. Investment is concentrated in the capital-intensive, technologically advanced primary resource sectors. The capital and skilled manpower requirements of these projects may actually inhibit expansion in the small provincial manufacturing industry, in spite of emerging market opportunities. Saskatchewan's manufacturing expansion is already constrained by its limited provincial markets, poor access to distant markets, the paucity of entrepreneurship and frequent absence of industrial infrastructure in the traditional agricultural and service economy.

Many of Saskatchewan's northern, rural and native residents remain excluded from the benefits of provincial expansion through isolation and restricted access to opportunities despite arrangements to alleviate these

circumstances through federal-provincial and provincial-private sector initiatives. Those who migrate to the centres of economic growth frequently find that their education, skills and training have limited application in the industrialized resource economy. For many native people, problems of urban adjustment are compounded by barriers to the labour market.

Development in Saskatchewan is highly dependent upon a few key federal and provincial policies and regulations. Federal energy, agriculture and transport policies have been instrumental in determining the recent pace of resource based development in the uranium, oil, potash and wheat industries. Provincial resource policy has directed substantial levels of public investment through Crown corporations, direct provincial incentives and concessions, and legislative controls particularly in agriculture, potash, mining, forestry, oil and gas.

Comparative economic advantage in the Saskatchewan economy lies in agricultural production, mineral extraction, processing of natural resources, and the supply of machinery, equipment, transmission components and services to those industries. The province holds numerous opportunities for extraction, production and processing. Significant manufacturing opportunities may still be linked to anticipated resource and agricultural developments. In the isolated northern economy, tourism, minerals, furs and fish may provide yet a further resource base for growth.

Public policy initiatives are necessary to fully realize and sustain Saskatchewan's present buoyant economic outlook. Efficient industrial environments are needed in traditionally agricultural centres and in cities if some of the manufacturing and high-technology service benefits from western natural resource expansion are to be fully realized. Supportive federal energy, resource, transport, and trade policies will be required to maintain momentum for growth in leading resource sectors.

Under the General Development Agreement and other ongoing programs, federal-provincial initiatives have been taken to promote northern development, mineral utilization, iron and steel, tourism and certain rural developments. The GDAs have been given substance by recently concluded subsidiary agreements on agricultural productivity, continued assistance in developing the province's mineral base, improvements in forest industry productivity, improved water supplies and drought proofing. These initiatives should maintain the momentum of recent productivity gains and diversification.

Additional programs may also be developed to improve the levels of native Indian participation in the provincial economy with special application to the circumstances of these people in urban as well as non-urban settings.

Realization of even a small portion of the resource-related manufacturing opportunities that are emerging in western Canada will require a large expansion in the province's manufacturing sector and its capability to respond. Increased energy and resources will need to be directed towards exploiting and realizing the manufacturing and servicing opportunities that emerge. Incentives for entrepreneurial development and the establishment of attractive and competitive industrial and manufacturing environments are important considerations. The opportunity to identify and capitalize on spill-over effects of the substantial financial and technical resources and industrial activity occurring in Alberta and British Columbia needs to be taken into account. All of these suggest the need in the near future to focus joint federal-provincial attention on a broad provincial industrial strategy, a rural development strategy, service sector development, high-technology industrial support, and long-term development of the tourism sector.

2. ECONOMIC DEVELOPMENT FACTORS

2.1 Background

Resource dependence on foreign markets continues to dominate the Saskatchewan economy. In 1977, the primary sectors accounted for nearly two thirds of provincial goods-producing output and 75 per cent of provincial exports (Chart 2.1). Manufacturing exports are dominated by sales of resource related manufactures such as forest products and farm machinery.

CHART 2.1

SASKATCHEWAN ECONOMIC STRUCTURE AND FOREIGN TRADE ORIENTATION, 1977

<u>SELECTED INDUSTRIAL SECTORS</u>	<u>PER CENT OF REAL PROVINCIAL PRODUCT IN GOODS PRODUCTION</u>	<u>PER CENT OF TOTAL PROVINCIAL EXPORTS SALES</u>
Agriculture	45.3	62.3
wheat and grains	(34.0)	(51.4)
livestock and other	(11.3)	(10.9)
Fishing, Forestry and Trapping	0.6	0.6
Mining, Oil and Gas	<u>18.3</u>	<u>12.7</u>
TOTAL PRIMARY	64.2	75.6
MANUFACTURING	11.6	20.1
OTHER	<u>24.2</u>	<u>4.3</u>
TOTAL	100.0	100.0

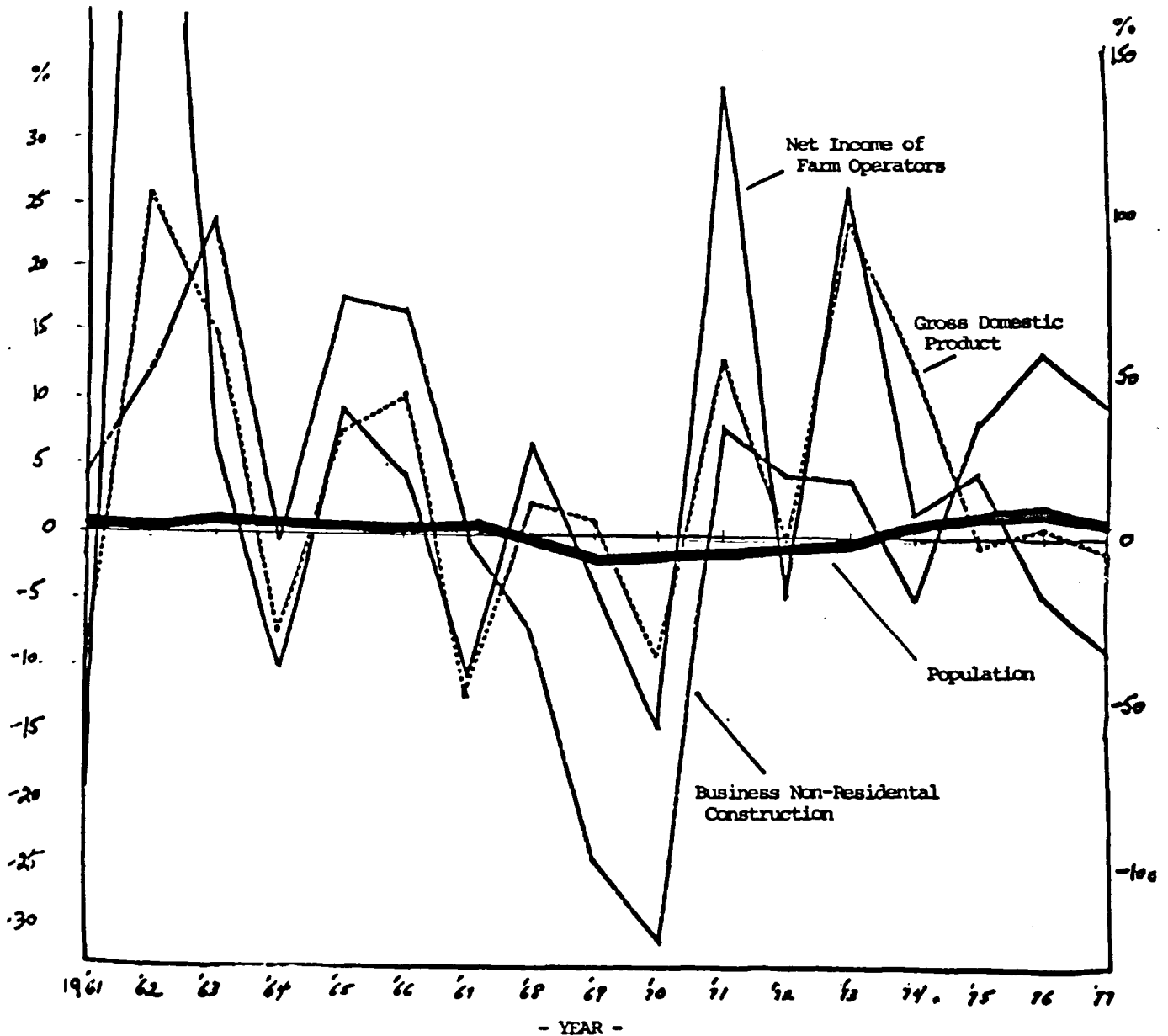
Source: Conference Board in Canada estimates for real provincial product, and adjusted Statistics Canada export data.

Thus, in spite of the province's broader economic base, it remains highly vulnerable to foreign export market conditions. Traditionally, changes in international markets have led to dramatic fluctuations in provincial incomes and employment opportunities and have been accompanied at times by considerable migration (Chart 2.2). The population of Saskatchewan, for example, was approximately the same size in 1931, 1960 and 1976. Declines in the province's population were experienced as

CHART 2.2

PERCENTAGE CHANGE IN SELECTED ECONOMIC INDICATORS
SASKATCHEWAN 1961 - 1977
(In Constant Dollars)

(Percentage Change: Net Income of Farm Operators)



(Percentage change: Others)

(Source: Various including Saskatchewan Bureau of Statistics and National Account deflators from Statistics Canada)

recently as 1974. Decades of dependence on specialized agricultural activity and the associated infrastructure, and the consequent settlement and labour skill development, make it more difficult to realize a more diversified industrial economy. By assessing opportunities, this paper delineates avenues for utilizing provincial resource potential to meet future markets and likely sub-regional development patterns in order to suggest possible development policies.

2.2 Factors

A variety of factors has been identified as holding particular significance for Saskatchewan's economic future. These include the province's natural, energy and human resource endowments, the markets for production and the geographic distribution of activity.

2.2.1 Resource Endowments

(a) Geography

Saskatchewan has a land area of some 570 000 km² and a further 82 000 km² of freshwater lakes and rivers, sub-divided into broad geographic regions identified as the remote north comprised largely of the Canadian Shield with its extensive mineral deposits, the central agro-forest fringe, and the southern agricultural areas (Chart 2.3, page 7).

The Canada Land Inventory identifies over 16.2 million hectares of "good crop lands" (CLI classes 1-3) within Saskatchewan on the basis of an evaluation of soils, drainage and climatic factors. This represents 36.6 per cent of total Canadian good crop land. In addition, there are 12.1 million hectares capable of sustaining certain agriculture activities (Chart 2.4).

CHART 2.4

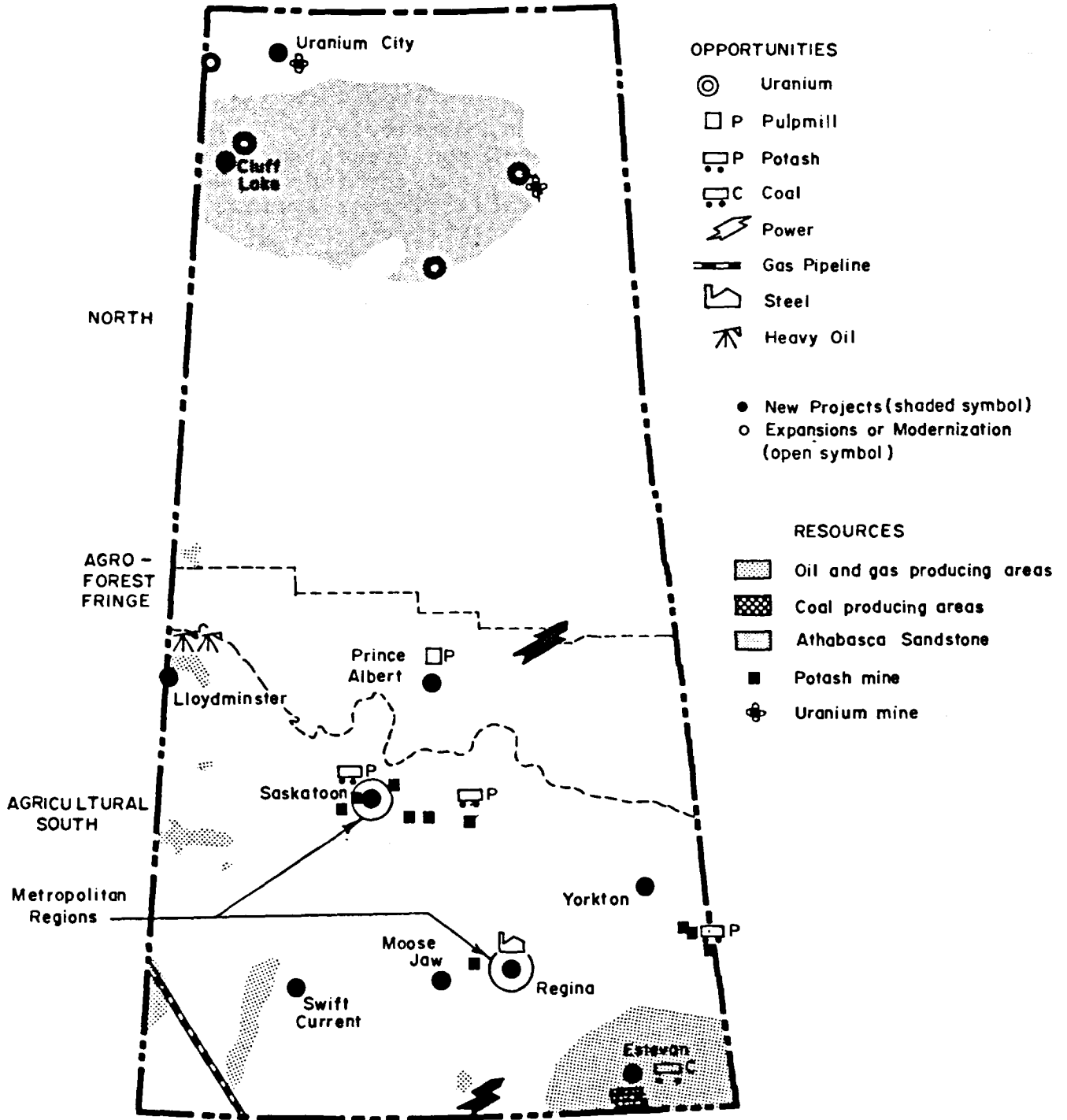
CANADA LAND INVENTORY SOIL CAPABILITY FOR AGRICULTURE, SASKATCHEWAN

<u>CANADA LAND INVENTORY CLASS</u>	<u>HECTARES</u>	<u>% OF CANADA</u>
1 (Best Land)	999 678	24.2
1-3 Total (Good Land)	16 296 311	36.6
1-5 Total (Arable Land)	28 547 379	30.1
6 (Perennial)	2 919 902	28.8
Organic Soils	1 775 680	10.7

Source: Environment Canada, Land Capability for Agriculture, Ottawa, April 1976.

