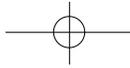


SO BEYOND



ACKNOWLEDGEMENT OF FUNDING

THE SOY 20/20 PROJECT IS FUNDED BY THE FOLLOWING PARTNERS:

Agriculture and Agri-Food Canada

www.agr.gc.ca

Ontario Ministry of Agriculture, Food and Rural Affairs

www.omafra.gov.on.ca

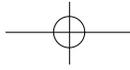
University of Guelph

www.uoguelph.ca

Ontario Soybean Growers

www.soybean.on.ca





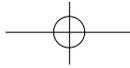
MESSAGE FROM THE CHAIR

Soy 20/20 has now completed three years since its inception and we have made great strides in identifying, stimulating and seizing new opportunities for the soy sector.

Our focus has continued to be analyzing market prospects, coordinating value-added research, and helping companies capture or expand real business opportunities. The passion and breadth of companies and ideas that launch and take tangible action from our analysis is remarkable.

This year alone, the project has been instrumental in developing six entirely new research projects and networking with as many as 30 companies on an as needed basis. The support offered and direction provided is not always measurable, but I believe it will prove to be important in transforming the industry beyond what it is today. The identity and maturation of our project is partially responsible for the positive steps taken by industry, academia and government engaged in this sector. This report highlights many of the key activities we have been involved with in 2004-2005 and initiates discussion on where we could go together in the future.

The results and impact achieved to date are due, in large part, to the hard work and creative thinking provided by our dedicated staff. An important element of this success has been the opportunity for the staff to interact with an effective, engaged and experienced board of directors providing guidance and insight. As Dr. Greg Penner has now completed his contract and moved on to other activities, Soy 20/20 wishes him great success and is grateful for his creativity, insight and leadership. The coming year will provide us with new thinking and energy in the form of a new Executive Director. I am confident that the momentum gained over the first three years will increase with new skills and determination.

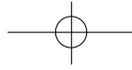


Looking forward, I see this project entering a new phase. We will strive to construct a dynamic soy sector that implements and actually builds on the opportunities and ideas that we have helped to identify, and catalyze. It's not an easy task, but we will aim for more market-driven research, more commercialization, and more investment.

Soy 20/20 has had a productive and progressive year. Let's continue to look beyond.

A handwritten signature in black ink that reads "Peter Hannam".

Peter Hannam
Chair, Soy 20/20 Project

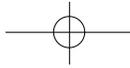


EXECUTIVE SUMMARY

The Soy 20/20 Project has exceeded expectations in many areas and identified significant barriers to success in others. We have been very successful in improving the alignment of public sector research with market opportunities. The Canadian soy protein research community has moved from zero involvement in mainstream, domestic protein ingredient markets to full engagement. We have successfully delivered on our central mandate, opportunity realization. Soy 20/20 has provided tangible assistance and leadership to numerous small companies that will help to build increased demand for soy protein and oil.

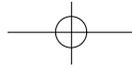
We have not yet succeeded in creating the kind of transformational change that will be required to maintain sustainable profit margins from soybean production in Canada, but our activities to date have laid the basis that will be necessary to achieve this goal. We need to be leaders in the identification and development of new markets and build on our existing strengths in identity preservation and on our ability to bring innovation to market. We are constrained in our ability to realize added value in soy protein food ingredient markets by the lack of a domestic soy protein processing facility of sufficient scale. We will not close this gap if we focus on competing with the existing global supply of soy protein. We have clearly articulated that the only justifiable basis for the development of such a facility in Canada lies in our ability to differentiate and segregate proteins, and our capability to deliver variety specific soy protein to market. These arguments have been made to potential investors, and we are building interest.

Industrial uses for soybean oil provide similar opportunities. We will not succeed in the creation of a competitive advantage for Canadian soybean production if we attempt to compete with heavily subsidized bio-diesel production in the U.S. We need to focus on opportunities that provide higher value than existing vegetable oil markets. Such opportunities exist on a scale that would transform the Canadian industry. The use of soybean oil based polyols for the flexible polyurethane foam used in car seats and headrests represents a market that is currently paying more for petroleum based polyols than the commodity price for soybean oil. In Canada, it is worthwhile for us to develop soybean varieties that are specifically aimed at these market opportunities. Our primary competitors, the U.S., Brazil and Argentina, are less motivated to do so, as the opportunities represent



only a fraction of their total production. We can develop specific, value added soybean varieties targeted for use in industrial applications as a means of creating a competitive edge for Canadian soybean producers.

