

Roles and Responsibilities of the Agricultural Service Boards

In describing the roles and responsibilities of the ASB, you will:

- ✓ *describe factors that would influence Council to form or support an ASB;*
- ✓ *explain the 5 duties of an ASB as outlined in legislation; and*
- ✓ *describe the relative importance of the duties of the ASB within your municipality.*

The purpose of the Agricultural Service Board is to improve and maintain agricultural production, improve the economic welfare of the farmer and act as an advisory body to municipal and provincial government.

* Describe factors that would influence a Council to form or support an ASB.

Factors that Would Influence a Council to Form or Support an ASB

The establishment of the first ASBs in Alberta was in response to production problems that emerged during the growth of agriculture during the 1920s to 1940s. The specific production problems that prompted the development of the ASB structure were the introduction and spread of new weeds, and wind and water erosion of arable lands.

Prior to the establishment of ASBs, agricultural issues were brought forward to local council and had the potential to be addressed at the Alberta Association of Municipal District & Counties Conferences (AAMD&C). However, in many cases the main focus of these meetings was to review and discuss local government affairs, which included issues spanning a variety of Ministries such as infrastructure, environment, finance, and agriculture. Little or no consideration was given to agricultural policy. Due to the diversity of issues being addressed at the regional and provincial meetings, agriculture filled a very small component of the agenda.

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Eventually, agriculture was deemed to be important enough to require separate regional and provincial conferences. These conferences continued to be attended by representatives of the Counties and Municipalities, but were organized and financed by the Association of Municipal Districts and County Field Supervisors and its successor, Association of Alberta Agricultural Fieldmen (AAAF). The change made sense for two reasons:

1. It allowed more time for deliberations on agricultural concerns.
2. It gave the work of ASB and AAAF a higher profile in the province.

In recent years, with the split conferences, a more assertive attitude has become evident. ASBs are questioning policy in several areas and there is a distinct trend toward demanding more local autonomy and fewer unilateral department decisions or terms of reference regarding areas of jurisdictions and financial responsibility. This does not mean that ASBs or Agricultural Fieldmen have become overly critical, but rather indicates they have gained a better understanding of the operation of ASBs in areas of mutual concern. They have reached maturity and are beginning to demand the same measure of autonomy accorded local governments by other departments.

The opportunities that evolve from the operation of an ASB at a local level stem from the responsibilities that the ASB undertakes within the agriculture industry. ASBs play a critical role in assessing the needs and direction of the agriculture industry in their area, as well as identifying obstacles and working to resolve any problems that may arise.

The general role of ABSs can be broken down into 4 main categories.

1. Policy and Administration

Once formed, ASBs become advisory to the council in the development and promotion of agricultural policies that meet the needs of the municipality. Through the ASBs, council has an advocate of agriculture that also has the capacity to advise the Ministers of Agriculture, Environment etc. on the development and review of external policy. ASBs also have the responsibility to administer and enforce provincial agricultural related acts, such as the *Weed Control Act*, *Agricultural Pests Act*, and the *Soil Conservation Act*.

2. Program Development and Review

As the major function of an ASB is to identify local requirements for agricultural programs, council may decide to form or justify an ASB in response to local demands for improved or increased support on agricultural issues. The ASB can set program objectives, introduce new programs, and through program planning and execution, encourage participation of those who benefit from the program. The role of an ASB is also to review and evaluate established programs on an annual basis.

3. Program Promotion and Advertising

ASBs are responsible for promoting agricultural programs through the use of a newsletter, participation at trade shows and other public forums where agricultural producers are in attendance.

4. General

ASBs are also responsible for a variety of other aspects associated with improving the economic welfare of the farmer. The preservation and improvement of agricultural production requires coordinated efforts and frequent communication between the ASB, local institutions, governments and organizations. The role of the ASB is also to encourage good farming practices and farm safety. While performing all of the duties and responsibilities of an ASB, the ASB shall remain accountable to the ratepayers.