CHART 2.3

SASKATCHEWAN'S NATURAL RESOURCES
AND BROAD DEVELOPMENT REGIONS



Currently, approximately 72 per cent of provincial farmland is under cultivation for grain, forage and pasture. Improved pasture, tame hay and forage crops account for another 1.8 million hectares. Some 28 per cent is unimproved land in the form of woodlots, treed windbreaks, unimproved hay land, native pasture, sloughs and marshes.

Surface water covers 12.7 per cent of the province and is concentrated mainly in the north. Water supply is relatively scarce in southern Saskatchewan, particularly in the Souris River, Lodge Creek, Battle Creek and Frenchman River basins. Most farm produce comes from dryland farming, although a limited acreage served by irrigation facilities is available near Outlook where about 13 354 hectares are irrigated out of a possible 16 997 hectares, and in southwest Saskatchewan, where PFRA and the province operate various irrigation projects. The amount of irrigated land in Saskatchewan is very small compared to the irrigated portion of Alberta.

Extensive forests of fir and aspen exist in the central and northern areas, covering approximately 50 per cent of the province. Timber stands currently utilized commercially, occupy a strip of land roughly 320 km wide stretching diagonally across the middle of the province. Further north are forests that vary in quality from potentially valuable commercial timber to the sparse woods near the Northwest Territories border and throughout the Canadian Shield. In total only 50 per cent of the allowable softwood cut (fir) and 17 per cent of the allowable hardwood cut (aspen) are being utilized annually. These woods constitute the habitat for many fur bearing animals including muskrat, lynx, wolf, coyote and squirrel. Many northern lakes have commercial quantities of freshwater fish such as lake trout, white fish, pike and pickerel.

(b) Energy Resources

Saskatchewan has a diverse and rapidly growing energy base. In southern Saskatchewan lignite coal resources are estimated at some 8.3 billion tonnes for use within the province for thermal power generation.

The province has about 30 per cent of Canada's uranium reserves. Recent provincial estimates suggest that approximately 180 000 tonnes of uranium oxide are drill-indicated and probable through both open pit and underground mining techniques. Recent finds at Rabbit Lake, Key Lake and Mid West Lake, located in the remote northern country of the Athabaska shield, are among the richest deposits in the world. Uranium concentrations average a grade of 13.6 kg per tonne but range from 3 to over 45 kg/tonne. These exceed the world averages of 1.4 kg/tonne for commercial deposits. Even the most important Australian prospects grade only about 3.6 kg/tonne.

Saskatchewan has an estimated 640 million barrels of recoverable petroleum at today's prices and technology, representing ten years supply at current production rates. Approximately 30 per cent of these reserves are light gravity oil located in the southeast and west central areas. Much of the remaining recoverable reserves are medium-gravity crude found in the southeast near Weyburn and in the southwest near Swift Current. Some deep wells in the Williston basin near Estevan have been promising although they are not now commercially viable.

Heavy-gravity oil is found in the west central areas near Lloydminster and Kindersley. Although there are many heavy-gravity crude reservoirs in these two areas, the viscosity of the oil and the unconsolidated nature of the sand reservoirs generally result in low recoveries. While estimates range to a high of 27 billion barrels of oil in place in the general vicinity, including a part of Alberta, the amount of oil likely to get to market is less than 5 billion barrels even under optimistic recovery rates approaching 20 per cent.

Saskatchewan has an estimated 24.4 billion m³ of proven natural gas reserves at today's prices and technology, and an additional 36 billion m³ classified as probable reserves. Although not a large amount in national terms, it represents an important supply of natural gas for the province and exploration continues.

Undeveloped hydro-electric potential in the province is located mainly in the north. Potential exists for at least one 300-megawatt generating station to harness some of the capacity on the Churchill, and another three stations on the North Saskatchewan River with a total capacity of 1 100 megawatts. Public hearings have been held on developments on the two rivers and it now seems probable that hydro development in the 1980s will commence on the North Saskatchewan site at Nipawin.

(c) Industrial Minerals

There are enormous deposits of very high-grade potash in central Saskatchewan. The deposits extend from Lloydminster in the west to the Manitoba border near Esterhazy. According to provincial sources, reserves within reach of conventional mine shafts are estimated at 3.5 billion tonnes of potassium oxide equivalent. A further 48 billion tonnes of potassium oxide equivalent are estimated to be available for recovery with solution mining techniques. At current rates of consumption, Saskatchewan has enough potash to supply the entire world for about 3 000 years.

Other deposits found in Saskatchewan include the metallic minerals copper, zinc, iron ore; the industrial minerals sodium sulphate, limestone, silica sand, sulphur, salt, clays (bentonite, refractory and others); and organic soils including peat moss. The Hudson Bay Mining and Smelting Co. Ltd. complex of mines in the Flin Flon area has reserves of 19 million tonnes of copper and zinc metal in Saskatchewan and Manitoba. These represent about 11 years of production at current rates. There are 21 major deposits of sodium sulphate in the province with total reserves of about 61 million tonnes of salt cake. Organic soils, including peat moss, are located in the northern agricultural fringe and account for approximately 316 000 hectares.

(d) Human resources

Currently, Saskatchewan has a population of 955 000. Persistent out-migration in the highly mobile western labour market has historically restrained population growth. The province's share of the Canadian population declined from 5.1 per cent in 1961 to 4 per cent in 1979. In addition, the population has aged considerably faster than the national average so that today 11.2 per cent of the provincial population is older than 65 years in contrast to the Canadian average of 8.9 per cent. The ageing population holds considerable implications for both the provincial tax base and efforts related to the costs and location of services. New commercial services may be generated by the general level of affluence and by the new demands of the older segment of the population for housing, commercial services, recreation, transportation, and so on. It is important to note that towns and villages are important locations for the over-65 population. By 1977 some 18 per cent of their populations was in this age category, compared to 10.1 per cent for cities, and under 8 per cent for all other areas.

Approximately 45 per cent of the provincial population is defined as rural. Rural farm population declined by 17.5 per cent between 1971 and 1976. These losses were partially offset by a 7.5 per cent increase in the rural non-farm population, as many farmers moved into small rural communities. The urban population has grown by approximately 4.2 per cent since 1971 and is increasingly concentrating in Regina and Saskatoon which now account for nearly one third of the province's population.

The provincial population supported a labour force of 421 000 in 1978. One quarter of these worked directly in agriculture. Much of the non-agriculture labour force was employed in servicing the farm sector to varying degrees. Labour skills are therefore most strongly developed in the agricultural and agricultural service sectors.

Saskatchewan has a diverse cultural heritage. Nearly 20 per cent of the population reports a mother tongue other than English or French (compared to a national average of 13 per cent). The main ethnic backgrounds include German, Ukranian, Indian (Algonquin, Athabaskan, Cree, Saulteau) and Polish, as well as English and French. This ethnic diversity is found throughout the province.

Of special concern is the situation of native Indians for whom cultural background tends to coincide with economic and social disadvantage. The native population, estimated in 1976 at as high as 129 954 people including Status and non-Status Indians, formed about 14 per cent of the total provincial population. Some 54 000 or 42 per cent of native people live in urban centres. The largest number live in Regina (over 20 500 or some 38 per cent). Saskatoon and Prince Albert each have about 5 per cent of the urban native population, and the remaining 50 per cent are located in various smaller urban settlements across the province.

Total Treaty Indian population for Saskatchewan in 1976 was about 43 300. Of these, an estimated 71 per cent lived on reserves and the remainder in other locations including urban areas. The Indian reserve population grew by about 5.8 per cent between 1971 and 1976 in contrast to a decline in overall provincial population of 0.6 percent. About 5 300 Status Indians, or 12 per cent of total Status Indians in the province, live in Regina.

Traditional hunting, fishing and trapping pursuits for native peoples in the north, and the public income support programs existing on reserves throughout the province, have not permitted industrial labour skills to develop. Unemployment rates for native people are between four and 15 times greater than the provincial average, depending upon location.

2.2.2 Market Environment

The markets for current Saskatchewan production are largely dependent upon world economic conditions. In addition, several specific factors are of importance in the markets for the province's major natural resource exports.

(a) Grain

Saskatchewan produces a significant share of world grain exports and prices are determined by harvest conditions at home and in other producing nations, levels of world inventories, and efficiency of delivery to export markets. These are crucial to the buoyancy of the Saskatchewan economy. Currently, the Communist Bloc countries, developing economies in Asia and China,

and the developed economies of Japan and the United Kingdom are important destinations for Canada's and hence Saskatchewan's grain. Present indications by the Canadian Wheat Board suggest that Canada's international grain exports could increase by 50 per cent to 30.5 million tonnes by 1985. While production could in all likelihood meet this target, transportation bottlenecks will have to be overcome.

(b) Potash

Most provincial potash exports have traditionally been destined for American markets. As with prospects for firm international wheat and feed grain markets in the 1980s, demand for potash from these areas should remain firm. Between 20 and 25 per cent of Saskatchewan potash is directed towards offshore markets, largely in Asia and South America. Although transportation efficiency to these export points is central to the international competitiveness of Saskatchewan potash against Russian and European potash suppliers, the province asserts that transportation efficiency is more critical to the North American market. Further growth of the industry will accelerate benefits received from special servicing industries to the potash industry locating the province.

(c) Energy Resources

Oil and uranium dominate provincial exports of energy fuels. Both fuels are dependent upon American energy requirements, particularly in the fuel-deficit upper Mid-West for oils, and from the entire United States for nuclear power generation. In the latter case, environmental issues surrounding safety of power generating plants and storage and disposal of nuclear wastes may become a significant factor in future market growth. However, markets for both commodities are expected to be stable and to grow through the 1980s. Federal export regulations, as applied through Atomic Energy of Canada and the National Energy Board, will therefore be instrumental in determining the exact level of foreign sales of the Saskatchewan product.

(d) Other Resources

Consumer demands in the United States are significant for a variety of resource products including forest goods, furs and fish. Saskatchewan, however, may represent a growing market outlet for its own wood products in future years. Coal production has been tied closely to expansion of provincial thermal generating capacity to meet domestic and some export demand.

2.2.3 Sub-Provincial Distributions

It is possible to distinguish four geographic sub-regions of the Saskatchewan economy. These are the agricultural south, the inter-related metropolitan Saskatchewan, the agro-forest fringe and the remote north (Chart 2.3).

(a) Agricultural South

Grain, and to a lesser degree livestock, form the economic basis for the agricultural south. The area contains the majority of Saskatchewan's best agricultural lands and 421 000 people, or less than one half of the provincial population. Farming conditions vary markedly through the region depending upon soil type, water supply, weather and market accessibility. The primary wheat producing areas stretch from the southeast to the northwest of the sub-region. In the wetter and heavier soils to the north, rapeseed, forage crops and livestock are attractive complements to wheat production. In the dry southwest, extensive range lands support a large cattle industry.

Many small centres and larger cities such as North Battleford, Yorkton, Swift Current, Moose Jaw, Weyburn and Estevan have developed, servicing the agricultural economy. The largest of these centres tends to have incomes above provincial averages, although employment opportunities are concentrated generally in the farm service and farming sectors.

In addition to agriculture, the region contains many industrial minerals and fuels. Potash development in the south-east and around Saskatoon has transformed the economic base of centres such as Esterhazy, Lanigan, Allan and Delisle. Coal development has been instrumental in the recent growth of Estevan and Coronach, and heavy oil development is already having a major impact on the Lloydminster area. Conventional oil and gas reserves are found across the southern part of the province, particularly in Kindersley, Kerrobert, Weyburn, Estevan and Swift Current.

(b) Metropolitan Saskatchewan (Regina and Saskatoon)

These two metropolitan areas, with a combined population of about 300 000 accounted for over 31 per cent of the provincial population in 1979. Their combined share of the provincial population has grown by 8 per cent since 1971. They are important distribution, warehousing, government and education centres for both the province and for western Canada. Both cities are becoming more industrialized and increasingly compete within a network of interconnected western cities, including Winnipeg, Calgary, Edmonton and Vancouver.

Regina, the capital, is located in the centre of the great wheat plains surrounded by deep clay soils that hold moisture well and have high potential yields. Surrounding agricultural resources include grain, livestock, meat and feed mill processing. Natural resources in the surrounding region include oil, clay, potash, sand, salt and gravel. From 1971 to 1978, employment in the public sector doubled to 17 000 with manufacturing employment remaining almost constant at 6 000 (although between 1961 and 1971 it had grown by 26 per cent). Although some agricultural machinery is manufactured in Regina, most manufacturing is in the food and beverage and primary metal sectors, the latter dominated by the IPSCO steel mill and pipe plant.

Ross Industrial Park was established in Regina in 1962. By 1977 it accounted for 66 per cent of the city's industrial tax base. Wholesale and transportation industries comprise 79 per cent of all permits issued, 77 per cent of the floor space and 74 per cent of the land sold. By 1978, there were a total of 1 420 hectares banked for industrial development in the city, including 582 hectares in Ross Industrial Park and 843 hectares of other land.

Regina's population grew by 7.3 per cent between 1971 and 1976, reaching a level of 149 593. The current population stands at over 155 000. In 1978 per capita retail sales in Regina were \$4 378, and per capita disposable income reached \$7 800: 44.8 per cent and 20.2 per cent respectively above the provincial average.

As already noted, there are currently some 20 500 native people living in Regina, or 14 per cent of total city population. Forecasts show that this group could increase in number to 33 500 by 1986 due to off-reserve migration and rural-urban movement of non-Status Indians. A large number of these people are poor and receive some form of social assistance.

