tutionnelles dans les législatures, devant les tribunaux et dans les documents parlementaires des provinces du Québec, du Manitoba et du Nouveau-Brunswick. La charte garantit aussi aux minorités le droit à l'instruction dans leur langue dans toutes les provinces.

La charte vise à préserver et à mettre en valeur le patrimoine multiculturel du Canada. Elle reconnaît et confirme les droits ancestraux ou issus de traités des peuples autochtones du Canada, c'est-à-dire des Inuits, des Amérindiens et des Métis. Elle énonce en outre qu'aucune de ses dispositions ne pourra porter atteinte aux droits des peuples autochtones.

La proclamation de la nouvelle Constitution ne met pas fin pour autant aux discussions constitutionnelles. Le Québec, seule province à majorité francophone, continue à s'opposer à la nouvelle loi. Elle considère en particulier que la charte des droits a pour effet de diminuer ses pouvoirs. Elle s'inquiète notamment de ce que les dispositions linguistiques de la charte compromettent sa législation concernant l'usage des langues dans l'enseignement.

## HIGH TECHNOLOGY ENTERS THE FARM GATE

An explosion of new research and development in farm machinery electronics, conservation techniques and genetic engineering is helping Canada's food producers to cut costs and increase efficiency.

Most of the impetus has come from the farmers themselves who have simply walked into high technology research centres devoted to new auto parts, office systems or space research, and outlined their own particular problems. Canadian researchers have often found that these farmers already have a fairly clear idea of the solution. They are very inventive. For generations they have managed with the materials at hand, and cooperated with their neighbours to carry out major projects. Now many of the young scientists in agricultural research are the sons of farmers and are bringing a love and understanding of the land into Canada's high technology laboratories.

The design of farm implements has remained fundamentally the same for 30 years. They are larger, but they are basically the same machines. Researchers are now working on new items such as an electronic cutter, to be attached to a combine harvester, which will automatically adjust to uneven terrain and cut up to 10% more beans off the bottom of the stalk. The microprocessor has made possible sophisticated equipment to replace gauges and other warning systems, and to ensure machinery is fully utilised with minimum wear and tear. Western farmers are experimenting with automatic irrigation by electronics. Computers moving on programmed paths across a farm can sense moisture levels in the soil and, when they reach a critical point, can deliver the equivalent of a centimetre of rain through overhead pipes and sprinklers which attach themselves automatically to the nearest well-head. Electronic circuitry can identify distinctly different electronic "signatures" produced by corn kernels or soybeans, and can disregard stems, pods, pieces of corncob and other crop debris. It is hoped that this form of monitoring will, among other things, be useful in reducing the amount of grain that is lost with the