Over the years, most ASBs have obtained their own shop, equipment and storage facilities in order to be more self-sufficient. This allows them to be equipped with the tools needed for dealing with the agricultural issues of their local ratepayers.

* Explain the 5 duties of an ASB as outlined in legislation.

Legislated Duties of Agricultural Service Boards

If the decision is made to have a local ASB, then the following duties and responsibilities of the *ASB Act* will apply:

- To act as an advisory body, and to assist the council and the Minister of Agriculture in matters of mutual concern.
- To advise on and to help organize and direct weed and pest control and soil and water conservation programs.
- To assist in the control of livestock disease under the *Animal Health Act*.
- To promote, enhance and protect viable and sustainable agriculture with a view to improving the economic viability of the agricultural producer.
- To promote and develop agricultural policies to meet the needs of the municipality.

The *ASB Act* was not intended to be mandatory legislation, but rather enabling legislation. However, a bylaw can be passed by the municipal council to have the *ASB Act* become binding for their district. Although it was not mandatory for local government to establish ASBs, more than 50% of the total 70 boards in place today were established by 1952.

While the *ASB Act* states the specific duties and responsibilities of the local ASB, the overall purpose is to improve and maintain agricultural production, improve the economic welfare of the farmer and act as an advisory body to municipal and provincial government. Improving agricultural production requires the application of research findings such as new crop varieties and tillage techniques at

the producer level. Similarly, maintaining agricultural production requires the application of proven preventative measures that will reduce or eliminate soil erosion and the spread of new weeds, insects and diseases. With each ASB carrying out the duties and responsibilities of the *ASB Act*, came the decentralization of Alberta Agriculture, particularly in the areas of weed control and soil conservation.

 Test your knowledge

Learning Exercise 1.1

Identify key phrases that highlight the duties of the ASB.

* Describe the relative importance of the duties of the ASB within your municipality.

Connection to Municipal Council

Provincial legislation has played a role in maintaining agricultural production through various Acts such as the *Weed Control Act 1907* and the *Soil Drifting Control Act 1935*. Both Acts were being enforced even before the establishment of the first ASB in 1944. However, with the implementation of the *ASB Act* in 1945, the major function of the ASB has been to identify local requirements for agricultural programs that will preserve and improve agricultural production. Once requirements are identified, several organizations or agencies work together with the ASB to solve the complex agricultural problems and to disseminate information. The approach used by the ASBs has been to advise and assist in proper land utilization and agricultural management with a view to improving the economic welfare of the farmer.

Agricultural Service Boards also play an important role in the development of policy for their local municipality. A policy:

- Is a statement or decision endorsed at the highest level of the organization;
- Determines the framework or environment within which people can formulate strategies to achieve results that serve the interests of the public;
- Is a guideline for future discretionary action;
- Is a generalized statement of intent, which describes the aim, purpose or objective to be achieved;
- Is a general guideline based upon a body of principles;
- Is a statement of what you intend to have happen.

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In general, policies are principles or guidelines, which assist the municipality to make day-to-day decisions and to achieve its mandate. They give definition to the philosophy of the municipality and provide for the establishment of consistent operational procedures. Policies form the lifeline of any local authority and are essential to good government and to an understanding of the continuity of Council decision-making. Policy development contributes to the overall separation of Council as policy makers, from the staff, which is charged with carrying out Council decisions. Further, written policy statements are useful to current and successive Councils as guidelines on key municipal issues. They represent the philosophy of the current Council and at least convey a sense of the direction of decision-making of that Council to the public and affected parties (Alberta Municipal Affairs, 1991).

REMINDER – Ensure that current ASB policies & bylaws have been submitted to the ASB Program Office, Alberta Agriculture and Forestry.

The ASB Program Office in Edmonton maintains a database of all ASB policies. Collection of these policies can save a municipality research time, policy writing time as well as link them with another municipality that has experienced the issue. These policies are available on the ASB program website at www.agriculture.alberta.ca/asb.