Saskatoon is the second largest city, located in south-central Saskatchewan. Surrounding natural resources include deposits of potash, clay and sodium sulphate. Due to its proximity to the province's potash mines and the associated secondary industry, it is known as the potash capital of the world. It had a population of 133 750 in 1976 and had grown by 5.8 per cent since 1971. The current population is estimated at 145 000 persons. The city is in a unique geographical location since it benefits from surrounding and northern resource development, and continues as an important agricultural service centre to the surrounding farm community. In 1978, per capita retail sales of \$4 013 and per capita personal disposable incomes of \$7 780 were 42.0 per cent and 19.9 per cent respectively above the provincial average. The city also houses the University of Saskatchewan which is contributing to the city's ascendancy as a

research centre. It is becoming a centre for mining head offices, including the Potash Corporation of Saskatchewan, the Saskatchewan Mining and Development Corporation, Amok Ltd. and Gulf Minerals Canada Ltd.

Saskatoon has enjoyed a significant share of the industrial growth and diversification occurring in the province. Of 110 new manufacturing industries established in the province between 1971 and 1974, 31 located in Saskatoon, 17 in Regina and 62 in other areas. (But total manufacturing industries in Saskatoon remained at 142 in 1971 and 1974.) The city remains heavily committed to the food and beverage industry, although that share has decreased slightly over the past decade to 44 per cent of manufacturing employment.

The establishment of Saskatoon as a centre for new commercial service industries in Saskatchewan (because of the city's key location in provincial resource development activities) opens up significant opportunities. These activities will require the city to expand the physical and environmental features necessary to capitalize on new opportunities.

(c) Agro-Forest Fringe

This region covers a 320 km strip of land in the mid-northern part of the province. The southern part of the region contains both marginal and arable agricultural lands, and the northern portion has dense stands of aspen, poplar and fir trees.

The population in 1978 was 204 800 or 21.4 per cent of total provincial population. Per capita personal disposable income in 1978 was \$5 119 -- approximately 80 per cent of the provincial average and representing in many cases the combined income from agricultural and forestry employment pursuits for local residents. Prince Albert is the major urban centre for this area.

Forestry is the predominant industry in the agro-forest fringe area. The industry remains centred in the kraft pulp mill operated by Prince Albert Pulp Co. Ltd. (PAPCO), and also sizeable mills producing studs, waferboard and plywood at the two secondary centres of Hudson Bay and Meadow Lake. Smaller dimensional lumber mills are located in Bodwin and Carrot River.

In addition to forestry related operations, the region (and particularly the city of Prince Albert) plays an important servicing role in northern mineral related development. Prince Albert's population grew by only 0.6 per cent between 1971 and 1976, prior to an accelerated growth of 3 per cent in two years to reach a population of 29 500 in 1978. Per capita retail sales

and incomes were well above the provincial average. There were 996 employees in manufacturing in the city in 1976, representing a decrease of 16 per cent from 1970. About half of these employees worked for the pulp mill.

Mixed farming of rapeseed, forage and feed grains are the principal crops in the region and supply the largest concentration of the province's livestock activity. The shorter growing season and poorer soils (of this sometimes marginal farming area) have supported a large and still growing rapeseed production.

(d) Remote North

Northern Saskatchewan is an area of sharp contrast to the southern part of the province in terms of population levels and distributions, standards of living, sources and levels of income, and public administration. Relative underdevelopment, low levels of living standards (social and physical), high costs for those goods and services that are available, remoteness, a sense of wilderness, and scattered native settlements are some of the basic characteristics of the region.

Some 25 000 people live in the remote north, and the area (Northern Administration District) is administered by the Department of Northern Saskatchewan. Over three quarters of the residents are of native ancestry, living in many small communities. The smaller number of white, non-native residents live mostly in the semi-industrialized communities of Uranium City, La Ronge and Creighton.

The remote north has many mineral resources. Uranium is currently under development, and is likely to provide major financial benefits in the medium term to Saskatchewan, through mineral royalties. Mining is the predominant industry of Uranium City and Creighton (copper, zinc) while the public sector is the main employer at La Ronge. Future mining fly-in camps, such as the one at Wollaston Lake, could also be developed at Key Lake and Midwest Lake when the potential uranium deposits are developed. The Cluff Lake mine will likely be of this type also.

The traditional sectors of hunting, fishing, trapping and small-scale forestry operations, and part-time work on various public construction projects, are the main employment generators for the people living in the remote communities.

2.3 Economic Performance and Prospects (1971-78 and Trends to 1985)

2.3.1 General Performance

The gross domestic product in Saskatchewan approached \$9.8 billion in 1978, following a growth in real terms of 37.8 per cent since 1971. The provincial increase was above the 32.8 per cent Canadian rise in real output resulting from province-wide variations in the performance of agricultural, mining and goods producing industries. Growth, however, has been steady following the rise in grain markets in 1974. The goods sectors accounted for 46.2 per cent, and the service sector 54.6 per cent of provincial real domestic product in 1978.

Swings in population continue to be affected by performance of the agriculture sector and its export markets. From 1971 to 1974, population dropped from 926 000 to less than 900 000. However, by 1978 the population had risen to 955 000. Total net in-migration to Saskatchewan from 1976 to 1978 was 10 800 persons.

Housing starts increased dramatically during the 1970s. In the province's cities of over 10 000 inhabitants, a steady increase in residential construction activity has occurred since 1971 when 2 324 units were started. By 1977 this had reached a peak of 9 328 starts. By mid-1979 starts stood at 4 344. Strong housing demand has resulted from rural-urban shift and the subsequent growth of the cities (particularly Regina and Saskatoon) from some provincial in-migration, and from periods of buoyant resource markets which increased personal income levels.

From 1971 to 1978, per capita personal income was generally below the Canadian average with the exception of 1975 and 1976 when farm incomes were very high. Farm income historically has represented 15 to 25 per cent of total personal income in Saskatchewan, depending largely on grain markets. In 1971, per capita income was 80.3 per cent of the national average. By 1978, it had risen to \$7 388 or 92 per cent of that average. Average weekly wages and salaries (industrial composite) are normally lower than the national average. In 1978 this figure stood at \$251 for Saskatchewan compared to \$267 nationally.

Present conditions and circumstances suggest continued growth in real domestic product over the medium term due to a strong resource sector and the short-term impact of several resource related major projects. Population could reach one million persons by the mid-1980s. However, the highly capital-intensive nature of the development projects could result in only a small number of direct, long-term employment opportunities.

Employment growth will likely take place in the Crown corporations, uranium and heavy oil development. The province's share of either national or western Canadian employment growth may not be maintained once the on-going and projected construction activities are completed.

2.3.2 Labour Market

In 1978, there were 421 000 people in the Saskatchewan labour force.

Employment and labour force growth in Saskatchewan have been well below national levels. Unemployment rates through the early 1970s remained low at 2 to 4 per cent: employment growth has exceeded the labour force increase, and in many years Saskatchewan residents migrated further west. Native Indian unemployment rates, although not included within historical statistics, are at least four times as high as province-wide rates. In 1977 and 1978, unemployment rates have approached 5 per cent as out-migration has been replaced by in-migration in anticipation of employment opportunities in the resource sectors. Recent experience has not shown a marked increase in goods-producing employment growth.

2.3.3 Investment

During 1978, Saskatchewan capital and repair investment increased by 7.9 per cent in current dollars, reaching a level of \$3 071 million. This compared to a national increase of 7.7 per cent. In real terms, from 1971 to 1978, total investment in Saskatchewan grew at almost twice the national average, and the provincial share of Canadian investment grew from 3.7 per cent to 4.8 per cent. The increase was due largely to strong primary and construction investment and a rise in public investment expenditures.

Manufacturing investment, historically small in Saskatchewan, doubled between 1971 and 1978. In 1971, manufacturing represented 4 per cent of total investment. By 1978, this proportion declined to 2.8 per cent. New manufacturing investment on a per capita basis was \$58 in Saskatchewan compared to \$277 nationally in 1978.

Investment climate for the primary and related construction sectors is strong as a number of energy related major projects in uranium and heavy oil are expected to come on-stream throughout the 1980s. These include three potential uranium mine developments, each with a capital cost of about \$300 million; upgrading of coal mining facilities and potash expansions; construction of the 256 km Saskatchewan portion of the Alaska Highway pipeline; many heavy oil developments in the Lloydminster

area; expansion of IPSCO at Regina; a possible additional 300 megawatt power plant on the Poplar River; and a possible 250 megawatt hydro plant at Nipawin.

Together, these major projects could contribute approximately \$3.3 billion of investment capital, and up to 10 000 person-years of direct construction related employment to the Saskatchewan economy over the next five to ten years.

Over this period, there is also expected to be a steady flow of financial, trade, commercial and institutional construction activity. In part these would be secondary and service related industries linked to the growing resource sector, and in part due to social and economic infrastructure expenditures of the public sector. Much of this commercial-services investment is focusing on Saskatoon.

The investment climate for manufacturing activities in the province can be best described as "stable" over the next few years. While some increase in both resource and non-resource manufacturing is expected, it is unlikely that new manufacturing investment will be much greater than its normal share of 1 of per cent total Canadian manufacturing investment. This is opposed to a normal share of 5 per cent of total investment, due to the importance of the primary sector.

2.3.4 Sectoral Review

(a) Agriculture

Agriculture normally accounts for 40 to 50 per cent of total goods produced in Saskatchewan. In 1978, the province produced 30 per cent of Canada's agricultural output and showed a real domestic product increase of 18.1 per cent from 1977.

Agricultural performance has been strong since 1974 because of high grain prices and record crops. Farm cash receipts have exceeded \$2 billion annually since 1974, and in 1978 reached \$2.5 billion. Net farm incomes, however, have continued to fluctuate from a high of \$1.5 billion in 1975 to \$967 million in 1978, as rising farm-input costs outpaced increases in revenue. Realized net farm income as a portion of farm cash receipts fell from 60.2 per cent in 1975 to 39.1 per cent in 1978.

There has been a shift in production of meat and grain in Saskatchewan during the 1970s. Wheat acreage production increased by 32 per cent from 1971 to 1977 mainly in response to high wheat prices. In contrast, production of other grains (oats, rapeseed, barley, rye, flax) decreased by 37.6 per cent. The livestock sector was depressed from 1974 to 1977 when

livestock cash receipts were virtually static. However, high beef prices in 1978 have led to an increase in cash receipts of 31.3 per cent. The 1978 cattle herd size of 2.7 million was slightly above the 1971 cattle herd size of 2.6 million. Many Saskatchewan producers left the hog business when strong wheat prices provided producers with a profitable alternative. From 1971 to 1978, the supply of hogs decreased from over one million to one half million.

The prospects to 1985 are for moderately expanding wheat markets due to world population growth and rapidly expanding feed grain markets. Pacific Rim developing countries are particularly important market areas as income levels rise and hence meat consumption increases. North American cattle markets will likely be firm over the medium term although rising herd sizes could begin to depress the current higher price levels by the early 1980s.

(b) Minerals

According to the Saskatchewan Bureau of Statistics, the value of mining production in 1978 continued to rise in Saskatchewan and reached approximately \$1.6 billion. This represented a 32 per cent annual increase over 1977. This increase was due to strong markets for the province's potash and oil resources, and a continued increase in the volume and value of uranium production. The value of Saskatchewan mineral production increased steadily throughout the 1970s. Since 1971, mineral production increased by more than 275 per cent in value, so that by 1978 it accounted for approximately 8 per cent of total Canadian mineral output according to the Conference Board.

Potash, uranium and petroleum products dominated mineral production in 1978. They accounted for almost 92 per cent of total value of mineral production. The value of uranium production, which has dramatically grown by 1 394 per cent since 1975, accounted for only 16.7 per cent of provincial value of mineral output.

Over the period 1975 to 1977, total primary energy production, including crude oil, coal, natural gas, uranium and hydro-electricity, more than doubled to reach 1 739 trillion BTUs in 1977. This was due largely to increased uranium production and to a lesser extent, crude oil and coal output. During the same period, total production of secondary energy, refined petroleum and electricity, declined by 26 per cent to 71 billion BTUs in 1977. The decline was due to a decrease in refined petroleum production from 71 to 42 billion BTUs. However, electricity production increased from 24 trillion BTUs in 1975 to 29 trillion BTUs in 1977.

Reserves of conventional oils have declined significantly since 1971. Production also fell from 88.5 million barrels per annum in 1971 to 60.4 million barrels in 1978. Rising oil prices, however, resulted in a 16 per cent increase in the value of the oil produced from 1977-78. Approximately 90 per cent of Saskatchewan oil was delivered to Ontario and the United States upper Mid-West in roughly equal quantities. Only 1 per cent was refined within the province. In 1978, drilling activity almost doubled from the previous year (from 530 to 998 wells) representing the highest level of activity since 1969.

Most oil activity in Saskatchewan is now focusing on the province's heavy oil deposits. Drilling activity in the Lloydminster heavy oil area rose from 244 wells in 1977 to 649 wells in 1978. In 1976, the federal and provincial governments entered into a \$16.2-million shared-cost program to encourage development of improved methods of recovering heavy oil from Lloydminster and similar oil fields. To date, three contracts with oil producing companies have been signed under the agreement, involving three field pilot projects. In October 1978, Saskatchewan signed a \$99-million eight-year exploration and development agreement, including tertiary recovery projects, with Petro-Canada, Gulf and SaskOil. The program involves 202 000 hectares in the west-central part of the province. Husky Oil has also commenced a \$450-million five-year program for the accelerated development of heavy oil, and the feasibility of an upgrading plant at Lloydminster. Over the medium term, the market for upgrading Saskatchewan petroleum will depend largely on federal government export policy. It is expected that production of light- and medium-gravity petroleum will continue to decline. Provincial revenues from this source should similarly decline. On the other hand, heavy oil production is expected to increase substantially, and this will partially offset anticipated declines in conventional oil production.

