Iowa Agricultural Finance Corporation

and its *tec*TERRA Food Capital Fund

Origin. Iowa Agricultural Finance Corporation (IAFC) is a private, for-profit investor in value-added agricultural and biotechnology ventures with intended benefits for the state of Iowa. IAFC was created in 1998 by a $25 million thirty year, interest-free loan from the State of Iowa through the Iowa Department of Economic Development (IDED).

Double bottom line investor – financial profits and public benefits. The private structure was intended by the legislature to de-politicize investment decisions and to comply with an Iowa Constitutional prohibition on the state becoming a shareholder in a private corporation. The state sought to expand private equity investing for IAFC's target market. The state loaned money to IAFC to do what the state cannot do directly. IAFC is a double bottom line investor, seeking both financial returns to repay the state loan and public benefits such as increased markets for Iowa producers, Iowa jobs and tax revenue.

Repayment schedule. Approximately $21.5 million of the original state loan is still outstanding with the next scheduled principal payment of $517,239 due in October 2007. The remaining principle is due in annual installments of $1 million beginning in 2008. IAFC fully anticipates meeting the repayment schedule.

Management and Ownership. IAFC is managed by a volunteer board of directors composed of agricultural producers and business leaders with experience in value-added agriculture and investing. IAFC is owned by those it finances and especially those ventures with agricultural producers as owners. More than ninety-nine percent of IAFC's stock is owned by agricultural producers.

Risk and Rewards. With double bottom line investing, both financial returns and public benefits are at risk. Not all investments will work out. Some will deliver financial returns. Some will deliver public benefits. Some fail to deliver either, despite best efforts and well-intended plans. Some deliver both. That is the nature of venture capital investing. IAFC's tecTERRA Fund's experience mirrors the experience of other venture capital investors. One or two winners are enough to make up for losses in other ventures.

Projects Funded

1. *Rudi's Organic Bakery, Inc.* (now NLIA, Inc. for the real estate and Rudi's Organic Bakery, LLC for the operations) – equity and debt, both directly by IAFC and indirectly through tecTERRA.
2. *ProdiGene, Inc.* (now a subsidiary of Stine Seeds affiliate International Oilseeds) – equity and debt through tecTERRA.
3. *Agricultural Waste Recovery Systems* (AWRS) – equity directly by IAFC.
4. *Wildwood Natural Foods* (now PMO Wildwood) – equity and debt both directly by IAFC and indirectly through tecTERRA.
5. *Sioux-Preme Packing Company* – equity and debt through tecTERRA.

Amounts are detailed in the included chart.

At legislative request and by mutual consent, IAFC pre-paid approximately $3.5 million of its outstanding debt to the Iowa Department of Economic Development (IDED) in the form of a note to Iowa Quality Beef assumed by IDED. The underwriting for this transaction was done by the state and the state has more recent contact with the borrower, therefore IQB is not discussed in the Project Status section. IAFC has had no ongoing involvement in the IQB transaction.

Project Status

- **Rudi's Organic Bakery**
  tecTERRA financed the construction of a $3.5 million new bakery in North Liberty, Iowa and marketing to support Rudi's growth. The plant was built too soon and became an unbearable financial burden on Rudi's operations. New management was brought in by tecTERRA. To salvage the opportunity and to earn back at least part of tecTERRA's and IAFC's investments, Rudi's operations were sold to a new majority owner and the real estate in North Liberty was bifurcated from the operating assets.

  The North Liberty plant is currently for sale and eventually will be sold, so as to deliver ongoing jobs to the local economy.

  With the additional investments provided under new ownership, Rudi's remaining operations recovered financially and Rudi's is now the fastest growing and largest specialty bread manufacturer in the United States, having moved past Food for Life as reported by SPINS point-of-sale data. This is some vindication of having picked the right company and the right market sector, but frankly the demands of a national brand exceeded the resources available through tecTERRA. We invested up to our diversification limits, but recognized that an additional investor would be necessary to carry the company across the threshold.

  It is frustrating that the job growth now being generated by Rudi's is not in Iowa. However, forced to choose between losing both the jobs and the money, or losing the jobs and getting a substantial return of our investment, the latter is clearly preferable. We will get back dollars from Rudi's. Neither IAFC nor tecTERRA control the timing of any exit from Rudi's.