Extending Beyond Local Jurisdictions

From a different perspective, the activities of ASBs have a far-reaching impact that extends beyond their local jurisdiction. A survey by Sandhu & Associates to assess the socio-economic impacts of ASBs was conducted in 1998 utilizing data from budgets submitted in 1995-96. A more recent survey analyzing socio-economic impacts is not currently available. This being said, the 1995-96 information presented will provide numerical examples and a general perspective on the impact that the activities of the ASBs have on the Alberta economy. The survey was designed to measure the importance of the programs and services provided by the ASBs. In this survey, quantitative estimates of socio-economic impacts were measured in terms of provincial income and employment generated as a result of expenditures on ASB programs and services. Total ASB expenditures for the period of this survey amounted to \$18.54 million.

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The distribution of expenditures was identified as follows:

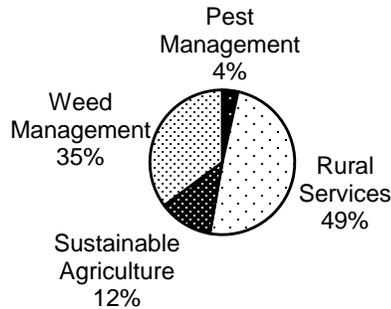


Figure 1.1

Distribution of ASB Expenditures Based on 1995-96 Financial Reports

Source: Sandhu & Associates, 1998.

As a result of expenditures, it was estimated that approximately \$16 million of income was generated in the provincial business sector, and that 434 jobs were created, of which a significant number (approximately 70%) were within the service sector. Although the survey is dated, these results would tend to indicate a positive impact on local community infrastructure in response to expenditures on ASB programs and services. In comparison, in 2005 the total actual expenses reported by municipalities for ASB activities were approximately \$32 million. Alberta Agriculture cost-shared approximately 33% of the total actual expenses reported by the municipalities.

For the purposes of the survey by Sandu & Associations (1998), **Rural Services** was defined by the following:

- Education and Extension Programs
 - transfer of weed and pest management information,
 - farm calls,
 - seminars and workshops,
 - crop and livestock demonstrations, and
 - local, regional and provincial tours.
- Specialized Rental Equipment

For example, on average in 1997, an ASB received 41 farm calls/week, ranging from 31 calls/week from December through February, to 139 calls/week from June through August. These numbers do not include casual meetings between Agricultural Fieldmen and local producers.

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In 1997, there were approximately 657 rentals of specialized pieces of equipment by producers through ASBs rental equipment programs. In general this equipment was not available through the private sector.

Weed Management programs and services were defined by the following:

- Weed Control on Municipal Land
- Weed Inspection and Enforcement on Private and Other Public Lands
- Rehabilitation and Reclamation of Land Under the *ASB Act*
- Weed Control Equipment Rental and Chemical Sales

For example, on average it was reported that in 1997, a municipality with 2 weed inspectors in addition to the Agricultural Fieldman would visit 759 sites within their municipality.

Rehabilitation and reclamation of land under the *ASB Act* involved controlling weeds where the infestation had severely impacted or prevented crop production, or where the infestation threatened to spread onto adjacent land.

Pest Management programs and services were defined by the following:

- Pest Monitoring and Field Surveys
 - crop pests such as blackleg, grasshoppers, and bertha armyworms
- Pest Prevention and Control Programs
 - predator management of coyotes and fox, and
 - pest management of beavers, rats, skunks, and gophers
- Warble Fly Inspection and Enforcement
 - improvement of livestock health and production

Data collected from field surveys in 1995-96 was used in models to forecast outbreaks and/or in the refinement of pest management strategies. For example, on average, 50 fields per municipality were inspected for blackleg to support a provincial approach to dealing with blackleg. More recently, ASB and Agricultural Fieldmen played a key role in the province wide survey for *Fusarium graminearum* in 2010 where 900 fields of corn and cereals were sampled.

