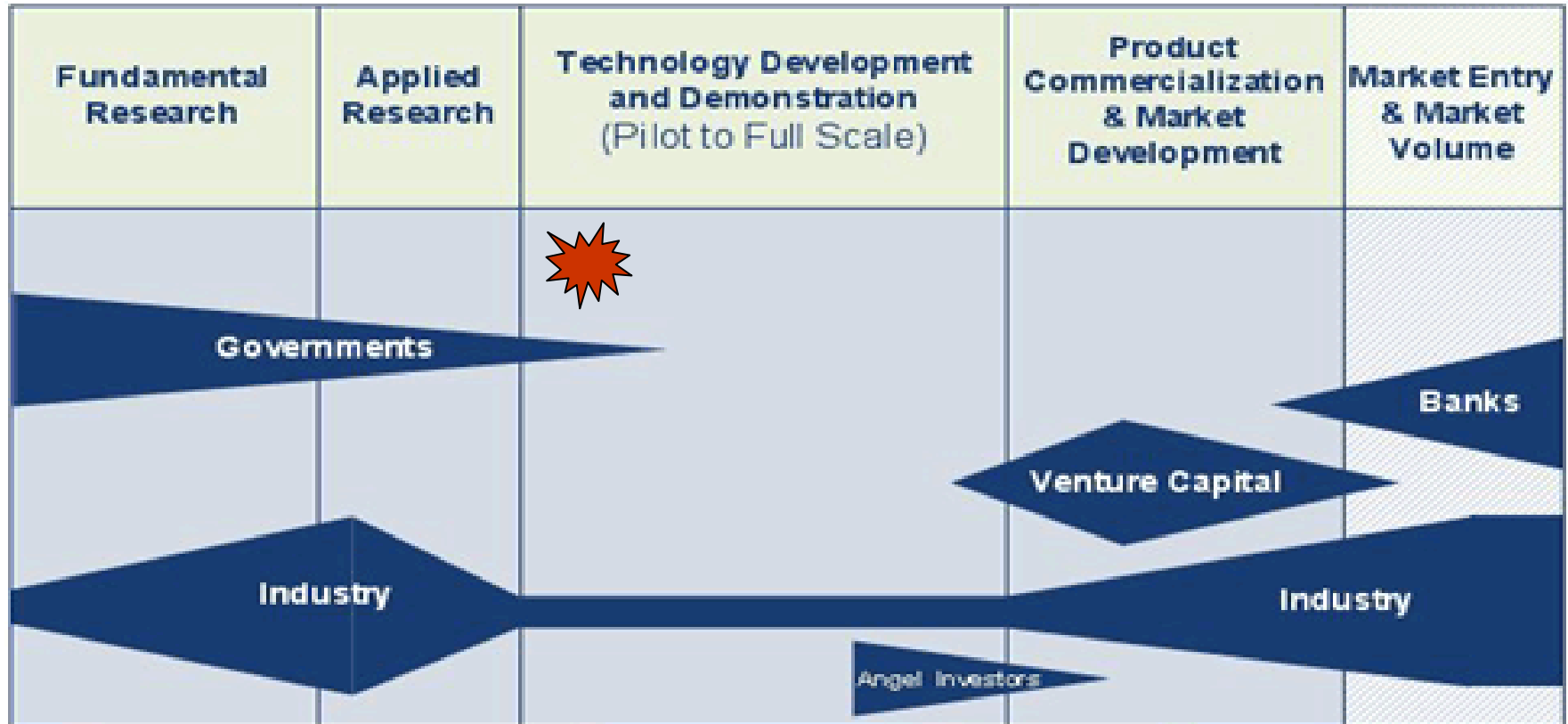




Science and Innovation Program

Agricultural Policy Framework Innovation and Renewal Team

Nov. 8, 2005



Public and Private Sector Research
\$23.3B/year
(Dec 2003)

VC Funding
\$2.3B/year
(Dec 2003)

★ AAFC Science & Innovation

Ref: http://www.sdte.ca/en/about/innovation_chain.htm



What is Science and Innovation?

- **Science**
 - *Investing Money to Create Knowledge*
- **Innovation**
 - *Investing Knowledge to Create Money*



Why was S&I included in the APF?