Uranium production refined into the compound U_3O_8 , grew from 0.5 million kg in 1974 to 4.23 million kg in 1978. This was due to a significant price rise for U_3O_8 and a growing world demand for energy. Considerable exploration is occurring in northern Saskatchewan. Major mining projects, under way or expected to start up over the medium term, include new investments on a large scale (from as low as \$150 million to as high as \$450 million), uranium mines and processors at Cluff Lake, Key Lake and Midwest Lake in northern Saskatchewan. Direct employment in uranium operations is expected to grow from about 1 000 in 1977 to over 2 200 persons by 1985.

While uranium prices could fluctuate as a result of both economic and institutional factors, the high grade of Saskatchewan ore should continue to give the province a

significant comparative advantage in world uranium production and in world markets. Examples of factors are: excess production; current high level of world uranium stocks; upward revisions in nuclear power forecasts and projected uranium demand; political factors; the lobbying by environmentalist groups supported by the nuclear accident at Harrisburg, Pennsylvania in 1979; and action in producing-countries to contain falling prices and prevent sales at bargain rates. Over 50 per cent of Canadian expenditures on uranium exploration are being spent in northern Saskatchewan, estimated at over \$70 million in 1979.

In 1978, Saskatchewan produced 7.4 million tonnes of lignite coal or 31.6 per cent of total Canadian production. Saskatchewan coal is used mainly as fuel for in-province thermal power plants, although long-term sales commitments with Ontario Hydro of approximately one million tonnes annually starting in 1980 have also been made. The medium-term market climate for lignite coal is firm due to a general requirement to meet growth in domestic energy demand.

Currently, Saskatchewan produces all of Canada's potash. Production grew by 71.1 per cent between 1971 and 1978. About 80 per cent of production is shipped to the United States; however, the Asian market is growing. Potash Corporation of Saskatchewan is expanding at Cory, Rocanville and Lanigan, and this provincial Crown corporation now accounts for 35 per cent of total provincial potash production. Although the potash industry has historically shown large swings in market conditions, the medium-term demand from both developed and developing countries is expected to be firm.

(c) Forestry

In 1978, Saskatchewan produced only 1 per cent of Canada's forest products. However, forest production within the province grew by 36.5 per cent from 1971 to 1978, compared to a national increase over that period of 22.4 per cent. This provincial growth, however, has been accompanied by wide swings in output. For example, production volume increased by 21.6 per cent in 1977 and decreased by 2.1 per cent in 1978. Production includes studs, dimension lumber, pulp, plywood and waferboard. Saskatchewan producers export wood products largely to the U.S. Mid-West and western Europe, with domestic shipments to Manitoba and eastern Canada. The forest-based industry employs approximately 4 500 people in harvesting and manufacturing operations.

Gross value of Saskatchewan forest products in 1978-79 was \$135 million. Market prospects are optimistic over the medium term and growth to about \$180 million in 1983 is anticipated, although cyclical variations will continue to occur.

Expansions of wood and pulp are foreseen through the 1980s; a \$22.9 million modernization proposal has already been made public by the Prince Albert Pulp Company Ltd.

(d) Manufacturing

Most of the manufacturing in Saskatchewan is resource related, such as machinery for agriculture, forestry, petroleum and so on. A certain amount of industry exists which is not tied to any one of the local resources. This includes for example, primary steel, metal fabrication, printing and publishing. Recently, the manufacturing sector has shown some strength, in part due to a healthy agricultural economy and to a devalued Canadian dollar. The farm machinery sector has gained some of the strength it lost when grain prices were low. The food and beverage industry is now operating at close to capacity levels because of more buoyant markets, the low Canadian dollar and a slow but continuing rise in the demand for food products as provincial population grows.

In spite of recent strengths however, manufacturing remains a very small part of the overall economic picture of Saskatchewan. The approximate 19 000 people employed in 1978 represented only 4.8 per cent of total employment. There has, in fact, been little employment growth in this sector since 1976 when manufacturing employment actually fell by over 500 persons. This was due to a 2.4 per cent decline in manufacturing real domestic production the previous year. While significant increases in real output occurred in 1977 of 4 per cent, and in 1978 of 5 per cent, this has not resulted in more manufacturing employment. Over the medium term, however, the manufacture and processing of Saskatchewan resources should continue to grow, although slowly.

(e) Services

The service and related sectors in Saskatchewan in 1978 accounted for approximately 25 per cent of provincial employment and 54 per cent of real domestic product. From 1971 to 1978, real domestic product in the service sector grew by 40.3 per cent, close to the national average. This compared to a 35 per cent increase in the goods-producing sector over the same period.

Real domestic product in this sector grew by only 1 per cent in 1977, due to a weak agricultural sector that year. The decentralized distribution system in the province is adjusting to increasing urbanization and the more centralized shopping patterns of rural residents. Due largely to a stronger farm economy in 1978, the service sector grew that year by 3.3 per cent. In addition to the consumer related service sector

serving mainly the agricultural industry, the service sector is now becoming a more important component of the expanding mineral industry, especially in business and transportation services.

(f) Construction

Construction activity has expanded rapidly since 1975 due to large investments in the trade, finance, commercial, utilities and housing sectors. Much of this increase was due to the growing role of the public sector in provincial development activities. While the overall construction sector has shown only a slight overall growth in 1978 over 1977, decreases in housing and manufacturing investments have been offset by large investments in utilities (1977) and in the primary sector (1978).

Over the medium term, the primary and utilities sectors should continue to show strong growth due to expected uranium and potash developments and to construction of one or two power plants. The expansion of IPSCO and certain other possible major projects such as the heavy oil upgrading plant, should result in increased manufacturing investment. There should also be continued growth in construction activities for the business service sector and particularly for anticipated commercial growth in Saskatoon. Housing starts are expected to continue at or slightly below the level set in 1976 in the next few years.

3. DEVELOPMENT PROBLEMS AND ISSUES

3.1 Basic Market and Supply Limitations

Saskatchewan is a resource rich province which exports large quantities of grain, petroleum, potash and uranium to other areas of Canada and to foreign countries. Because of the export nature of its economy, Saskatchewan contributes in a major way to Canada's trade balance and overall economic health. However, Saskatchewan is located on a land-locked terrain far removed from markets and tidewater, has a small population and hence limited local markets. As the Saskatchewan economy is almost completely dependent on world markets for its primary products, the economy has been characterized to a greater extent than many other provinces by relatively large swings in income.

As resource development opportunities continue to provide the impetus for growth in Saskatchewan and needed balance of payment benefits to Canada, this sector must continue to be cost competitive and highly productive. However, the long-term growth potential of an economy based almost exclusively on primary production, with minimal resource processing and manufacturing, is limited.

There are considerable leakages of potential socio-economic benefits because much of the intermediate goods used by local industry are imported. Also, much of the value-added income benefits are lost when primary products are exported in a raw, unprocessed form. Saskatchewan requires, in addition to a strong primary sector, more industrial development and increased processing activity; that is, a more diversified industrial base and a strengthened manufacturing base. This could provide a framework for stable economic growth. A limited market size within the province acts as a major constraint to the development of new industry, especially of manufacturing.

Drought conditions which prevailed in southern Saskatchewan (Souris River Basin) in 1976 and 1977 resulted in severe water shortages in many areas. This reaffirms that water shortages do occur from time to time and that they are exacerbated by increasing urban expansion and industrial activity. Farmers who rely on surface water are most vulnerable to drought conditions and need alternative sources from which water can be hauled in emergencies. In addition, the development of water-intensive industries such as potash, coal and heavy oil, and increasing urbanization and attendant increases in industrialization (especially in the Saskatoon and Regina regions) have all put a serious strain on water supply. If more industrial development is to occur, assured and adequate supplies of industrial and domestic water will be required.

Agricultural production output could increase significantly with greater technological transfer and improved farming techniques. More intensive farming associated with increased fertilizer use and irrigation could likely increase grain production by as much as 50 per cent. Another constraint to farm production requiring attention is the increased level of salinity in the soils.

Anticipated resource developments in both Saskatchewan and neighboring Alberta will place large demands on the provincial labour force for skilled labour. It seems unlikely that these skills can be obtained in sufficient quantities from the present labour market and there will thus be a requirement for increased levels of in-migration and labour training. Not to satisfy this labour requirement could adversely affect skilled wage levels in the province and contribute an additional labour cost barrier to other forms of industrial development outside the resource sector.

3.2 Industrial Development and Diversification

In spite of natural resource expansion, Saskatchewan remains a resource dependent economy and has made only limited progress towards the development of its manufacturing sector. The anticipated resource development in the early 1980s may further constrain manufacturing growth as provincial labour and capital resources now employed in various manufacturing activities are directed towards the new major resource-oriented projects. Historically, major expansions in Canada's mining industries have led to relative declines in the agriculture, iron and steel, and machinery industries, all of which are central to the Saskatchewan economy. Such declines, however, have not been felt as yet, and the reverse in fact may presently be the case in the province.

The small size of the provincial population and industrial sector effectively reduces market prospects and limits the number of local entrepreneurs available to realize opportunities. Access to large western markets is dependent upon long overland hauls to distant western cities or dispersed rural markets. Improvements in provincial transport infrastructure and services and the removal of some freight rate anomalies that discourage western processing will be significant in improving the pace of manufacturing growth.

Within the western market, Saskatchewan cities and producers must compete with other western provinces and metropolitan areas. Regina and Saskatoon offer only marginal

advantages for industrial location and are in some cases at a significant disadvantage from their western alternatives in Winnipeg, Calgary, and Edmonton. For example, both Regina and Saskatoon have only a small labour pool. Winnipeg, in particular, has a strong manufacturing and industrial service base. Calgary and Edmonton are both growing dramatically and attracting highly technical and qualified expertise in petroleum and related energy industries. Potential industry to service resource developments in Saskatchewan will not likely develop in this province if the location costs and labour constraints are equal to or greater than those in other prairie metropolitan areas. Significant commercial developments and associated real estate speculation in Saskatoon particularly, due to high expectations over northern resource developments and an acute shortage of new industrial serviced land, have resulted in rapid price increases for serviced land and accommodation. Additional municipal services at attractive costs need to be developed in Saskatoon over the medium and longer term if the province is to realize some of the available development opportunities. Similarly, other Saskatchewan urban centres with potential to satisfy some of the emerging resource related demands must rapidly transform their industrial environments if they are to fully benefit from and participate in the provincial growth prospect.

3.3 Federal Attitude Towards Provincial Resource Policy

Natural resource policies of both federal and provincial governments are basic to the economic prospects facing the Saskatchewan economy. Successive provincial governments have taken initiatives designed to increase their control over natural resources on the basis of their stated rights under the British North America Act. This has permitted such schemes as potash prorationing schemes and the Saskatchewan oil income tax and royalty surcharge.

In both these cases, provincial resource legislation was opposed by private resource corporations supported by the federal government. In both the cases brought respectively by Central Canada Potash and Canadian Industrial Gas and Oil, final judgments by the Supreme Court of Canada overturned the unanimous decisions of the Saskatchewan Court of Appeal. This has led the province recently to conclude that there is a deliberate strategy on the part of the federal government to expand federal jurisdiction at the expense of provincial powers, to manage and tax natural resources.

Saskatchewan would therefore like to see constitutional changes to strengthen the provincial control over resources to the effect that:

- i) provinces be allowed to levy indirect, as well as direct taxes on resource production;
- ii) the federal trade and commerce power be clarified so that it can no longer be used to frustrate a province's legitimate efforts to influence the production and marketing of its resources;
- iii) changes be made to the Supreme Court of Canada so that it will not only be, but be seen to be, an impartial arbiter of federal-provincial disputes.

The federal position is that benefits of Canadian natural resources should accrue to all Canadians as well as to those in the province of origin, and that the federal government be in a position to resolve acute problems affecting resources in emergency circumstances.

3.4 Transportation and Grain Handling

Historically, transportation infrastructure was put in place to facilitate commerce and bind together the Confederation. Today, the high degree of resource dependence, an economy fuelled by large exports of bulk commodities, the economic efficiency requirements of trade and commerce and the developmental needs of both the nation and the region, provide the foundation for western transport policy. In the more developed southern part of Saskatchewan, transport efficiency and cost considerations are important, while in the more remote and undeveloped areas of the Saskatchewan northlands, developmental needs still prevail.

The transport and distribution of Saskatchewan natural resources to export markets are, in part, basic to the economic structure, trade and industrial performance of both western Canada and Canada. Improving the transportation efficiency of moving bulk commodities such as grain, coal, potash and lumber across the large expanses of western Canada to ocean terminals can reduce the delivered costs of the resource exports, increase Canada's international competitive position for these commodities and also result in higher returns to Saskatchewan producers.

Currently, various institutional barriers exist to improvements in some aspects of Saskatchewan transportation efficiency. Often these have developed over many years. Only recently, the statutory Crow's Nest freight rate for the movement of specified grains to export markets has dropped below a compensatory level and now remains a central and complex problem

for western transport development. Modification to, or removal of, the existing statutory rate will clearly have an impact and cause structural changes to western agriculture. What is not clear is exactly where, to whom and how severe or advantageous these changes will be. Depending upon the details of change and compensatory package offsets, geographically, benefits might be expected for livestock producers in Alberta, southern Saskatchewan and Manitoba and in the feed grain areas of central and northern Alberta. The negative impacts are expected to focus on grain producers of south-eastern Alberta and Saskatchewan and the agriculture service and support industries. It is not even obvious that extensive markets would exist for beef. In fact, alternative crops might be stimulated. The net overall economic impact, including processing, is unclear.

Aside from the direct impact upon agriculture, the removal or modification of the Crow rate is expected to have an impact on intermodal competition. Truck transport is increasing its share of total commodity movements. Any fundamental shift in the rail rate structure will undoubtedly affect the trucking industry. A compensatory rate system would eliminate the loss on commodities shipped under the Crow rate and thereby should lower the revenue generating requirements on other commodities. The overall impact on rates and intermodal competition is again not clear-cut, but would probably lead to some structural adjustment in the western economy.

Prairie grain handling issues are further complicated by rationalization of the country elevator system and the original pattern of widely dispersed branch lines. The whole issue has been the subject of several commissions of enquiry but as yet remains unresolved. Western, including Saskatchewan, interest groups are very concerned about the possible elimination of the Crow's Nest Pass freight rate. The existence of a branch line is often viewed by local residents as the foundation for community survival. Concerns, alternatives and solutions to this issue are neither clear-cut nor unanimous and involve a wide variety of economic, social and political considerations.

