

# **Organizational and Operating Structures of a National Pork Producers Cooperative; Evaluation of Alternatives for Implementation of the Pork America “Umbrella” Model**

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## **Abstract**

### **Organizational and Operating Structures of a National Pork Producers Cooperative; Evaluation of Alternatives for Implementation of the Pork America “Umbrella” Model**

This paper summarizes the structural components, activities and processes evaluated during the implementation of a national pork producers’ cooperative. It reviews and compares various organizational structures considered and identifies the components, activities and processes that would best allow Pork America to fulfil its mission.

The paper adds detail to the organizational structure of the “umbrella model” designed by the National Pork Producers Council Cooperative Task Force. More concretely, it outlines, evaluates, and compares alternative activities and processes to implement operations within that structure. It identifies strengths and weakness of each alternative, needs for internal and external competencies, potential business models, management scenarios, and financing options for the alternative approaches considered by Pork America. This approach supported the development of Pork America’s master business plan. Governance and operational structures to allow Pork America to function successfully; incorporating local, state and regional groups as members; and be responsive to the restructuring occurring in the pork industry were described.

The paper describes the essential components of each structure that was considered, including, but not limited to the following areas:

- (1) Relationships within operating units, among operating units, between a national headquarters and operating units, and between the board and management.
- (2) Groupings of employees into departments or operating divisions, within business units, and between business units and the scope of those operating divisions or business units.
- (3) Systems for communications, coordination, and integration among various divisions and units that make up Pork America, both vertically and horizontally.

Methodologically this report is a descriptive case study of the Pork America Cooperative. It outlines the structure of the pork industry in which the cooperative is operating, and develops aspects of the New Generation Cooperative structure that are applicable to this cooperative. Furthermore, the paper identifies alternative activities and processes that Pork America considered or will be considering to implement this structure. Advantages and disadvantages of potential activities and processes are identified and compared.

The organizational models discussed are based on those actually considered by the NPPC Task Force and the Pork America Board including: (1) a large-scale three-plant model; (2) a large-scale single-plant format, (3) a service company model, (4) a joint marketing model and (5) a national network model. The paper identifies the alternatives judged to best fulfill Pork America’s objectives given the structural components implied in the umbrella model and the changing structure of the pork industry.

# **Organizational and Operating Structures of a National Pork Producers Cooperative; Evaluation of Alternatives for Implementation of the Pork America “Umbrella” Model**

The primary objective of this paper is to describe and evaluate alternative approaches to organizing a national pork producers cooperative. To do so, this report briefly describes the Pork America Cooperative and outlines the structure of the pork industry in which the cooperative operates. The alternative structures are described and strengths and weakness relative to governance, finance and operations are identified. The structures were considered based on their ability to allow Pork America to function successfully; incorporate local, state and regional groups as members, and be responsive to changing industry conditions.

## **Pork America**

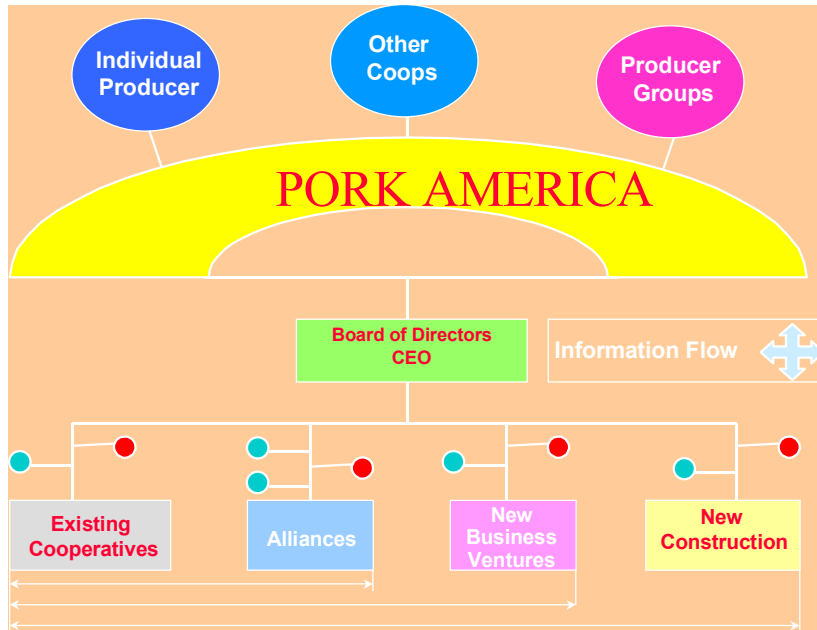
Pork America is a nationally based pork producers cooperative with members in 19 states. Pork America was incorporated under Minnesota cooperative law in December 1999. The founding board consisted of eight members from six states. All but one of the founding board members had served on the National Pork Producers Council (NPPC) Cooperative Task Force. The board currently consists of five of the original eight interim board members.