The Soy 20/20 Project has successfully developed non-traditional relationships between the manufacturing industry and agriculture. These relationships are the first step required to identify future opportunities. We have forged alliances with the chemical industry, and are currently working with them to identify value added opportunities of interest to both industries. We are working with soy protein end users to identify novel, value added functional opportunities that could be established in Canada. We have and will continue to focus on the development of novel opportunities that go beyond simply creating individual market successes by creating strategic competitive positions for the Canadian soybean industry as a whole. This project was initiated with the hope that success would lead to increased profit margins for Canadian soybean farmers. Our success to date has turned this hope into a conviction. We can make a substantive difference, and Canadian soybean farmers can compete globally. Success is never achieved easily, but the knowledge that we can, enables us to strive even harder.



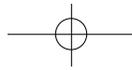
Innovation ~ Market

INTRODUCTION

Soy 20/20 Vision Statement

“Canada's Soybean Industry - Leading in value-added Innovation”

Soy 20/20 was established to accelerate the realization of Canadian soybean market growth by identifying opportunities through market analysis, removing constraints by increasing the effectiveness of public sector research, and most importantly, working with companies to develop or increase demand for Canadian soybeans. We apply this approach to the development of added value by working with those points within value chains that are currently constraining growth. In this annual report we will report on our achievements over the last year in four defined sectors: creating an innovation climate, realizing opportunities, increasing research effectiveness, and operational excellence.



Canada is a world leader in the delivery of new soybean varieties and processing technologies.

CREATING AN INNOVATION CLIMATE

To create a competitive edge for the Canadian soybean industry, we need to deliver in two key areas.

- 1.) We need to be able to bring innovation to market faster than our competitors.
- 2.) We need to realize innovative opportunities before our competitors do.

We need to be more clever!

Being more clever than our competition is enabled more by doing an effective and thorough job of understanding opportunities, than it is by having access to clever people. Soy 20/20 has been a clear leader in the development of independent and thorough analyses of opportunities, including economic and technical feasibility.

Vision:

“Canada is a world leader in the delivery of new soybean varieties and processing technologies.”

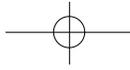
Role:

Development and articulation of a clear strategy for capturing increased value from soybeans in Canada.

Approach:

We have performed independent market/technical analyses of potential opportunities within soy based value chains. We identify gaps and constraints to implementation of the opportunities.

Soy 20/20 conducted technical and business analyses for the following soy opportunities which include cultured soy, organic soy meal, soy-dairy blended products, soy butter, cold pressed soy oil, okara, low linolenic soybeans, edamame, soy lubricants, textured soy protein, biodiesel, meat analogues, industrial soybeans, and soy protein as a food ingredient. In each case, technical issues, in conjunction with the business opportunities have been thoroughly analyzed. Results from these analyses were shared broadly with industry, government,



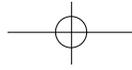
and the business community, both locally and globally. Those opportunities where the impact to the Canadian soybean industry is significant, in terms of on farm value, are being pursued aggressively in cooperation with new and existing companies.

In previous years we have clearly shown that the primary constraint to capturing more value for Canadian soybean lies in maximizing the value of our existing expertise with identity preservation through the production and application of value added soy protein as a domestic food ingredient. Unfortunately, identifying a constraint is not the same as overcoming it, and the availability of low-cost commodity soy flour, soy protein concentrate and soy protein isolate from large scale manufacturers in the U.S. has proven to be an insurmountable barrier to date. We have prepared a vision statement outlining what we need to achieve in terms of technical innovation in regard to protein extraction and processing, the cost points that this technology needs to deliver at, and the added value that can be realized. This document, entitled, "Closing the Canadian soy protein value chain gap" is available on our web site.

"Closing the Canadian Soy Protein Value Chain Gap" - www.soy2020.ca

Our analysis of bioproduct opportunities has led us into close interaction with major chemical manufacturing companies. We outline our vision for the future of a soybean based bio-industry in a vision document, entitled, "Soy chemistry, from salad oil to industrial chemicals". In brief, our conclusion is that soybean oil can serve as a cost competitive source for many intermediate chemicals currently synthesized from petroleum. Targets such as acrylic acid, a short carboxylic acid, are currently worth more than the twice the value of soybean oil on a weight basis. Cost-effective production of these chemicals from soybeans can be achieved by modifying the composition of the oil, and by using biocatalysis to produce shorter chain molecules. We have shared this vision with the chemical industry, and are building excitement and support.

"Soy Chemistry from Salad Oil to Industrial Chemicals" - www.soy2020.ca



Soy 20/20~Putting the elements together.

REALIZING OPPORTUNITIES

All the ideas in the world are meaningless if they never come to market. We have not found that opportunities in Canada are limited by entrepreneurs, or existing investment capital, or market channels, or good ideas. We are limited by our ability to put all of these elements together effectively.