Currently, the means of transporting bulk commodities include not only railroads, but trucks, ships, pipelines and the infrastructure associated with each transport mode as well. In addition, intraprovincial and interprovincial trucking regulations and intermodal competition form part of western transport concerns. Given the possible expansion of grain exports by 40 to 50 per cent in 1985, and given the anticipated increase in shipment of other bulk commodities such as coal and potash, all these issues centering on rail transportation should magnify over time.

Transport for broader development purposes, both social and economic, remains important in the west and to Saskatchewan. In the remote Saskatchewan northlands, establishing an initial transportation system is a basic requirement. Northern access for both social and commercial reasons has yet to be fully realized. The presence of even minimal transport infrastructure is often a prerequisite for local residents, often native, to meaningfully gain access to, and participate in, the benefits of the wider economy. Winter and all-weather road construction, air, and water connections will remain important for development in the remote and sparsely populated parts of the province.

3.5 Urban Native Development

Current estimates suggest that approximately 50 000 native people live in the 11 cities of Saskatchewan. About 40 per cent of these people live in Regina, and another 25 per cent in Prince Albert and Saskatoon. Significantly, native people form about 14 per cent of Regina's total population. Forecasts suggest that by 1986 there will be 10 000 Treaty Indians and 25 000 Metis and non-Status Indian people living in Regina.

Population data indicate that at present only a small number of today's native Indian entrants to the Regina labour force are urban raised. The majority are transplanted rural young people. This situation is expected to change over the next ten years to a situation where the majority of new Indian ancestry entrants to the Regina labour force will be urban raised.

Urban labour force projections in Saskatchewan over the next ten years show that about 20 per cent of all new labour force entrants will be people of Indian ancestry. From 1976 to 1986 the school age Indian population is expected to increase by 21.5 per cent compared to potential overall decreases of the entire school age population.

The group loosely referred to as urban natives are for the most part poor, lacking in employment skills and political, social and employment opportunities. They are, on the average, unemployed at a much higher rate than the Canadian average.

While labour shortages in the overall economy of Saskatchewan could occur, many employment opportunities will rest in the high-technology and capital-intensive mining sector. Emphasis needs to be placed on both skill training and industrial life-style conditioning if rapidly increasing native participation in the urban economy is to occur. Accordingly, in addition to employment creation, native programs should also be directed towards an increased participation of native people in community, social and political activities in urban Saskatchewan.

4. FEDERAL AND PROVINCIAL INSTRUMENTS

4.1 Provincial Development Priorities

The major economic development policies of the Government of Saskatchewan are directed primarily towards achievement of stable economic growth, development of provincial resources, diversification of provincial industrial structure, rural stabilization, and an increase in the geographic and social participation of residents in the benefits of the resource economy. Since the present government was first elected in 1971, direct and aggressive public sector participation, particularly in non-renewable resource development, has been achieved through a combination of taxation and regulation schemes, Crown and joint venture corporations and selective programming.

In the past, considerable controversy surrounded the government's approach to economic development. Most notable have been the acquisition of controlling interest in provincial potash development, although the province viewed this as a special case. Land banking to ensure preservation of the family farm, and establishment of the Department of Northern Saskatchewan are other initiatives undertaken. Significantly, the election of October 1978 represented an endorsement and recommitment to the assertive use by the provincial government of public policy for economic development. More specifically, the policy change increased the willingness of the province to look at a wider range of instruments to achieve its goals, with a preference for joint venture undertakings.

4.2 Provincial Instruments

4.2.1 Fiscal Capacity and the Heritage Fund

The theme of recent provincial budgets has been one of prudence in balancing growing demands against current revenues, and the anticipation of future resource revenues based on a phased program of resource development. The 1979-80 provincial budget expenditures are projected to be \$1 856 million. If all resource revenues are taken into account, there will be a cash surplus of \$69 million for 1979-80. While up to 80 per cent of the resource revenues in any year may be transferred to general revenue, approximately two thirds has been budgeted for this purpose in both 1978-79 and 1979-80. Over the past decade, Saskatchewan has shown a significant change in its fiscal capacity. In 1972-73, Saskatchewan's index of fiscal capacity was 79.5. By 1978-79, it had risen to 99.8. These indices included all resource revenues. However, fiscal capacity based on the equalization formula, where only one half of resource revenue is included, was 98.0 in 1978-79.

In 1978-79, 59.4 per cent of provincial government expenditures was devoted to social services, compared to 64.5 per cent for Canada as a whole. For both Canada and Saskatchewan, 5.2 per cent of expenditures was devoted to industrial development. On a per capita basis, industrial development expenditure for the provincial budget amounted to \$94 in Saskatchewan in 1978-79, compared to \$87 for Canada as a whole. This excludes, however, economic development expenditures by Saskatchewan's Crown corporations.

The Heritage Fund was established in 1978. It serves as a depository for all non-renewable resource revenues, estimated to exceed \$500 million in the current fiscal year. Currently, 74.8 per cent of the resource revenues is from the oil industry, 21.9 per cent from potash, and 3.3 per cent from other sources, such as uranium and coal. By the mid-1980s, uranium royalties will likely become a major contributor to the fund.

4.2.2 Agricultural and Rural Development

Saskatchewan's agricultural policy is based on the need to maintain and support the family farm. As this is the main component of the agricultural sector, several programs have been implemented to assist this basic production unit. Mortgage, fuel and machinery costs have all increased substantially over the past five years. Major initiatives which have been designed to assist the viability of the family farm include the Land Bank, the Farm Cost Reduction and Farm Start programs.

While these programs are aimed directly at the family farm unit to serve and enhance its viability and competitiveness, a wide range of additional provincial expenditures is supportive of the agricultural sector. These include expenditures in crop insurance, price stabilization, community pastures, marketing boards, irrigation assistance and a variety of livestock and crop research and development programs. The 1979-80 Saskatchewan budget also proposes establishment of a \$3 million agricultural research fund.

At the same time, the province has been actively engaged in efforts to strengthen the economic base of the system of rural communities. Rural development policy in Saskatchewan has been designed to ensure both a continuing service function to the agricultural sector and to permit the economic, social and cultural development of rural communities. Grants and revenue-sharing schemes with rural municipalities are available for a wide variety of purposes in support of these objectives. In addition, the provincial departments of Industry and Commerce and Municipal Affairs jointly administer the Mainstreet program, assisting in the revitalization of main street business districts in small communities.

While the Industry and Commerce department also administers other programs to assist in the establishment or expansion of industry, the Small Business Interest Abatement Program has been explicitly designed with a bias towards encouraging small business development in smaller centres.

4.2.3 Industrial Development

Several departmental programs and the Saskatchewan Economic Development Corporation (SEDCO) have been developed to encourage the economic expansion and diversification of industry in the province. Consulting, financial and developmental assistance, as well as direct small business corporate income tax reduction and joint venture investments, have been applied.

The Small Industry Development Program provides grants to expand, modernize or establish small industry. The Industrial Technical Assistance Program provides management improvement, product design and development assistance to existing manufacturers to improve their competitiveness.

The Heritage Fund investments are varied and the fund has and will continue to provide a source for direct investment capital in the operations of Crown corporations. The Saskatchewan Mining Development Corporation, for example, obtained loans from the fund while the fund has also financed the government's potash acquisitions.

4.2.4 Industrial Natural Resources

Central to the provincial resource policy is the intent that a fair economic return should go to both the private or public investor and to the people of Saskatchewan. This policy has been pursued through a combination of taxation and revenue-sharing schemes, the establishment of Crown corporations, and Heritage Fund investments. The principal Crown corporations responsible for the implementation of government resource policy are the Saskatchewan Mining Development Corporation (SMDC), the Potash Corporation of Saskatchewan (PCS), the Saskatchewan Oil and Gas Corporation (SaskOil) and the Saskatchewan Forest Products Corporation (SFPC).

The SMDC has a mandate to participate in mineral dispositions acquired after March 1, 1975. Where an exploration program in excess of \$10 000 is planned, it has the authority to obtain up to 50 per cent equity. Involved in about 150 joint venture projects, one of SMDC's acquisitions has been the Key Lake uranium deposits. SMDC originally purchased a one-third interest in Key Lake and its equity position was later increased to 50 per cent. The Potash Corporation of Saskatchewan is

currently in the midst of a considerable expansion program costing at least \$131 million by 1981 leading towards an increase in the Corporation's share of rated productive capacity to about 45 per cent. SaskOil, established in 1973, is engaged in petroleum and natural gas exploration and development, including heavy oil. In addition, Kywan Petroleum Ltd., a wholly-owned subsidiary, is involved in petroleum and natural gas activities in Alberta. The Saskatchewan Forest Products Corporation produces lumber, treated wood products and plywood. Manufacturing facilities are located in several communities, with total operations offering 1 000 peak employment opportunities annually.

The province's Crown corporations have aggressively proceeded to become major participants in the development of Saskatchewan's resources. Revenues from renewable and non-renewable resource developments will remain within the province enabling direct resource management and planning by the government. While having immediate economic impact, the planned disbursement of these revenues can significantly contribute to offsetting the swings in the province's cyclical agricultural economy.

In addition, the province has employed legislative and regulatory powers to pursue its resource policy. Prorating has applied strong supply management controls to the expansion of the potash industry. Similarly, mineral income tax and royalty surcharges were applied in 1976 and 1977 to precipitate development and to capture such resource rents as might occur for the province. Both these initiatives have been declared unconstitutional in federal courts. Revised provincial legislation has been developed in both cases to ensure provincial controls over resource revenues and development and to return "windfall" gains to the Saskatchewan treasury.

4.3 Federal Instruments

Direct federal instruments have historically been important in the handling and marketing of grain. More recently, foreign trade instruments and oil and gas pricing have had a significant influence on provincial developments. The major issue at stake is over the taxation control of provincial resources. Recent Supreme Court decisions have taken the view that provincial tax levies on petroleum, based in part upon export prices, interfered with interprovincial trade. These levies were considered to be an indirect tax on Canadian residents living outside the province, and hence not under provincial jurisdiction. While some consensus on resource issues, such as on pricing and in emergency situations, has occurred between the provincial and federal governments, little consensus over the tax issue is evident.

4.3.1 Agricultural Development

The presence of federal instruments and mechanisms influencing Saskatchewan's development are most significant in the province's agriculture sector. The agriculture economy is dominated by the federal administration and regulation of the grain handling system, transportation, freight rates and foreign marketing.

There are subsidies on grain transportation and a number of regulations on grain handling. Grain handling tariffs must be filed with the Canadian Grain Commission and must not exceed an established ceiling. The amount of grain that farmers deliver to elevators for a given period is based upon the quota system set by the Canadian Wheat Board. Quotas are designed to ensure an orderly marketing and distribution of grain over the year. Allocation of grain cars is based on the same principle, although the specific type of car is based partly on whether higher box cars must be used. Branch lines cannot be phased out without government approval. In brief, most of the facets of the grain handling industry are regulated by government, with the exception of entry into and closure of grain elevator facilities.

There are other agriculturally oriented regulations and government programs which "institutionalize" the industry to be export-oriented for raw, unfinished products. For example, the National Feed Grains Policy assures the availability of western feed grain supplies to markets in central Canada at prices directly linked to the cost in Montreal of United States corn. Also, freight rates for moving grain are based upon statutory Crow's Nest Pass rates.

The federal influence on Saskatchewan agriculture is long-standing and diverse. The Prairie Farm Rehabilitation Administration, a DREE agency, has made major investments since 1935 to deal with the reality of drought. Canada Agriculture farm research stations have been instrumental in agricultural development in the province. The Prairie Provinces Water Board developed the water apportionment agreement between the prairie provinces. Guaranteed water supplies are a prerequisite for an expansion of irrigated lands. Federal multilateral trade negotiations under the General Agreement on Tariffs and Trade hold significance for Saskatchewan by securing established, and opening new, export markets for the province's agriculture resources and reducing farm costs by lowering costs on certain farm inputs now imported from the United States. The recently concluded Multilateral Trade Negotiations (MTN) may, over time, influence more resource processing in Saskatchewan as various tariff concessions were offered by the United States and Japan in the agricultural and resource processing sectors. The tariff reductions will be phased in, in eight annual steps beginning January 1, 1980.

4.3.2 Resource Development

Federal mechanisms directly affecting the development of Saskatchewan's mineral resources are primarily related to the energy sector. The federal government has recognized, through DREE subsidiary agreements involving Energy, Mines and Resources, the need to work closely with provincial governments in assisting exploration and development of the mining sector. It also seeks cooperation in establishing energy prices and export levels.

The viability of major energy investments is dependent upon the anticipated revenues that can be expected when production commences. Thus prices, export volumes and the federal tax share are of critical importance in development. As evidence, the recent National Energy Board decision permitting the export of surplus heavy oil supplies was warmly received by the provincial government. In addition to its regulatory function, the federal government has also participated directly in resource development through federal Crown corporations such as Eldorado Nuclear and Petro-Canada.

4.3.3 Industrial Development

Numerous federal instruments are supportive of industrial development in Saskatchewan. They fall broadly into two categories: first, those that, on a national basis, assist in product design and development, marketing or international competitiveness; second, those that attempt to eliminate the risks of establishing, modernizing or expanding facilities in selected regions.

Programs associated with the first group, such as the Enterprise Development and Export Market Development programs of the Department of Industry, Trade and Commerce, are all available to Saskatchewan businesses. However, they are also available to businesses in Toronto, Winnipeg, Calgary and Vancouver. In essence, such programs are part of the national industrial environment. Whether they can be considered to have a major role in achieving industrial development in the province is questionable due to the very small size of the province's industrial base.

Under the second category, federal instruments available in the province which are addressed to the elimination of industrial development obstacles are limited. Assistance through the Regional Development Incentives Act (RDIA) administered by DREE is the principal mechanism. Incentives in the form of grants, loans and loan guarantees are offered on a reactive basis to directly stimulate manufacturing investment and employment. Increased selectivity of the program's expenditures, directed towards industrial sectors enjoying some form of comparative advantage, could enhance the program's ability to realize the province's industrial development opportunities.