Initial producer interest was high. Within a year of incorporation, Pork America estimated that its membership represented ten million market hogs, or approximately 10 percent of total U.S. production. The task that then existed, and that is described in this document, was how to organize the cooperative to best serve this geographically diverse membership.

The board initially described Pork America as a national cooperative that would facilitate and coordinate among individual producers, as well as local and regional groups. It would act as a resource center for activities related to the production, delivery, and marketing of pork and pork products. In addition, Pork America would foster research and development activities needed to assure that its members supplied quality products precisely targeted to the needs and wants of consumers and end users.

## **The Umbrella Model**

The concept was identified as the “Umbrella Model”. It envisioned that producers would be direct members of the national cooperative. However, it also allowed producer groups and other cooperatives to be members. The vision was based on the concept that producer ownership and control, and the opportunity to participate in and profit from business activities beyond the farm gate would be achieved through a cooperative structure.



New Institutional economic theory identifies a visible boundary as a necessary characteristic for a firm or organization to exist; to be distinct from all other or entities or firms. It is argued that this boundary will be set at the point where organizing a transaction internally is marginally more costly than buying in the necessary good or services (Buckley and Michie, 1996). Relationships and activities within organizational boundaries are governed by policy and fiat. Relationships outside the organization are governed by contracts or prices. In a cooperative, members are simultaneously in both positions. As owners of the cooperative they are inside the cooperative boundary, whereas their farm businesses are outside the cooperative boundary (as shown in the above graphic).

The farm business is separate and distinct from the cooperative. The farm of any individual member may exist without the cooperative, while the cooperative may exist without the farm of any individual member. Nonetheless, and more so with new generation cooperatives, it may be necessary for that portion of the farm’s production marketed through the cooperative to be produced as if the farm were within the boundaries of the cooperative.

Members, however, cannot be compelled by fiat to incorporate those characteristics and attributes that may be necessary to connect their production to a customer. Governance and operational structures – items such as membership and marketing agreements, and producer education programs – that provide incentives for producers to operate as if they were within the boundary of the cooperative are, therefore, essential. Even when governance and operational structures correctly align incentives, it may not be feasible for some producers to make the adjustments necessary to supply products that meet the characteristic and attribute requirements of targeted customers.

This concept perceived that business activities would take place within the boundaries of – under the umbrella of – Pork America. It was recognized, however, that various business ventures within the boundary of the cooperative could take on different structures including service companies, joint ventures, limited liability corporations, or traditional cooperatives. One of the founding board members commented, “A national cooperative had never been done like this before. Most of the other national cooperatives have come together as a result of mergers of regional cooperatives. We’re starting something really new.”

The closest available active models on which to base a national pork cooperative were found in the U.S. dairy and the Danish pork industries. In both of these cases, however, cooperatives had achieved national scope through more than 100 years of evolution. Their examples, therefore, did not help resolve the issue of how to initiate such a venture. It was initially unclear as to what organizational structures must be put in place to achieve a successful implementation of this concept.

The systems through which the cooperative fulfils its operational goals would be dependent upon the technologies utilized to connect the producer to the customer. A range of activities would be considered. They included, but were not limited to:

- the production and processing technologies necessary to provide the product characteristics and attributes that the customer wants;
- the information technology to allow communication within the organization system;
- the incentive systems necessary to inform producers of product criteria and encourage them to adopt the technologies necessary to provide products that achieve those criteria that customers demand; and
- the governance covenants which define the rights and responsibilities of both members and management.

The NPPC task force, from which Pork America was formed, identified six criteria that the cooperative must fulfill to be viable from the producer’s standpoint. The task force believed that the cooperative must:

1. Capture a greater portion of the economic value of pork and return it to producers;
2. Identify and recruit producers willing and able to supply sufficient equity capital and market hogs necessary to make the venture efficient and effective;
3. Develop a system that pulls pork through the marketing chain based on consumer demand rather than pushing pork through based on members’ production decisions;
4. Implement solutions to address the imbalance between cyclical and seasonal hog production and slaughter capacity;
5. Offer pork producers opportunities to realign themselves in the pork value chain while maintaining their identify as viable independent businesses in the pork industry; and

6. Exploit the “story” of independent U.S. pork producers to create value in both the domestic and export markets.

These criteria formed the framework for the initial operational considerations, reflecting the task force’s belief that the cooperative should focus on business objectives uncompromised by social or political objectives.

