role of basic research in social, economic and technological development is clear when complemented by the application of knowledge. Innovation, design, development and commercialization of new products and processes are vital push factors of socio-economic development and technological advancement. This is particularly true in a manufacturing sector where the bulk of the total effort in technological development is not in basic research but development, production and commercialization. Government support for research and development (R&D) is expected to follow this trend. This is to ensure purposeful and balanced allocation of government funds earmarked for R&D.

As a major R&D performers, independent R&D institutions (IRDIs) are extensively involved in activities ranging from research, development and innovation to production of prototypes and pilot commercial facilities particularly for small and medium industries (SMEs). This study highlights that in Japan, Germany and the USA, government support for IRDIs is significant and sustainable. IRDIs have proved that they are effective providers of customized research, innovation and technological assistance specifically to the manufacturing industries. Their outreach activities are extensive, and their collaboration and partnership with academic institutions (universities and colleges) and government owned and operated R&D establishments is also solid. IRDIs have become the major players behind the industrial strength and technological advancement of these countries.

The Canadian experience has been studies to find out if government’s regular support for IRDIs is comparable to the above mentioned counties. The result has shown that Canada is significantly lagging behind in its support for IRDIs and in its innovation and competitiveness specifically in the small-scale manufacturing sector. This stands at odd with its vision of achieving overall excellence in innovation, development and commercialization. Strategies should be designed to ensure that government resources are allocated to all R&D performers in accordance with the full spectrum of activities in R&D and outreach objectives targeting the small industries in the process of knowledge commercialization. Small and medium manufacturing enterprises are the backbone of Canada’s industrial strength and export capability. Thus the intermediary role that IRDIs would provide is essential. Therefore, revising the traditional approach and promoting a more realistic and balanced approach in the allocation of government funds for R&D will be necessary specifically for enhanced entrepreneurial innovation and further technological advancement and competitiveness.