  Rudi's is not a public benefits success in the near term for Iowa. Long-term, the new food grade factory in North Liberty, financed by tecTERRA, is likely to create future, yet uncounted public benefits beyond the $3.5 million spent in the local construction economy.

  From the financial bottom line viewpoint, Rudi's still has the potential to be a significant success or at least a save for IAFC.

- **ProdiGene**

  ProdiGene's intellectual property is now wholly controlled by an Iowa parent corporation, International Oilseeds, a Stine Seeds affiliate. The original facility in College Station, Texas is empty or subleased except for one part-time person. Stine Seeds wrapped up operations in Texas and Nebraska and is instead providing services to ProdiGene on a contract basis through Stine affiliates in Adel, Iowa. ProdiGene essentially has no direct employees, but instead contracts for services. (This is not an unusual situation for a small technology company.) Stine has the experience and reputation for managing an intellectual property portfolio. A great deal depends upon future market and regulatory developments.

  The market prospects for ProdiGene and similar companies engaged in modifying food crops to produce pharmaceuticals or industrial chemicals is cloudy as illustrated by the recent experience of Ventria (rice) in Missouri and North Carolina. (See attached Business Week article.) ProdiGene's experience with corn was similarly challenging.

  ProdiGene was started in Iowa as a spin-out of technology developed within Pioneer Hi-bred International by Dr. John Howard. ProdiGene previously moved to Texas in search of growth capital and other resources. Four years ago, Iowa economic and political leaders encouraged the pursuit of bio-pharming opportunities and tecTERRA responded by bringing ProdiGene back to majority Iowa ownership.

  In the meantime, the market changed. ProdiGene's target customers, pharmaceutical companies, did not stand still in the face of risks to existing production methodologies of key proteins derived from livestock or human blood. The major pharma houses or their current suppliers invested in new filtering technologies, dedicated identity-preserved livestock herds and more. In short, other people were building alternative new mouse traps at the same time.

  The science pioneered by ProdiGene works. ProdiGene (and others) can bio-engineer crops to deliver pharmaceuticals free of animal disease vectors like the prions associated with Mad Cow Disease (BSE).

  However, the business model does not work, at least not yet. Because most pharmaceuticals require multiple inputs, one input free of animal disease vectors is not enough. The cost of directly manufacturing human-grade pharmaceuticals in plants is still too high for the relatively small technology companies in the market, including ProdiGene. They cannot afford the cost of human medical trials, especially when market acceptance is in doubt, even if medical trials are successful.

  There appears to be an emerging consensus in the marketplace that bio-engineering food crops for drug production is in conflict with protecting the integrity of the conventional food supply. At minimum, this means that any food crops genetically modified for drug production would have to be grown away from the regions where the base crop is part of the staple food chain. Some significant market change may be necessary before bio-engineered pharma crops can play a significant role in Iowa's bio-economy future.

With a young technology, it is still too early to judge the public benefits to be derived from tying ProdiGene back to Iowa. At least in the near term, despite best efforts by many in the company, at Iowa State University, the Iowa Department of Economic Development, and others, the prospects for bio-engineered pharmaceuticals and bio-pharming are in doubt.

From a financial viewpoint, tecTERRA is unlikely to earn a substantial financial return. This is not to say that the company is worthless. Rather, it is reasonable to expect that realizing value will require additional investments of uncertain amount and timing that are likely to dilute prior investments, including tecTERRA's. To the extent financial returns are available, they will first be earned by subsequent investors. Success probably waits for new scientific or market developments or both and more money, time and effort to respond to those opportunities.

- **AWRS**
  AWRS was a relatively small investment in high-risk, proof-of-concept technology. AWRS proprietary system was intended to address the problems of animal waste odor and pollution by processing wet manure into dry, sterile compost for reincorporation into the soil. The potential public benefits from successfully addressing this crying market need induced the investment. Unfortunately the company made insufficient technical progress with the moneys made available. Additional investment would be necessary to create a self-sustaining business. Subsequent issues undermined the company's business prospects. While the technology may be resurrected, AWRS as a corporate entity is dormant and unlikely to be revived in its previous form.

  AWRS was a good effort in pursuit of clear public benefits, but ultimately not a financial winner. All of IAFC's investment was spent on Iowa employees or contract researchers. These people remain at work on the general issues pursued by AWRS, so the lessons are not wasted.