Also in 1995-96, there was an average of 111 beavers, 3 foxes and 44 coyotes removed, 40 gopher traps sold and 370 livestock inspected annually.

Sustainable Agricultural Practices programs and services were defined by the following:

- Soil and Water Conservation Programs
- Promote, Advise, and Assist
 - in appropriate soil, land, and water management to enhance the economic viability of the agricultural producers under the *ASB Act*.

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- Shelterbelt Programs.
- Applied Research and Demonstration.

ASBs have a long and successful history of coordinating programs, which tie together federal, provincial and municipal governments in promoting sustainable agriculture. For example, ASBs have handled the distribution of approximately 2 million trees in Alberta through the shelterbelt program. In addition, the role of ASBs in bringing technology and research to agricultural producers is of significant importance to the advancement of agricultural operations. Examples of these programs include Soil Conservation Area Program (SCAP), Farmland Drainage Rehabilitation Program (FDRP), Canada Alberta Soil Conservation Initiative (CASCI), and Canada Alberta Environmentally Sustainable Agriculture (CAESA).

In addition to the successful coordination of programs, the ASBs have been and will continue to be consulted on local issues as they relate to government policies and programs.

Qualitative Socio-Economic Impacts

General qualitative impacts were identified as increased net returns to agricultural producers, reduced environmental impacts, and increased tourism and recreation.

The following model (Figure 1.2) demonstrates the qualitative estimates of ASB program impacts using the weed/pest management program as an example.

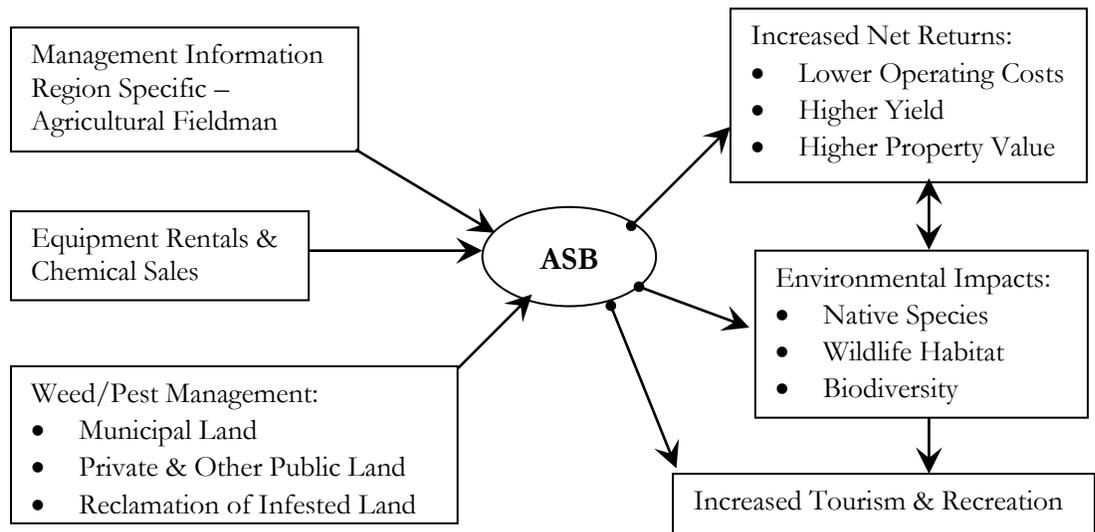


Figure 1.2

Source: Sandhu & Associates, 1998.

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In Figure 1.2, the three boxes on the left side illustrate the components of the ASB programs, while the three boxes on the right side illustrate the qualitative impacts of these programs. Increasing net returns to the producer through weed/pest management program activities can be attributed to lower operating costs, improving yields, and increasing property value. Impacts on the environment can be translated into preserving native species, wildlife habitat and biodiversity. Weed/pest management programs can also impact tourism and recreation within a municipality or region.

