## ESTIMATION METHODOLOGY SUMMARY

**Net farm income measures are derived residually.**

**Net cash income is derived by subtracting operating expenses from farm cash receipts.**

**Farm cash receipts** include revenues from the sale of agricultural commodities, program payments from government agencies, and payments from private crop and livestock insurance programs. Receipts are recorded in the calendar year when the money is paid to farmers. Market receipts are farm cash receipts minus program payments. They include sales of field crops, fruits, vegetables, floriculture and nursery products, maple and forest products, livestock, milk, poultry, eggs, wool, fur and honey. The information is collected from a wide variety of surveys and administrative sources that report the quantity and average farm price for each commodity marketed in a province. Program payments are tied to agricultural production and paid directly from government to farmers. Examples of these payments include the Net Income Stabilization Account (NISA), non-private crop insurance payments, and provincial stabilization programs. NISA payments include only the withdrawals from the government portion of the NISA accounts because the producer account includes only money previously counted as farmer income.

**Farm operating expenses** represent business costs incurred by farm businesses for goods and services used in the production of agricultural commodities. Expenses, which are recorded when the money is disbursed by the farmer, include property taxes, custom work, rent, fertilizer and lime, pesticides, machinery and building repairs, fuel for heating and machines, wages, interest and business share of insurance premiums. Initial expense estimates (released in May following the reference year) are based mainly on analysts' estimates using price changes from the Farm Input Price Index (FIPI) and quantity changes based on discussions with industry contacts and other available data. The first revisions in November are based on preliminary tax data. The following May, final tax data are used. In addition to the tax data, other administrative data are available for some specific expense items (e.g. interest, crop and hail insurance, and business insurance). Every 5 years the Census of Agriculture provides data which are used as a benchmark for many of the expense variables.

**Realized net income is derived by subtracting depreciation and adding income-in-kind to net cash income.**

**Depreciation** charges account for the economic depreciation or for the loss in fair market value of the capital assets of the farm business. There are no monetary disbursements associated with depreciation. Calculated on farm buildings, farm machinery, and the farm business share of autos, trucks and the farm home, depreciation is generally considered to be the result of aging, wear and tear, and obsolescence. It represents a decrease in the potential economic benefits that can be generated by the capital asset.

**Income-in-kind** measures the value of the agricultural goods produced on farms and consumed by farm operator families. It is included to measure total farm production. There is no monetary disbursement related to income-in-kind. It is calculated using Statistics Canada estimates of per capita food consumption, coupled with Census measurements of the farm population and the average prices that producers would have received in the marketplace.

**Total net income is derived by subtracting depreciation and adding income-in-kind and value of inventory change to the net cash income.**

**Value of inventory change (VIC)** measures the dollar value of the physical change in producer-owned inventories. This concept is used to value total agricultural economic production. To calculate VIC, the change in producer-owned inventories (between the end and the beginning of a calendar year) is first derived and then multiplied by the average annual crop prices or value per animal. This calculation is different from the financial or accounting book value approach, which values the beginning and ending stocks, and then derives the change.

The VIC over all the major commodities can vary widely (depending on the size of the change of inventories and prices). The VIC can be either positive (when inventories are larger at the end of the year compared to the beginning levels) or negative (when year-end inventories are smaller than the levels at the beginning of the year). If the inventory levels are the same at the beginning and end of the year, VIC will be zero despite price changes.