- **To create new opportunities for the sector that will attract investment, increase profitability of farming, and enhance the viability of rural communities.**
- **To identify new mechanisms that will combine new science, investment and commodities to address new mechanisms**
- **To identify new departmental initiatives that will support Innovation growth within the sector.**
- **More than \$2 billion in fixed assets and \$600 million in annual investment by federal and provincial labs, industry and universities.**
- **Pressing need to focus and leverage these resources on National Agri-Innovation opportunities**



How will APF S&I make a difference?

- **Realignment of** public sector resources toward the APF priority areas (environment, food safety and quality, renewal, science & innovation, BRM)
- **Coordination** throughout the value chain by building stronger links through improved collaboration and partnerships
- **Creating a climate for** the development of **innovation** in the APF priority areas and in bioproducts



What can we expect as Outcomes?

- **Increased levels of Investment (internal and external) in Science and Innovation in Priority areas, especially new bio-products.**
- **Increased market share for new food and non-food products produced in Canada**
- **Improved producer and rural community value share in incomes**
- **Stronger departmental focus on Innovation**



What are we doing?

- **Strategic Planning Tasks - \$8M**
 - *Inventory of Agricultural Research Capacity – RFP let*
 - *Intellectual Property Management Strategy*
 - Science Bureau, IP & Commercialization Office
 - *Science Expertise Database*
 - *BioProducts and BioProcesses Strategy Studies*
 - AAFC Phase 1-3 BP studies; BIOCAP-CARC BP Study; NRC BP Study – all completed in 1st year of APF
 - AAFC BioProducts Working Group formed and operating
- **Programs - \$30.7**
 - *Broker Program - \$6M*
 - *Agri-Innovation Program - \$20M*
 - *Ontario Implementation Agreement Initiatives - \$4.7M*



Accelerate Innovation

Brokering Program - \$ 8 million

Linking science into existing and new value chains

- *Creation and / or funding support of a number of **Broker Organizations** (e.g. like Soy 2020, National Flax Initiative, BioProducts Canada)*
 - Strengthen adoption of new innovations by brokering between university, government and industry
 - Move producers/rural communities up the value chain to increase share of agri-sector income
 - Differentiate commodities into a wide range of new products and markets
 - Create new value chains



Accelerate Innovation

Agri-Innovation Program - \$24 million

Funding the gaps to move spur innovation & commercialization...

- *Start-up help* – *centers of innovation, incubators, business mentoring, pilot processing*
- *Ag BioProducts Integration* – *facilitate across:*
 - Scientific disciplines, Project initiatives, Facilities and systems, Research, Integrated research planning
- *Realignment incentives*
 - Bridge funding for key science positions, facility planning, transition initiatives



Progress to Date

- **Full Proposals**
 - *13 Approved - \$11M*
 - *12 in consideration - \$13M*
- **Letters of Intent**
 - *5 in consideration - \$14M*
- **Rejected**
 - *17 rejected - \$28M*
- **Total Requests - \$66M but only \$30.7M available**



Key Initiatives

- *Soy 2020*
- *Flax 2015*
- *Pulse Innovation*
- *Novalait – Milk BioRefinery*
- *Maple Nutraceuticals*
- *Pilot Plant Network*
- **In Development or Discussion**
 - *Bio-Oils, Bio-Active Compounds, BioActive Meats, Industrial Triticale, Northern Berries, Maple, Fenugreek, Nutraceuticals, Potato 2020, Parkland BioFibre, BioCar*
- *BioProducts Canada*
- *BioPharmaceutical Centre (OLSC)*
- *Food @ Guelph*
- *Plant Biotechnologies Assn (BC)*



Challenges and Opportunities

- **Linking of Key Initiatives with AAFC Science, AAFC Marketing & Policy, VCRT's, Provinces and OGDs**
 - *Policy*
 - *Regulation*
 - *Financial Environment*
- **Strategic Planning Tasks**
 - *Departmental Innovation Strategy*



Challenges and Opportunities

- **Long term perspective**
 - ***10-15 year horizon on results***
 - ***Need for APF S&I II to continue growth of key initiatives***
 - ***Market Chain Development to address***
 - Health & Wellness
 - Bio- Fibres
 - Alternative Energy