Increased Net Return to Agricultural Producers

Lower Operating Costs

The following data collected by Agricultural Fieldmen provides evidence of the lower operating costs to producers as a result of ASB activities.

Table 1.1

Lower Operating Costs Associated with ASB Weed/Pest Management Programs

Services	Unit Cost W/O ASB	Unit Cost With ASB	Calls/year	Savings/Unit With ASB	Total Savings
Predator Control	\$650	\$120	48	\$530	\$25,440.00
Blasting	\$150	\$40	55	\$110	\$6,050.00
Equipment Rental	\$50	\$30	150	\$20	\$3,000.00
Grasshopper forecast	\$72	\$0	1250	\$72	\$90,000.00
Blackleg survey	\$20	\$0	300	\$20	\$6,000.00
Warble Inspection	\$75	\$0	1500	\$75	\$112,500.00
				Total	\$242,990.00

Source: Sandhu & Associates, 1998.

Higher Yields

In addition to lower operating costs, increased net returns to producers can also be realized by increasing outputs or yields. There are several examples of economic thresholds of particular weeds on direct yield loss and reduction in seed quality. For example, it has been estimated that 20 plants/m² of stork's bill can reduce the yield of peas by 20%. Therefore, by reducing the weed population, yield increases and an increase in net returns is possible.

Increased Property Value

Increased net returns to producers by increasing property value can be based on direct resale value or impact on grazing land/rangeland. For example, the direct economic impact of knapweed on the Montana economy is estimated to be greater than \$14 million annually due to the infestation of over 2 million acres of rangeland (Hirsch and Leitch, 1996).

Environmental Impacts

Another positive impact from ASB activities is based on the assumption that improved agricultural programs and services will provide information to make environmentally sound decisions, which in turn will reduce the negative impact on the environment. ASBs can assist farmers/landowners in developing and implementing the most cost effective weed/pest management plans for their pest concerns. The use of weed/pest population information and integrated management plans contribute to the protection and enhancement of native species, wildlife habitat, and biodiversity.

Increased Tourism

Another positive impact from ASB activities that is more difficult to measure is the potential for increased tourism and recreation within the municipality and the province as a whole. In association with the reduction in environmental impacts, the existence of a landbase free of weeds and pests tend to enhance native species, increase biodiversity, and improve wildlife habitat. Therefore, we can assume that these conditions will result in an increase in recreation, hunting, and camping activities.

 Graded Assignment-

 Due Date- February 17,
2017

Assignment 1.1

For your own municipality, generate a table similar to Table 1.1 above, which compares costs for the key services in your area with and without the support of the ASB. Submit the table and explain how the total savings impact the producer.

In addition, describe other programs or services your ASB offers that would contribute to increasing the net return for producers, impacting the environment and increasing tourism.

<p>Total Question Value = 14 Table & explanation = 8 pts Net return = 2 pts Impact on environment. = 2 pts Increasing tourism = 2 pts</p>

Quantitative Socio-Economic Impacts

GDP = wages and salaries +
 employer contributions + net
 operating surplus +
 depreciation

The quantitative socio-economic impacts estimated in this survey were based on impacts on income and employment as a result of ASB activities. Impacts on income are measured in terms of Gross Domestic Product (GDP). Total impacts are the sum of direct and indirect impacts. Direct impacts relate to direct expenditures of the ASB.

ASBs do not operate in isolation as they rely on other industries to supply commodities and services. The chemicals, machinery, and services they purchase are called indirect inputs. This demand on other industries for indirect inputs generates additional provincial GDP and employment impacts. At the production end, additional output generated due to ASB activities also generates additional provincial GDP and employment impacts.

The total direct GDP impacts of ASB activities were \$7.78 million for the 1995-96 budgets. The indirect GDP impacts due to the purchase of products and services was estimated to be \$4.76 million, while the indirect GDP impacts due to increased activity of other industries to deliver the products and services purchased by the ASBs was estimated to be another \$3.09 million. Therefore the total indirect GDP impacts due to all of the ASB activities were \$7.85 million.