- **Wildwood Harvest**
  tecTERRA and IAFC invested in Wildwood Harvest to build a new $5 million soy dairy analog food plant in Grinnell, Iowa and to support national marketing of an Iowa soy foods company.

  Pulmuone USA, a subsidiary of the leading South Korean natural soy foods company, subsequently invested in Wildwood Harvest to gain greater access to the U.S. health foods market and synergies in US production and distribution. Pulmuone was already a major buyer of Iowa organic and non-GMO soybeans. Subsequently, Wildwood purchased the operating assets of Pulmuone USA to create the successor, PMO Wildwood. PMO Wildwood continues to operate the plant in Grinnell, Iowa financed by tecTERRA's investment in Wildwood.

tecTERRA is now a minority owner in PMO Wildwood and, therefore, tecTERRA no longer controls the timing of any potential sale of the business. PMO Wildwood has the benefit of an experienced and deep-pocketed parent corporation.

Wildwood's cultured soy products, soy yogurt, soy smoothies and soy cream cheese are all manufactured in Grinnell and distributed nationally through major natural foods retailers including Whole Foods and Trader Joes, among others.

Wildwood is essentially the reverse of Rudi's. It is an Iowa benefits success, with a new plant, operating with Iowa employees and selling Iowa processed soy products nationally. Unfortunately, neither IAFC nor tecTERRA is likely to financially profit from the current or future success of PMO Wildwood. Pulmuone's subsequent investments, and likely future investments, dilute our prior investments (a smaller share of a larger capital pool) and Pulmuone now controls the timing and structure of any exit. Could this be a financial success? Yes. However, because of the uncertainty of timing or amount, we are currently not counting on any financial return from PMO Wildwood.

By bringing in a senior strategic partner, we hope to sustain and grow the Iowa benefits of Wildwood's Grinnell plant and Iowa sourcing of inputs, even if the financial benefits accrue primarily to the strategic partner.

- **Sioux-Preme**

  Sioux-Preme Packing Company expanded operations in both Sioux Center and Sioux City. Under tecTERRA's ownership, more than $7.6 million in capital improvements were made over the last four years. These capital expenditures include a new lairage barn, expanded cooler capacity, new fabrication lines, and more. As a result, Sioux-Preme's processing capacity is significantly increased. The percentage of total capacity dedicated to higher margin specialty processing has also increased from approximately fifteen percent of production to well over fifty percent. The increase in specialty processing is especially beneficial to Iowa agricultural producers as the availability of Sioux-Preme's processing is essential for producers to participate in higher-value specialty markets. The large commodity processors simply do not offer the custom processing services that Sioux-Preme provides the market. As a result, a large share of national specialty hog production is centered in Iowa and processed through Sioux-Preme.

  Sioux-Preme's specialty customers now include almost every national brand in the organic and natural sector. The increased value to Iowa agricultural producers is approximately $7 million in the last year and more than $12 million in the last four years. (Based upon non-proprietary, independent estimates of $4-6 average premium per hundred weight for specialty hogs.)

  Sioux-Preme is a clear success in both bottom lines. Public benefits are many and deep, with a significant work force (more than 200 employees), local taxes, producer benefits (market access for premium value specialty hog production), and more.

Financially, Sioux-Preme is successful even in the turbulent hog market, precisely because of its focus on specialty processing.

Sioux-Preme illustrates the next major challenge faced by IAFC – selling a winner while minimizing disruption to the public benefits. In order to repay the state loan, winners must eventually be sold to realize cash. Because of the state loan and presence of outside investors, we have the duty to maximize the value of Sioux-Preme upon sale. The ideal buyer would involve a producer group or Iowa management that would continue the track record of local success. We can call an economic tie in favor of Iowa benefits, but cannot sell at a discount. This balancing act is an inherent part of double bottom line investing and will be the key thing to watch over the next couple of years.

Conclusion. IAFC is on track to repay the state loan on schedule. The portfolio has winners and losers in both public benefits and financial returns. This is to be expected in venture capital investing. Achieving success requires risking some failures. IAFC is delivering significant public benefit returns and sufficient financial success to assure the timely repayment of the state loan.

IAFC personnel are available to discuss the lessons learned over four years of venture capital investing in Iowa. IAFC remains committed to investing in growing Iowa.