4.4 Federal-Provincial Instruments

In February 1974, Canada and Saskatchewan signed a ten-year General Development Agreement (GDA) in order to facilitate joint federal-provincial cooperation in initiatives for the economic and socio-economic development of Saskatchewan. The agreement's objectives are to accelerate economic development and to encourage the socio-economic development required to provide an effective opportunity for people throughout Saskatchewan to contribute to and participate in the benefits from economic development.

Development priorities identified in the GDA have led to the signing and implementation of a number of subsidiary agreements in Saskatchewan for steel, mineral exploration, northern and native initiatives, planning, Agribition development, productivity/technology transfer in agriculture, water development, drought proofing, forestry, and the development of the Qu'Appelle Valley. Together with RDIA, PFRA programs, the Agricultural Service Centre Agreement, ARDA, and Special ARDA, these agreements have made substantial contributions towards resource, industrial, agricultural and rural development.

The joint federal-provincial approach to economic development frequently results in the participation of several departments and agencies at both levels of government. Federally, the departments of Transport, Indian Affairs and Northern Development, Energy Mines and Resources, Industry, Trade and Commerce, Fisheries and Environment Canada, and Agriculture Canada, working in consort with DREE, have participated in the definition and implementation of initiatives.

Currently, economic conditions in the province suggest a continued need for joint federal-provincial initiatives. Sustaining the pace of diversification in the primary resource sector led in 1976, for example, to the Canada-Saskatchewan heavy oil agreement which provided research funds for the enhancement of heavy oil recovery. This exemplifies the GDA approach to pursuing joint development objectives. National energy self-reliance and balance-of-trade considerations have in this case combined with provincial non-renewable resource policy.

In addition, there is considerable potential within Saskatchewan for the joint development of federal-provincial agreements to more fully realize the province's development potential. These are specified in more detail following a review of the province's strategic development prospects, development opportunities and constraints to growth.

5. ECONOMIC DEVELOPMENT OPPORTUNITIES

5.1 Comparative Advantage

In order for economic development initiatives in a provincial economy to contribute to both local and national needs, it is important to have a clear understanding of each province's relative economic strengths and weaknesses. The assessment of comparative advantage is made difficult by confidentiality restrictions on a restricted data base. Nonetheless, the evaluation of recent industrial performance and productivity does provide some indications of provincial economic strengths that can provide the basis for longer-term development.

The natural resource endowment of Saskatchewan's agricultural land supply represents a clear comparative advantage for provincial agriculture. These lands are of high quality for crop production under the Canada Land Inventory classification (CLI 1-3), and are also available in quantity (16.2 million hectares). This natural production advantage has given prairie agriculture a productivity advantage over all other regions of Canada (Chart 5.1).

CHART 5.1

INDEX OF AGRICULTURAL PRODUCTIVITY GROWTH, CANADA AND REGIONS, 1961-1974

	REGIONS					CANADA
	ATLANTIC	QUEBEC	ONTARIO	PRAIRIES	B.C.	
GROWTH INDEX OF TOTAL AGRICULTURAL PRODUCTIVITY (1961 = 100)	122	109	114	144	89	127

(Source: D.M. Slate, Canadian Farm Economics, Vol. 10, No. 6, 1975)

Canadian agricultural productivity for wheat production is amongst the highest in the world, exceeded in recent years only by New Zealand, Australia and the United States. Nationally, the growth in labour productivity was faster in agriculture than other major goods-producing and commercial service sectors, rising by 82 per cent between 1961 and 1974. This is in contrast to a manufacturing productivity increase of 64 per cent and a commercial industry productivity increase of 49 per cent.

Industrial productivity measures are also an indication of economic strength and comparative advantage. Labour productivity generated in each industrial sector in Saskatchewan, if compared with other provincial and national levels, again identifies the resource manufacturing industries as contributing most to economic performance.

It is apparent that the natural resource endowment of the Saskatchewan economy in its renewable agricultural and forest resources, in combination with a variety of related resource processing, service and supply industries, provides the province with its main areas of economic strength. The following sections discuss specific economic development opportunities in these areas of comparative advantage that may emerge during the early 1980s.

5.2 Agricultural Integration

5.2.1 Agriculture Spinoff Opportunities

Industrial diversification around the basic agricultural sector represents a major industrial development opportunity in the 1980s.

(a) Grains

The Canadian Wheat Board estimates that grain sales, and thus production, are expected to expand by 50 per cent to reach 30 million tonnes in 1985. It seems likely that this expansion can occur only if there is a rise in the use of fertilizers to maintain and increase wheat yields, continued mechanization in farm practices, major improvements in grain storage, and innovations in the distribution to markets. Continued mechanization of farming practices will provide additional markets for the province's farm machinery industry. Continuing increases in the scale and capital intensity of the farm sector will also produce a continuing demand for parts for agricultural machinery and related equipment and repair tools. Farm storage requirements are already creating an increase in the demand for galvanized steel for storage bins.

The processing of grains for industrial purposes has now passed well beyond the stage of technical experimentation. The fermentation of grains to produce alcohol, pharmaceuticals, plastics and starch is commercially profitable in various parts of the world, and may represent an opportunity area for the province.

(b) Oilseeds

Oilseed processing of rape, sunflower and flax represents a further agriculturally related development opportunity. Canada is a net exporter of oilseeds and a net importer of processed oilseed products. Domestically, crushed vegetable oils can reduce Canadian dependence on imported oils used mainly by the major food preparation companies. Oilseed meal by-products from crushing are a source of protein for Canadian livestock. Acreages of the higher-valued oilseeds are expected to continue to rise in the 1980s.

Rapeseed processing capacity has exceeded domestic requirements since major expansion occurred in 1974 and 1975, and crushing utilization rates are again increasing. Currently, however, a balance is returning between oilseed production and processing markets. Additional oilseed processing plants could be developed in the province in the early 1980s.

5.2.2 Feed Grain and Meat

Opportunities exist for Saskatchewan's feed grain and meat industry due to both a growing world population and rising income levels. Beef production in the province, however, tends to remain a residual activity. Strong opportunities exist to market feed grain in Pacific Rim countries, as rising living standards result in increased meat consumption.

Beef available for slaughter is expected to decline through 1982 with the sharpest declines occurring in 1979 and 1980 due to the rebuilding of herd sizes. However, continued growth in consumer demand for beef is estimated at 3 to 4 per cent per annum, due to an expanding population and increasing consumer disposable incomes. The United States and Australian beef industries are also rebuilding herd sizes and some supply deficits may occur. Much of Saskatchewan's cattle production is finished in large meat packing facilities in Alberta, Manitoba and Ontario. Over the medium term, Saskatchewan farmers will continue to rebuild herd sizes and much of the production will be feeder cattle. This reduced slaughter will result in increased problems for the meat packing industry, which historically has experienced some over-capacity in western Canada and in Saskatchewan. Thus, limited opportunities in meat packing are envisaged over the medium term, although plant modernizations of smaller abattoirs will probably continue. Success in the

industry will require good product-market development for specialized cuts and innovative distribution-transport measures such as box-ready beef. Increased beef prices will result in a strong demand for beef substitutes such as pork, fish, poultry and other meat substitutes and extenders. While some increase in hog production should occur over the medium term, Saskatchewan does not have a strong comparative advantage in hog finishing compared to central Canada where larger and more efficient hog raising and processing operations exist.

5.2.3 Productivity

Improving Saskatchewan's natural soil quality, water quality and water supply can, in the longer term, represent the most significant contribution to provincial farm productivity. Removing these two development constraints can create and support some further options for irrigation, livestock and new crop development.

There is considerable potential of a large investment to expand irrigated acreage on the west side of Lake Diefenbaker. The necessary infrastructure requirements for canal construction and the installation of sprinkler systems are extensive and the gestation period for a shift away from the present wheat economy could be long. At the present time, a transition from wheat to forage for use in feeder operations or to specialty crops represents perhaps the most economical development path for the irrigation districts, since there are only small and limited local markets for specialty crops.

New specialty crops can contribute to farm diversification, soil fertility and increase agricultural returns. These crop types include peas, fababeans, pintobeans, sunflower, mustard seed, high fibre flax, and spices. New saline tolerant varieties of both traditional forage and experimental crops may be developed to accommodate the soil deterioration problems in some locations. High-protein crops may also compete with more traditional feed grains in livestock supply, and their higher yields and returns per acre can significantly improve farm productivity.

The realization of these development opportunities in agriculture will require a sustained process of research, applied experimentation and product market and processing development. The full benefits from these initiatives can likely be measured only in decades rather than in years.

The recent Multilateral Trade Negotiations resulted in reduced export tariffs to the United States and other countries, including Japan, for cattle, boxed beef, processed meat, oilseed products and specialty crops. Significant opportunities may result for these Saskatchewan agricultural related products. The concession on vegetable oils, however, will be initiated only in 1983 to give the United States market and industry time to adjust to Canadian competition.

5.3 Primary Resource Diversification and Development

In addition to improvements in the productivity of the Saskatchewan farm sector, further primary resource diversification in such areas as forestry and peat can assist in expanding and stabilizing provincial economic activity and establishing a broader source of provincial income.

5.3.1 Forestry

Only about one half of Saskatchewan's softwood cut (mainly fir) and 17 per cent of the hardwood cut are being utilized annually. Utilization rates are lowest in the more remote northern areas of the forest zone where access is limited, forest inventories are incomplete, and trees are smaller. In contrast, some overcutting is occurring in areas adjacent to existing sawmills and pulp operations. Traditionally, the development of the more northerly and remote sawmill facilities has contributed to the social and employment requirements of the depressed, non-industrial northern communities.

The Saskatchewan government regulates and manages the forest resource through the provincial Forest Act and accompanying forest regulations. Allowable cut permits are issued to the major companies and to Saskatchewan Forest Products, a Crown agency, usually with a related requirement for regeneration activities. In 1971, the province introduced an integrated forest development policy designed to maximize the utilization of forest resources. In effect, the policy requires all companies to clear cut all forest stands, use the larger diameter logs in the appropriate mills, and ship the chip by-product and smaller materials to the PAPCO pulp mill for conversion to pulp. It has been possible for the province to implement only part of this policy to date, due to high transport costs.

Strong markets potentially exist for Saskatchewan forest products. Studies produced by the federal Department of Industry, Trade and Commerce and the United States Department of the Interior show that the United States will require increased imports of wood products over the medium and longer term. Improving Saskatchewan's export position for forest products is

dependent upon producers improving their competitive position, primarily through the reduction of costs in delivering wood to the mills, and the development and use of new products and technologies. A product with particular potential for increased export production is waferboard, produced from aspen -- a hardwood which Saskatchewan has in abundance. This product is now gaining slow acceptance in the United States, competing strongly with plywood as sheathing material in construction. The upcoming United States tariff reductions from 10 per cent to 4 per cent for flakeboard or waferboard, will augment this opportunity. Other potential uses of aspen include pulp production, stud furniture, furniture components, animal feed, and as a feedstock for fermentation processes.

The development of a second provincial pulp mill complex in the Meadow Lake area remains contingent upon adequate longer-term market conditions for pulp in North America and Asia. Canada's current exchange-rate advantage in American sales could represent a sufficiently attractive margin for development.

It is possible that an integrated aspen operation involving a pulp mill, furniture plant, dimensional lumber and perhaps a fermentation industry, could be viable. Hybrid aspen pulpwood plantations have high-productivity potential for ten-year rotations on appropriate sites. The disadvantages of aspen are high harvesting costs due to small and crooked stems, high moisture content, and decay in older trees.

New uses for low-grade woods can also lead to increased efficiency in the use of the forest resource. Such innovations include chemical preservatives for wooden foundations for housing, the use of the foliage by-product available in large amounts from wood and mill operations as a glue diluent and extender, the application of stronger adhesives in the production of veneers, particle boards and waferboards, and the preparation of woodfibre insulation. Research activities to develop in support of new product technologies and related market identification will be significant in realizing these opportunities.

5.3.2 Peat

Saskatchewan's extensive peat resources represent a further area for primary resource diversification and northern development. Provincial airphoto surveys have identified over four million hectares of untreed peatland within 160 km of the southern edge of the Precambrian Shield. Regions of vast peatlands with at least 60 per cent peat cover are located in the areas of Cumberland House-Hudson Bay-Ballantyne Bay, Weyakwin, Big River and Ile-à-la-Crosse.

To date, development of the resource has been limited to horticulture peat moss production in the Carrot River area. About 99 per cent of production (6 100 tonnes) was shipped to vegetable growing areas of the United States. This was predominantly to California where quality peat supplies are lacking. Saskatchewan peat competes with other prairie bogs basically on freight rates. As such, the inaccessibility of the Saskatchewan bogs, regardless of quality, makes them less competitive and production less economical. Recently, the introduction of a new major producer in New Brunswick has contributed to a supply glut and a sharp reduction in the price of peat by over 30 per cent.

A major problem for Saskatchewan peat producers is transportation. Access to bogs is difficult, and roads must be designed around drainage patterns. Railroad links with the United States are poor. Peat is high in volume, but low in value, making transportation even more difficult. At present, a major portion of Saskatchewan peat is shipped to the United States on backhauls by vegetable trucks.

Currently, therefore, three factors work against the extensive market development of the peat industry in Saskatchewan: depressed prices and oversupply in the peat market; bogs with poor accessibility to markets; and the need for technical expertise to improve bog maintenance and production.

An economically attractive and technically feasible alternative use for peat is as a fuel. Certain northern communities might benefit by using peat for domestic heating.

5.4 Mineral and Mining Spinoffs

The large resource development expenditures currently underway or anticipated in Saskatchewan's uranium, coal, heavy oil and potash industries are part of a western Canadian investment boom. Large resource development and energy transportation projects are scheduled in both Alberta and British Columbia during the 1980s.

Supplying some of the machinery, equipment and services for the mining and mineral industries across western Canada can represent a significant development opportunity for Saskatchewan in the next decade. Many of the large development projects in Saskatchewan and elsewhere in the west have similar product and service requirements. The protracted length of the forthcoming western major resource project investment cycle suggests that it may be feasible to develop and direct manufacturing service facilities towards both the initial construction and the subsequent continuing requirements of the large resource projects.