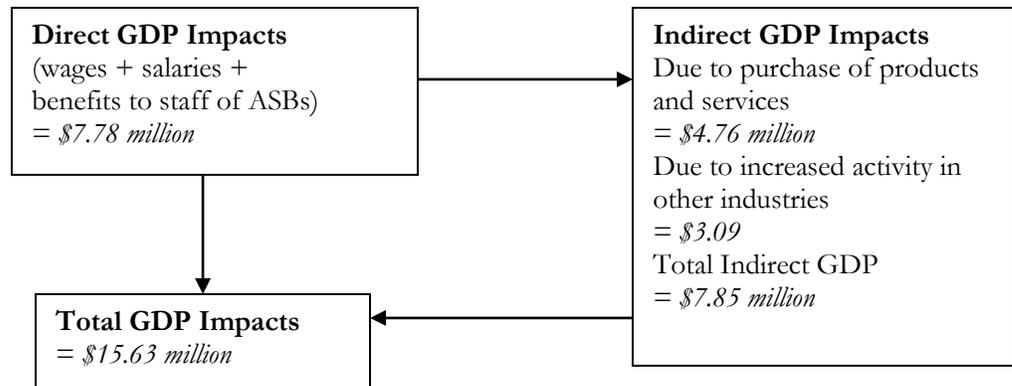


Figure 1.3
 Socio-Economic Impacts Related to Income.
 Source: Sandhu & Associates, 1998.

As illustrated in Figure 1.3, the total provincial income generated due to ASB expenditures amounted to \$15.63 million.

Industrial sectors that experienced significant indirect GDP impacts as a result of ASB expenditures are listed below beginning with the sector that experienced the highest impact.

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- **Service sector** – machinery and equipment repairs, financial services, construction and utility industries.
- **Oil, petroleum and industrial chemical sector** – fuel, chemicals, and fertilizer industries.
- **Manufacturing sector** – machinery and equipment industries.
- **Agricultural sector** – hay and grass seed industries.
- **Forestry sector** – agroforestry.
- **Wood and paper processing sector** – pulp and paper, wood products, and furniture industries

Agroforestry: trees for horticulture and shelterbelt programs.

 Test your knowledge

Learning Exercise 1.2

Do you think that the above list of service sectors is the same today as it was in 1995-96?

Quantitative Estimates of Socio-Economic Employment Impacts

The sum of direct and indirect jobs generated due to ASB activities represents the total impact on employment. During the survey period, there were 105 permanent Agricultural Fieldmen and an estimated 200 seasonal positions contracted as a result of ASB activities. In addition to these 305 direct jobs, there were also indirect jobs generated in the business sector as a result of purchasing inputs and producing outputs. It was estimated that a total of 129 indirect jobs were generated.

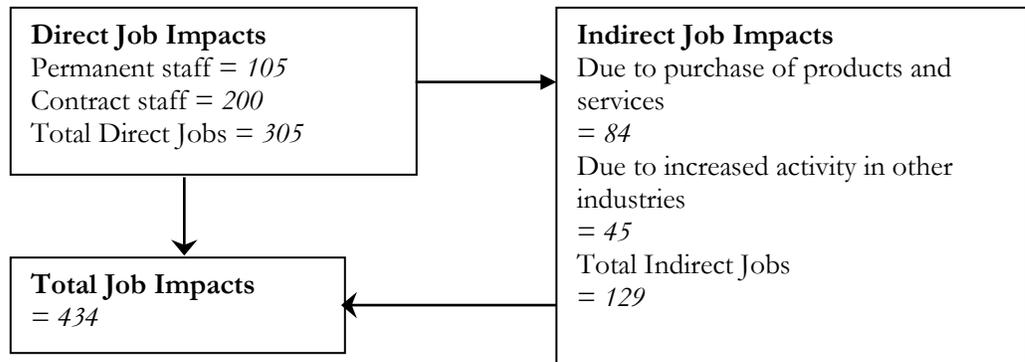


Figure 1.4

Socio-Economic Impacts Related to Employment.
Source: Sandhu & Associates, 1998.