Vision:

“Canada is the world's best place to invest in novel soybean opportunities.”

Role:

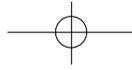
Our role is to act as a facilitator, to bring companies together within value chains, and to assist companies in capturing opportunities through the development of effective business plans, and the capture of investment capital. In addition, our role is to challenge companies with new opportunities, or novel ways of overcoming constraints.

Approach:

Throughout the past year Soy 20/20 has worked with an array of small and medium sized food companies, start-ups, and multi-nationals. These companies have required various degrees and types of support to help them capture opportunities that they have identified or that Soy 20/20 has encouraged them to develop.

The following is a sampling of opportunities where support was provided:

- soy oil paste,
- ethnic cuisine,
- soy crushing and partially defatted soy flour production facilities,
- bio-based lubricants,
- soy mayonnaise,
- edamame



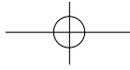
Soy 20/20~A champion, a friend, a facilitator, an analyst.

We also worked closely with two large companies to develop significant manufacturing facilities in Ontario. In the one case, the development related to a pilot scale manufacturing facility centered on a bioproduct opportunity. This opportunity has been delayed by the action of the companies multinational headquarters. In the other instance, the opportunity relates to a potential soy protein processing facility. This project is proceeding well, and we hope to have more tangible results to report in next year's annual report.

When Soy 20/20 interacts with an industrial partner to help them realize an opportunity, we do what is necessary. This ranges from facilitating interaction with other members of the value chain, conducting market analyses, forging relationships with investors, reviewing intellectual property landscapes, providing input on technical constraints, and assisting in accessing public sector funding initiatives. Our role varies from being a champion, a friend, a facilitator, an analyst, and a source of technical expertise. All business relationships extend beyond the formation of business plans, to partnerships with co-commitment to success. We force our partners to face reality, no matter how harsh, but we also provide support to their dreams.

Soy 20/20 continues to work in partnership with companies to help them obtain the capital necessary to realize their initiatives. We have succeeded in helping our partners obtain funds for a variety of food products, and a unique soybean breeding program, totaling approximately \$400,000.

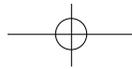
Soy 20/20 has used its industry insight and network to arrange and support incoming itineraries for potential investors in the bioproducts and food co-product sectors. In addition, meetings and events have been designed and held for domestic companies, at various points along the food chain, looking to make connections within the food distribution and processing sector. These have resulted in new networks, sales opportunities, and information sharing among private organizations in new and developing soy based value chains.



In one example, a showcase was hosted by Soy 20/20 to bring together innovative food companies using soy and the food service industry. This resulted in new linkages and relationships to further the demand for, and consumption of, soy in domestic markets.

On another project, Soy 20/20 was able to arrange an extensive three day event for a U.S. company interested in bioproduct investments during which meetings were arranged with 12 private Ontario companies with potential for partnership.

Recently, Soy 20/20 acted as a catalyst to introduce entrepreneurs from abroad to a local company directly resulting in a major investment being made locally for a leading edge process and co-product optimization technology.



Canada is a country that understands development is as important as research.

INCREASING ALIGNMENT BETWEEN PUBLIC SECTOR RESEARCH SECTOR AND MARKET OPPORTUNITIES

Both the province of Ontario and the Canadian government are committed to a continued high level of investment in soybean research. We are not limited by the number or quality of soybean researchers, nor are we limited by the amount of research funding available. We have the opportunity to compete in a wide variety of sectors for public support, and we have the advantage of a plethora of compelling industrial opportunities for soybean fractions. Our challenge is the need to focus on those opportunities that make the most sense for Canada.

Vision:

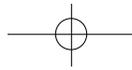
“Canada is a world leader in the interaction between public sector research and domestic industry. This is a country that understands development is as important as research.”

Role:

Our role is to provide public sector researchers with market information, and access to industrial leaders.