The commodity and service requirements of the major western development projects are substantial and diverse. The construction or proposed development of several major uranium mine and mill facilities at Cluff Lake, Key Lake and Midwest Lake, combined with Eldorado Nuclear's mine-mill expansion at Beaverlodge near Uranium City, will result in an annual expenditure for exploration, mine-mill development, construction, and operation of \$100 to \$200 million between 1980 and 1983 (Chart 5.2). Specific requirements include, among others, camp supplies, geological instruments, assay analysis and diamond drilling during exploration, and also capital equipment such as structural steels, vacuum pumps, tanks, pipes, valves and reagents. Although Chart 5.2 shows exploration expenditures decreasing slightly over 1980-83, that decrease will be offset by increased capital expenditures on development.

CHART 5.2
ESTIMATED URANIUM EXPENDITURES, SASKATCHEWAN
1980-1983

		VALUE BY YEAR			
		<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
MILLIONS (1978)	DOLLARS	215	163	145	116

(Source: Benefits for Saskatchewan Industry from Resource Development, Saskatchewan Industry and Commerce, January 1979)

Similarly, the ongoing and construction requirements of Saskatchewan's potash industry are expected to generate industrial material expenditures of approximately \$100 million over the 1980-83 period (Chart 5.3). Specific items include electric hardware, mining machine parts, mining teeth, conveyor belts, pumps, valves, and pipe.

CHART 5.3
ESTIMATED POTASH EXPENDITURES, SASKATCHEWAN
1980-83

		VALUE BY YEAR			
		<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
MILLIONS (CURRENT)	DOLLARS	85.5	141.9	219.1	165.1

(Source: Revised Forecast, Provincial Department of Mineral Resources, 1979)

Heavy oil development in the Lloydminster area has resulted in a \$450 million program by Husky Oil for accelerated development of the company's heavy crude oil reserves. It will have an initial capacity of 50 000 barrels per day, rising over a short period to 100 000 barrels per day. The project involves, over and above present activity, the drilling of 2 000 wells, construction of 966 km of gathering pipelines, 20 tank batteries, three waterflood recovery projects, and nine thermal recovery pilot projects. Of the total amount to be spent, \$185 million is for development of primary and secondary oil production, \$89 million for enhanced or tertiary recovery projects, \$60 million for exploration, and \$16 million for permits and detailed engineering work on an upgrading facility. \$100 million dollars is budgeted for other heavy oil development and related opportunities. Once again, the development will generate substantial demands for pipes, pumps and compressors, as well as technologically advanced research and development services. Results from the Petro-Canada and SaskOil \$99 million west-central Saskatchewan program will be important to the establishment of heavy crude oil supplies for an upgrading plant.

The possibility of the Imperial Oil Cold Lake in situ heavy oil recovery project in Alberta, with an initial capital cost of \$4.7 billion and completion date of 1986, will have similar material requirements. Continued construction of oil sands plants in northeastern Alberta, following the Great Canadian Oil Sands and Syncrude projects, will generate an additional need for mining and refining equipment. Further development of coal reserves in British Columbia, Alberta and Saskatchewan can precipitate demands for pumps, fans, drill bits, conveyor belts and foundry products that may also have modified application in the oil, potash, and uranium industries. At a more technologically advanced level, other electrical products and control systems will be required for production and inventory management.

The largest pending western development project, the northern gas pipelines, has an estimated cost of \$5 billion for the Canadian section. Potential sales to the project have already been significant in precipitating a \$67.4 million IPSCO expansion in Regina to supply line pipe. Additional manufacturing opportunities may be available from the project and for its massive commodity requirements which include buildings, construction and transport equipment, valves, pressure vessels and coatings. A review of provincial capacities and opportunities to supply non-pipe items to the project suggested that Saskatchewan might expect to receive approximately 10 per cent of the manufactured content with a value of \$40 million (1976).

It is probable that the combined investment of western development projects could represent billions of dollars of activity through the 1980s. Access to regional markets may permit the development of manufacturing scale and productivity at levels that can be competitive in international markets. The magnitude of these requirements suggests that even if manufacturing opportunities cannot be realized for direct supply to projects, displacement opportunities will emerge as traditional suppliers direct their capacity towards project requirements.

Many of the manufactured requirements of resource industries are normally imported. Drilling machinery and drill bits imported from the United States totalled \$133 million in 1977. This represented the fifth largest import from that country to western Canada. Similarly, there were high levels of imports of power shovels, excavating machinery and mining, oil and gas machinery in 1977 (Chart 5.4). An expanded capacity within Saskatchewan to satisfy even a small portion of the western and provincial manufactured commodity demands can be expected to make a direct contribution to the balance of trade.

CHART 5.4

SELECTED MINING AND CONSTRUCTION IMPORTS TO
THE PRAIRIES AND WESTERN CANADA, 1977

	PRAIRIES		WEST	
	(\$000)	% Canada	(\$000)	% Canada
<u>MINING</u>				
Drilling Machinery & Drill Bits	123 559	(58.2)	133 363	(62.8)
Mining, Oil & Gas Machinery	68 030	(42.0)	81 396	(50.2)
<u>CONSTRUCTION</u>				
Power Shovels	69 451	(41.4)	96 638	(57.5)
Bulldozing & Similar Equip.	5 923	(25.6)	11 921	(51.6)
Front-end Loaders	27 559	(21.0)	46 826	(35.7)
Other Excavating Machinery	40 376	(42.9)	49 585	(52.7)
Construction & Maintenance Mach.	38 764	(25.3)	59 080	(38.6)

Source: Statistics Canada, Special Tabulation, 1978.

The potential for realizing these opportunities from a Saskatchewan location would seem good in the early 1980s when the new resource projects will be establishing their procurement patterns. It is anticipated that Saskatoon or Prince Albert, both geographically central to many of the resource developments, might be best placed to exploit and develop the manufacturing opportunity.

Other mineral related opportunities exist in Saskatchewan beyond the manufacturing requirements of the major resource projects. Research and development into uranium uses, storage and mining will be particularly appropriate and will increasingly be required for some of the world's most radioactive deposits that lie in the Saskatchewan northlands. Proposals for a uranium centre of excellence at the University of Saskatchewan at Saskatoon have been under consideration for some time, and a science park is under development by SEDCO. The location of a growing number of uranium and mining head offices in Saskatoon would seem to increase the possibilities of realizing this project. A uranium refinery has been under consideration for some time at a proposed site at Warman near Saskatoon, and SEDCO holds options on land for the facility.

Uranium milling will also require considerable quantities of limestone. New surface deposits of limestone at Pinehouse Lake in the north offer the opportunity to supply Key Lake with up to 200 tonnes per day, and equally important, to provide further employment opportunities in limestone mining and distribution to that depressed community. Mine development would require a \$2 million investment but could also result in coal or peat exploration and development in the area to fire the lime kilns.

5.5 Strategic Materials for Resource Manufacturing

The extensive resource related opportunities identified in the mineral and agricultural sectors suggest that some manufacturing sectors may have a more strategic development potential than others. Among these are primary iron and steel, farm machinery and, to a lesser extent perhaps, the electronics industry. These industries may hold additional significance in the context of provincial development as basic building blocks for a more diversified manufacturing sector.

5.5.1 Primary Iron and Steel

Steel products in the form of pipes, plate, galvanized strip, bars and structural shapes are common requirements for many of the resource industries. Currently, the western steel market (which is served in roughly equal proportions from the west, central Canada and offshore) is growing rapidly and is expected to rise to approximately 3.1 million tonnes by 1985. The requirements of major resource development and transportation projects may further expand regional steel demand by another 1 to 1.5 million tonnes by the mid-1980s. IPSCO's \$67.4 million expansion plan for the Regina mill represents a response to this market prospect.

Small tariff concessions from 7.5 per cent to 6 per cent were offered by the United States at the recent Multilateral Trade Negotiations for iron and steel products (plates, threaded pipe). This affects Saskatchewan's IPSCO production. No concessions were offered for oilwell casing or non-threaded pipes which are also produced by IPSCO. However, new opportunities could result from overall tariff reductions for carbon steel products, from 2.1 to 10 per cent to rates of 1.9 to 8 per cent.

The regional and national benefits which could be realized through the continued expansion of western Canada's steel capacity are contingent upon adequate raw material supplies. Western Canada's steel industry is almost wholly dependent upon scrap steel for its required iron units. Regional scrap supplies were adequate to satisfy the original design capacities and steel market served by western Canada's first mills. As production capacity has increased in large incremental steps to respond to growing regional demands and to maintain market shares, scrap purchasing has had to be extended to the United States. Today, United States scrap imports represent about one fifth of the total regional requirement. In 1974 when regional consumption of rolled steel products reached a high of over 2.4 million tonnes, the United States government assigned scrap export quotas. These quotas were only temporary but demonstrated the vulnerability of regional producers to the exercise of external controls over their iron unit supply.

New scrap purchases in recent years by the five western steel mills have fluctuated between 826 000 and 886 000 tonnes. Additional purchases to satisfy the basic regional market in 1985 could approach 200 000 tonnes. The iron unit requirements of major new projects would be incremental. The needs of this scrap-deficient region to meet increased demand for scrap iron could result in expanded foreign imports. Other supply options could lead to the identification, collection and distribution of additional domestic scrap, the large-scale use of reduced iron pellets, or the construction of a direct ore reduction plant to satisfy requirements.

Iron foundry products represent a further area of primary iron and steel development potential that could be adversely affected by the iron unit supply. Development of cast iron and steel products to satisfy continuing western mineral, farm and oil requirements represents a clear development opportunity for the region.

Since 1974, the Saskatchewan iron and steel agreement has lead to the examination of some aspects of the supply alternatives available to an expanded level of provincial production, and has assisted in the expansion process. Saskatchewan was identified as a possible location for the production of directly reduced sponge iron for distribution to a

western market, although the development opportunity was never realized due to low prices of scrap iron in the North American steel industry. The resolution of the quality, quantity and security of the iron supply issue, in economic terms, remains the task for both Saskatchewan and other western steel producers in realizing the region's steel development potential. Federal-provincial initiatives on a multi-provincial western basis may be necessary to precipitate the economic cooperation required to establish a longer-term supply management system for the growing western industry.

5.5.2 Farm Machinery

The farm machinery industry in Saskatchewan represents a small, though well established, part of provincial manufacturing. It has traditionally been highly vulnerable to fluctuations in farm incomes but has nonetheless developed some export performance capacity.

The United States has agreed, in recent Multilateral Trade Negotiations, to permit duty free entry for most Canadian produced agricultural machinery, implements and parts, provided they are intended for agricultural use. This has removed a long-standing trade irritant.

Many of the skills found in the farm machinery industry may be applicable to the emerging mineral and mineral servicing requirements. Support and development of this industry, in satisfying both the mining and agriculture sectors, may be significant in expanding and stabilizing a considerable part of the province's manufacturing industry.

5.5.3 Electronics

Saskatchewan has a very small, though growing and innovative, electronics industry, centred mainly in Saskatoon. Early development focused on space and communication technologies. Increasingly, the application of electronic techniques to rural and northern communications, agricultural production, grain handling control and inventory management, and mineral production control and measurement requirements could provide the basis for major expansions to the electronics sector to supply western markets. Production skills are established within the community, and applied training requirements of the industry can be developed through both the University of Saskatchewan and community college systems.

Electronics imports into western Canada for resource related sectors have been growing well above the national rate of import growth. Imports to the prairies of measuring and control equipment in 1977 exceeded \$10 million. The western market is small by international standards. However, specialized requirements of the region's large farm, grain handling and

mineral sectors for electronic control equipment, as well as communication equipment requirements for dispersed rural and northern populations, may provide a basis for both domestic and export market production.

The growth of the electronics sector has been highly dependent upon government contracts and procurement policies. Realizing these federal purchasing patterns in the western context to encourage the development of such resource related technologies can provide a major stimulus to growth of the industry.

5.6 Western Market Threshold Developments

Historically, the Saskatchewan market has alone been too small to support much manufacturing activity based solely upon its requirements. Consumer oriented manufacturing activity has been restricted in size to local needs, and often of a service nature. Manufactured goods have been imported from elsewhere in Canada or abroad. With the steady growth of the provincial and western economies and better communication ties within the west, the potential for import replacement and local supply will increase. By 1985, the Saskatchewan population is expected to exceed one million, the prairies will have reached four million, and western Canada will be approaching seven million people. The central geographic location of Saskatchewan in the prairies and western markets may afford the province distributional advantages for the manufacture of certain consumer oriented products.

It will be necessary for Saskatchewan manufacturing to achieve competitive scales of production if provincial producers are to supply prairie or western markets. An evaluation of the emerging relationships between anticipated levels of regional demand for some consumer related products and the medium sizes of production facilities provides some indication of the magnitude of this emerging manufacturing opportunity. In each of the broad product areas identified in Chart 5.5, current regional production capacity falls far short of future needs. Significantly, average plant size tends to be much smaller than national averages, and the expanding regional market may thus provide a basis for expansion of existing facilities.

Currently, many consumer oriented products are imported. An assessment of these import levels suggests that there is considerable scope for expanded Saskatchewan production without displacing eastern suppliers. Chart 5.6 identifies the value of consumer products imported into the region in 1977. In comparing the import levels with the currently competitive scales for production for each item, the additional western production requirement based solely upon foreign imports can be calculated. It reveals opportunities for either plant expansion or new plant construction in each example.