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As illustrated in **Figure 1.4**, the total number of jobs generated due to ASB expenditures is 434.

Industrial sectors that experienced significant job impacts as a result of ASB expenditures are listed below beginning with the sector that experienced the highest impact:

- Services sector;
- Manufacturing sector;
- Oil, petroleum and industrial chemical sector;
- Agricultural sector.

To compare the socio-economic impact of ASB activities to the activities of other industry sectors in the province, the survey used income and employment multipliers. The numbers generated indicate the amount of money on every dollar that transforms into provincial GDP.

Income Multiplier

Income Multiplier: ratio of total GDP generated by ASBs to their total expenditures.

$$\begin{aligned} I_{ASB} &= \frac{\text{Total GDP}}{\text{ASBs Expenditures}} && \text{(pg. 17)} \\ &= \frac{\$15.63 \text{ million}}{\$18.54 \text{ million}} && \text{(pg. 11)} \\ &= 0.84 \end{aligned}$$

From the above calculation the income multiplier for ASBs is 0.84. This means that for every dollar of expenditures on ASB activities, \$0.84 is cycled back into the provincial economy. For comparison, the income multipliers for other sectors such as oil, services and manufacturing are 0.78, 0.76 and 0.59 respectively.

 Test your knowledge

Learning Exercise 1.3

How does the income multiplier for ASBs compare to other industries? Do you think it is the same today as it was in 1995-96?

Employment Multiplier

$$\begin{aligned} E_{ASB} &= \frac{\text{Total Number of Jobs}}{\text{Direct ASB Jobs}} && (pg. 18) \\ &= \frac{434}{305} && (pg. 18) \\ &= 1.43 \end{aligned}$$

For the above calculation the employment multiplier for ASBs is 1.43. This means that for every direct job created in the ASB, there are 0.43 jobs created in the province. For comparison, the employment multipliers for other sectors such as oil, services, and manufacturing are 2.33, 1.30, and 1.33 respectively.

 Test your knowledge

Learning Exercise 1.4

How does the employment multiplier for ASBs compare to other industries? Do you think it is the same today as it was in 1995-96?

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For additional resource material dealing with this topic refer to the following websites:

- Clubroot Disease of Canola and Mustard – Agdex 140/638-1
[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex8593](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex8593)
- Frequently Asked Questions
[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/faq7389?opendocument](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/faq7389?opendocument)
- BioProducts Alberta – homepage
<http://www.bioproductsalberta.com/index.php>
- Alberta Clubroot Management Plan
[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex11519](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex11519)
- Best Management Practices for Disinfecting Farm Machinery and Equipment to Prevent the Spread of Clubroot between Canola Fields
[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/prm12120](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/prm12120)

References

Accounting Records of AAFRD. 1973-2005.

Agricultural Service Board. 1997. Provincial Agricultural Department Survey.

Alberta Municipal Affairs. 1991. How to Manual on Policy Development.

Association of Alberta Agricultural Fieldmen and Agricultural Service Boards. 1989. The First Forty Years.

Hirsch, S.A. and J.A. Leitch. 1996. The Impact of Knapweed on Montana Economy. Agricultural Economic Report No. 355, Dept. of Agricultural Economic, North Dakota State University.

Sandhu, G. 1998. Socio-Economic Impacts of Agricultural Services Boards. Sandhu & Associates.

http://www.municipalaffairs.alberta.ca/documents/LGS/Municipal_Grants_Information_Booklet_-_Web_Portal.pdf Municipal Grants Information Booklet 2011/2012.