Approach:

In addition to sharing the analyses undertaken with the private and public research communities, Soy 20/20 has been the driver on major research initiatives. Soy 20/20 raised over \$1.1 million for these initiatives in a combination of private and public capital. Research initiatives include investigating innovative liquid-solid fluidized beds for isolating soy protein, utilizing peroxidase in soybean hulls to treat waste water, developing a bean with an oil profile suitable for industrial bio-product applications, developing a bean to be used in specific lubricating bioproducts, designing a breeding program for value-added soy varieties in a unique growing area, and understanding the relationship between Ontario soybean varieties and protein functionality in foods. Soy 20/20 hosted a strategic workshop for the public soy protein research community which brought together

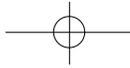


Imagination Agriculture Chemical Industry

many key researchers to establish direction and form research teams for specific priority projects. Soy 20/20 has influenced new research directions by participating in the review of research projects for OMAF, the University of Guelph, Ontario Soybean Growers, and Agricultural Adaptation Council. Soy 20/20 is pleased to have participated on many expert panels regarding the future funding direction of production systems research. There is a strong desire to build funding strategies that are not only sustainable but grow. Soy 20/20's forward thinking will have a positive impact on the transformational change to ensure that research is increasingly directed towards the creation of value for Canadian grown soybeans.

Soy 20/20 has championed soybeans as a leader in the emerging bioproducts market. We have provided a forceful presence on the national scene, working closely with Agriculture and Agri-Food Canada, Industry Canada, and NRCan, as well as with third parties such as Sustainable Development Technology Canada, to ensure that soybeans are considered as a Canadian opportunity, and not relegated to the status of an American threat to canola. We have articulated a different vision for bioproducts, one that is based on added value, and integration with the existing Canadian chemical industry. We have done more than throw ropes from one industry to another; we have helped to build bridges between agriculture and the chemical industry. These bridges will serve as a basis for the coming together of imaginations necessary to be globally competitive in this arena, and as a means of building the friendship and trust necessary to develop opportunities.

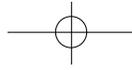
Opportunities exist to create industrial chemicals from soybean oil where the value is higher than the world market price for soybean oil. We have identified opportunities, and we are continuing, within confidentiality agreements, to work through the technical constraints and the intellectual property barriers necessary to bring these opportunities to market.



We have identified opportunities, such as the application of the peroxidase enzyme from soybean hulls to the polymerization of phenols and cresols in industrial waste water. We built a research team composed of experts from the University of Windsor and AAFC's Southern Crop Protection and Food Research Centre (London) to address this opportunity, and we worked with this team to successfully obtain funding for a three year research project. Perhaps more importantly, we emphasized that this project needed to be aimed at removing constraints to commercialization of this technology. To this end, we were successful in engaging companies that currently use phenols and cresols in their manufacturing processes. Companies have agreed to work openly with the research team, including access to their plants and waste water streams, to test product efficacy, and have agreed to work with us to determine the best fit between technical approach and cost.

The success of this project speaks to the success of Soy 20/20. We were pro-active in developing a vision for an opportunity and then making it happen. We led the development of this project not from above, but from within, shaping and articulating a group vision, and working hard to build the necessary relationships. This is the type of approach that has made our entire initiative successful, and this is the type of approach that we must multiply ten-fold to effect real, lasting, positive change to the Canadian agricultural economy. We have an abundance of research capability in this country, and significant industrial capacity across a broad range of products. Both the research and the industrial communities can be led to imagine and to realize more. To have the courage to lead requires that we do our homework, that we listen to our partners, and that we all are honest about what opportunities actually make sense.

Soy 20/20~Leading from Within



The Soy 20/20 Project is a leading example of achieving maximum results with minimal investment.

OPERATIONAL EXCELLENCE

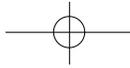
There are an increasing number of programs and initiatives in spaces similar to the Soy 20/20 Project, aimed at working in the interface between research and industry. Soy 20/20 not only needs to justify its own existence but to work synergistically with other programs to maximize the effectiveness of every public dollar that is spent in this area. We need to be clear as to where our mandate starts and where it finishes. We also need to maintain open and clear channels of communication with all of our partners to develop an effective and integrated team approach.

Vision:

“The Soy 20/20 Project is a leading example of achieving maximum results with minimal investment.”

Role:

We need to manage our founders' investment in this initiative responsibly and with full and open accountability for our actions and activities. We need to work within our means to affect change by relying on our ability to act as catalyst to stimulate financial, creative, and energy investments by others. Reports, financial statements, and meetings with the Board of Directors for Soy 20/20 have occurred regularly as scheduled. Responsible care and management of costs and operations is demonstrated by meeting budget and program targets as verified by third party audits.

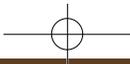


Approach:

Soy 20/20 works collaboratively with representatives and staff of its four member organizations, and other industry and government sponsored groups, in order to build consensus, share non-confidential information and offer support. Soy 20/20 is also effective in implementing its mandate by acting in confidence with companies and maintaining autonomy as a stand-alone organization to identify and seize opportunities for the soy-bean industry.

“Nobody succeeds beyond his or her wildest expectations unless he or she begins with some wild expectations”

~ Ralph Charell



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