CHART 5.5

SELECTED CONSUMER ORIENTED MANUFACTURING ACTIVITIES,
1975 FACILITIES AND ESTIMATED 1985 REQUIREMENTS,
PRAIRIES AND WESTERN CANADA

<u>CONSUMER ORIENTED MANUFACTURING ACTIVITY</u>	<u>PRAIRIES</u>		<u>WESTERN CANADA</u>	
	<u>NO. OF PLANTS</u>	<u>VALUE OF SHIPMENTS (\$000)</u>	<u>NO. OF PLANTS</u>	<u>VALUE OF SHIPMENTS (\$000)</u>
<u>LIGHTING FIXTURES</u>				
1975	5	7 801	13	14 411
ESTIMATED 1985		29 084		47 560
ADDITIONAL REQUIREMENT		21 283		33 149
<u>HOUSEHOLD FURNITURE</u>				
1975	171	60 923	336	85 847
ESTIMATED 1985		136 198		222 719
ADDITIONAL REQUIREMENT		75 275		136 872
<u>SPORTING GOODS AND TOYS</u>				
1975	13	3 003	23	6 547
ESTIMATED 1985		58 233		95 227
ADDITIONAL REQUIREMENT		55 230		88 680
<u>BISCUITS</u>				
1975	5	22 546	7	N/A
ESTIMATED 1985		49 506		N/A
ADDITIONAL REQUIREMENT		26 960		N/A

Source: Estimated using selected Statistics Canada industry data and prairie and regional population projections)

CHART 5.6

SELECTED CONSUMER ORIENTED IMPORTS TO WESTERN
CANADA AND RELATED REGIONAL PRODUCTION
OPPORTUNITIES

CONSUMER ORIENTED MANUFACTURING ACTIVITY	1977 VALUE OF IMPORTS		ADDITIONAL PLANTS REQUIRED ON THE BASIS OF CURRENTLY COMPETITIVE SCALES OF PRODUCTION	
	\$000		NUMBER	
	PRAIRIES	WEST	PRAIRIES	WEST
LIGHTING FIXTURES	5 146	11 435	3	8
SPORTING GOODS	11 128	29 486	10	27
TOYS AND GAMES	5 224	16 695	6	20
DOMESTIC APPLIANCES	16 158	37 540	4	10
BISCUITS	775	3 693	0	1

(Source: Estimated using unpublished Statistics Canada import values and related industry output data.)

Such findings, from even these limited examples, strongly support the emergence of a more definable western region market for many manufactured products. Development of this opportunity area in Saskatchewan will require transport upgrading to improve the province's distributional advantage within the prairies. Improved industrial environments will be required to attract both foreign and Canadian manufacturing capital and expertise to this agriculturally oriented province, and to generate and build upon local industrial enterprise. Realizing even a part of the western development opportunities will also require that Regina and Saskatoon be in a position to provide industrial locations and services to effectively compete with Calgary, Edmonton, Winnipeg and Vancouver.

Finished food and beverage manufacturing represents an important development opportunity area where the province's natural resource strengths in agriculture may be able to combine with the growing regional market for food products. Significantly, this also represents a manufacturing sector in which Saskatchewan has an established entrepreneurial base with companies like Intercontinental Packers, CSP Foods, and Agra Industries. These may be in a position to expand in an industry dominated by major national and international food conglomerates.

Potential finished food markets for which high levels of regional consumption may be anticipated by 1986 include bread, rolls, noodles, frozen doughs, pastas and snack foods (Chart 5.7).

CHART 5.7

ESTIMATED WESTERN CANADIAN CONSUMPTION OF
SELECTED FINISHED FOOD PRODUCTS, 1986

- C O N S U M P T I O N -
(000 UNITS)

<u>PRODUCT</u>	<u>UNIT</u>	<u>1974</u>	<u>1986</u>	<u>ADDITIONAL REQUIREMENTS 1986</u>
Bread	lb.	362 705	414 580	51 875
Cookies	lb.	42 881	48 981	61 000
Cakes	lb.	19 741	22 596	2 855
Rolls	lb.	47 947	54 836	6 889
Doughnuts	doz.	9 409	10 747	1 338
Flour	lb.	125 965	143 980	18 015
Prepared Breakfast Cereals	lb.	40 022	52 632	6 610
Cake Mixes	lb.	17 391	19 909	2 518
Pasta Products	lb.	30 525	34 858	4 333
Macaroni Dinners	lb.	31 823	36 374	4 551
Snack Foods	lb.	27 061	30 932	3 871

(Source: Food Processing in Western Canada,
DREE, Western Region, 1976)

Current plant utilization rates of many Saskatchewan finished food producers are approaching 80 per cent of capacity. This group may be prepared to examine the emerging development opportunity. Not to satisfy these food requirements from domestic sources will inevitably lead to increased levels of foreign, mainly American, imports.

5.7 Northern Development

In the north, development opportunities are based on a combination of social and economic conditions. Chronic levels of unemployment in many northern communities place a much higher emphasis on achieving higher rates of employment growth and labour participation and of utilizing established labour skills. Public-private sector agreements have thus been developed to increase the levels of northern participation in the major uranium expansion projects currently underway in northern Saskatchewan. Many smaller-scale forest development operations have additional significance in the context of northern development needs. These include portable sawmill operations, and post and fencing production. In addition, forest industry operations can often provide important employment transition opportunities from the traditional northern economy to an industrialized society, consistent with existing labour skills and preferences.

The rich geological resources of the Canadian Shield hold known uranium, copper, zinc, iron, platinum and nickel deposits. In addition, there have been discoveries of less well known minerals such as the rare earths and lithiums necessary for the production of space-age metals and fuels. Continued evaluation of the remote and unexplored northern mineral resources represents an important development opportunity in terms of current exploration requirements and potential impact on the provincial economy.

Traditionally, commercial fishing in northern freshwater lakes has been an important element in the northern economy. Today, the northern commercial fishing industry is smaller, in terms of both volume and value, than that of the tourist fishing industry. Approximately 1 200 people, many of native ancestry, are employed in the fishery. Northern fish production is marketed through the Prince Albert Fisheries Cooperative and the federal Freshwater Fish Marketing Corporation for final sale in North America.

Declines in the fishery have occurred for various reasons. Although the industry's potential has fallen, it is probable that given the high and rising North American protein costs, some expansion of the industry could occur. Such changes, however, will likely require changes in the resource management and marketing approaches of the industry.

Trapping is an important income supplement in many northern communities. Currently, there are 1 550 active trappers collecting beaver, mink, muskrat and lynx. Over the past decade, there have been 55 mink ranches in the Buffalo Narrows, Dore Lake, Ile-à-la-Crosse, Dillon and Denare Beach areas. All but one mink ranch have since closed down.

Potential now exists to revive this industry in both established areas and also around Lake Athabaska where there is an abundant supply of rough fish protein. Strong international demand has produced rising pelt prices, although only a small proportion of this reaches the trapper. Their average income in 1976 stood at \$490. As in fishing, problems of marketing and resource management will require resolution before the full potential of the industry can be realized.

Tourist development holds a certain long-term potential for northern development and income opportunities. Much of the north is wilderness and totally undeveloped. Improved access and tourist facilities to cater to various tourist interests will be necessary before major benefits can be realized. The attractions of some parts of the north are sufficient to provide significant United States foreign exchange benefits. These attractions have already formed the basis for many remote fly-in fishing camps.

6. SUMMARY AND CONCLUSIONS

6.1. Summary

6.1.1 General

The economy of Saskatchewan has historically been characterized by relatively large swings in economic activity, due mainly to:

- an economy dominated by production of primary products;
- changes in international grain markets;
- adverse weather conditions and crop failures.

Primary industry diversification and development in the 1980s based primarily on wheat, potash, heavy oil, uranium and coal offer the prospect of an expanded level of provincial economic activity. But resource growth may do little to encourage further processing and manufacturing of primary products within the province after the construction phases of these major projects have been completed. The provincial government, therefore, is concerned about the proper phasing of resource development and associated activities.

Construction requirements associated with major development projects in Saskatchewan and neighbouring Alberta could retain growth in important manufacturing and service sectors, thereby capturing a greater share of the benefits for the mineral industries. The unique relationship between the economic activity underway in both provinces and the potential for Saskatchewan, needs to be more clearly understood, and vigorous and prompt action undertaken to capitalize on opportunities.

In the longer term, the province may remain vulnerable to wide swings in international markets. In spite of these unknowns, diversified economic development to more fully realize the province's development potential will require positive policy and program initiatives by federal and provincial government levels to:

- sustain the performance of the leading resource sectors; and
- establish industrial environments capable of attracting enterprise and investment.

6.1.2 Economic, Social and Spatial Dynamics

Rural Saskatchewan is faced with a number of circumstances which need to be viewed under a broad framework of rural development policy:

- in the agriculture southern zone, grain, and to a lesser extent livestock (more as a residual activity), form the predominant economic base;
- many small communities (towns and villages) are almost totally dependent on servicing the agricultural community where continual rationalization is occurring. DREE's Agricultural Service Centre Agreements, implemented by PFRA, have played an important role here;
- construction of major access roads, school consolidations, changing shopping patterns, locating of key public services, such as senior citizens homes, and farm consolidation have resulted in the decline or growth of many rural communities;
- farm consolidation and increasing capitalization continues to occur in both the grain farming and particularly the mixed farming areas where farms are smaller;
- the continuing migration of persons in the older age groups to the larger urban centres, and particularly to towns and villages, and the implications for communities of location decisions on the provision of special services for them need to be taken into account;
- the lack of good transportation access and service to communities and the resultant negative effect on existing and potential new commercial and industrial activities represent a significant disadvantage;
- transportation services for bulk commodities including grain, potash and perhaps coal represent a serious constraint for future growth in these sectors, and for associated rural communities;
- manufacturing and service sector growth, where opportunities and comparative advantages exist or can be made to exist, should also occur in rural areas.

6.1.3 Native Indian People in Urban Areas

Increased options and opportunities for greater participation by native Indians in the economic, social and political activities affecting their livelihood and development, particularly in urban settings, need to be provided.

6.1.4 The Major Cities

Saskatoon is growing but it can benefit even more fully from northern resource development, particularly during the construction phases. Although many specialized service firms may leave after that period, long-term benefits may accrue by the retention of certain key firms which set up head offices there. However, the high cost of serviced land and a shortage of skilled labor could hamper growth as Saskatoon competes with other major urban centres in the prairies which have larger and more mature industrial servicing and manufacturing bases.

Regina, an important warehousing and distribution centre for western Canada, should continue in this role. This city is also an important agricultural service centre for surrounding farming areas. A major socio-economic issue facing the city is the influx of many native Indian people from rural locations, the high level of poverty among them, their deficiencies in education and job skills, and the social impact of this phenomenon on the city in general.

6.1.5 The Agro-Forest Fringe

This region of the province has a significantly lower per capita income than the provincial average. Much semi-arable land is associated with small mixed farming operations. Opportunities exist in the forest-based operations for pulp, dimensional lumber, furniture components, and with innovative applications of various other lumber products such as waferboard and chemically treated wood.

6.1.6 The Remote North

Here, overall living, health and employment conditions are well below southern provincial levels for many residents. Public objectives include the improvement of the ability of northern people to take advantage of existing opportunities or new ones as they become available, and to improve their physical standard of living.

6.2 Conclusions

6.2.1 Development Instruments

Certain federal and provincial mechanisms may strongly influence Saskatchewan's development path, including federal transport, agriculture, energy, trade, immigration and manpower training policies. The need is to maintain the momentum for growth and to remove obstacles to development, for example, the need to resolve the allocation of federal and provincial resource jurisdictions to provide a stable development climate.

Provincially, policies on resource ownership may also affect the entrepreneurial climate. Spending decisions from the provincial Heritage Fund could provide an important financial stimulus to diversified development. Evolving education and social policies and programs will be significant for both the development of skilled labour supplies and for improving the conditions of people of native ancestry, particularly in urban centres.

Initiatives supported by DREE through the General Development Agreement, or by other mechanisms such as ARDA, Special ARDA, RDIA, and historically by PFRA, have generally furthered provincial socio-economic development by:

- assisting to diversify the province's primary resource base for production and related activities;
- improving the standard of living in the north, increasing options and opportunities for livelihood, and improving transport access to remote centres; and
- supporting increased levels of manufacturing activities such as steel and related industries, and the general industrial incentives for new industries and plant modernizations.

Current joint programs such as the Canada-Saskatchewan agreement on northlands and Special ARDA give priority to northern development and native participation.

The Canada-Saskatchewan Subsidiary Agreement on Iron, Steel and Other Related Metal Industries is intended to increase the level of aggregate economic growth in the province, as is the Subsidiary Agreement on Mineral Development and the RDIA Program.

New Canada-Saskatchewan initiatives now being implemented include:

- the new Subsidiary Agreement for Planning, to continue to provide a mechanism for joint identification and analysis of development opportunities, and to review provincial economic and social circumstances;
- the Subsidiary Agreement on Productivity Enhancement and Technology Transfer in Agriculture, to encourage farmers to adapt innovations to increase production, reduce soil salinity, increase acreage returns, increase the potential for value-added processing and to accelerate the transfer of technology;
- the Interim Subsidiary Agreement on Water Development for Regional Economic Expansion and Drought Proofing, to undertake water management and supply programs; and
- the Subsidiary Agreement on Forestry Development, to assist in overcoming critical constraints facing the forestry industry.

6.2.2 Opportunity Areas

Federal-provincial initiatives that are currently only at the discussion level between officials, include:

- economic development needs of Saskatchewan's native Indian residents in the large urban centres, particularly Regina;
- industrial development in urban and rural areas including a federal-provincial industrial strategy coordinated with resource management needs, industrial infrastructure, municipal services, centre of excellence (uranium), and industrial innovation; and
- exploration of a means to facilitate the development of a grasslands national park.

Potential issues for future federal-provincial consideration include:

- tourism development. This sector, assisted to a limited extent under ARDA agreements which have now terminated, could be looked at over the longer term.

- mineral spinoff development: exploration of the opportunities to provide manufacturing activity and special services to this growing sector;
- service sector support -- an important opportunity area to diversify and augment the provincial economy;
- high-technology industrial support, such as the fermentation industry, gasahol, and science centre to explore highly innovative opportunities;
- iron supply units for existing and new steel development activities, to reduce the present dependence on scrap imported from the United States;
- rural development, including broad federal-provincial strategies, policies and programs to strengthen this essential and significant element of provincial economic development; and
- extension of mineral agreements. The current agreement has already accelerated growth and may be useful for further initiatives with joint federal agency consideration.