Cooperatives, however, like all human organizations, have inherently social characteristics. To successfully perform the necessary business functions, the cooperative must foster relationships – a social criterion – among producers as both owners and suppliers, the board of directors, cooperative management, cooperative employees, and customers. These types of criteria appear to be even more important in today’s knowledge-driven, relationship-based economy. It is important, therefore, that the cooperative also be considerate of the implicitly social aspects of governance and operational structures regardless of the business goals or economic objectives that it hopes to achieve. In addition, agricultural producers and processors operate in a particularly politicized environment. To conceive that the cooperative could be considered viable without consideration for the political aspects of food production and processing may not be reasonable.

This reflects the dilemma of satisfying both the social and economic philosophies inherent in cooperative action. While the social philosophy emphasizes democratic control; the economic philosophy emphasizes the distribution of benefits (Torgerson, Reynolds, and Gray, 1998). The NPPC Task Force did not abandon the social philosophy of democratic control, it, nevertheless, clearly emphasized that success of the cooperative venture would be determined by economic rather than social forces.

Focusing on economic success, the Pork America board identified two factors that must be predominate for the cooperative to succeed. First, Pork America must be, in the long run, market driven. Second, Pork America must be a significant industry player on a national scale. To achieve Pork America’s goals, the board developed five strategies for the cooperative’s operations. The cooperative must:

1. Increase efficiency by improving producer-to-consumer and consumer-to-producer information flow;
2. Coordinate production, processing and marketing through real-time internet-based information management systems;
3. Develop systems and partnerships to determine value as close to the retail consumer as possible, including development of an independent producer brand;
4. Avoid head-to-head competition and predatory pricing with existing large players by identifying and supplying underserved segments and niches; and
5. Support new and existing producer groups and return profits to the local level by developing and supporting pork-merchandising opportunities for new and existing groups aligned with Pork America.

The Pork America board realized that different combinations of technology and organization would be required to supply differentiated market segments. The cooperative's activities, therefore, should be sub-divided, as proposed, to achieve efficiencies of specialization using the umbrella organization to maintain economies of scope and scale where necessary. The boxes on the organizational chart associated with these organizational divisions represent groups of people with specific skills that perform specific sets of specialized activities. The systems that apply to one sub-division may not be perfectly transferable to another sub-division. Governance and operational structures of the cooperative must be flexible enough to accommodate this.

The deliberate act of forming a cooperative implies that coordinating mechanisms among individuals and groups within the cooperative's boundaries will be planned within the organization. This coordination will replace that of numerous contracts and market transactions. That is, the interactions among the various entities within the cooperative boundaries – member-patrons, board members, cooperative management, and cooperative employees – are governed by cooperative policy as outlined in documents such as the by-laws, member agreements, marketing agreements, operating policies, and employee handbooks rather than contracts or open-market transactions. In cases where there are real costs to these transactions outside of the boundaries of the cooperative, correct alignment of these coordinating mechanisms can result in efficiencies for the cooperative.

## **Pork Industry Background**

A brief digression to review the structure of the pork industry permits a deeper understanding of the challenges and opportunities faced by the decision makers for Pork America in designing and implementing the umbrella model.

Structural and institutional change was well underway before the economic crisis that hit the production sector between late 1997 and early 1999. Independent producers, however, fear that the crisis accelerated the trend toward fully integrated production, similar to the U.S. chicken industry. They believe that the result of this trend will be the elimination of their ability to operate as independent pork producers.

The U.S. Department of Agriculture (2001) estimated that pork producers in the United States lost \$3.5 billion in 1997, \$2.5 billion in 1998 and another \$1 billion in 1999. Several factors converged to create this crisis: the loss of and a resulting lack of slaughter capacity during peaks in the production cycle; surging slaughter hog imports from Canada resulting from labor unrest; and a 10.1 percent increase in pork production (Plain March 2000). Though there has been some recovery of this equity through the summer of 2001, forecasts show that any further losses in processing capacity could present another cycle similar to late 1998 (USDA P&S June 2001).

The number of pork producers has fallen from nearly three million in 1950 to approximately 84,000 in 2001 (P&S June 2001). Producers with 50,000 or more hogs represented more than 40 percent of the inventory in 2000, while those with less than 2,000 pigs represented less than 30 percent of inventory (USDA 2001). By comparison in 1991,

43 percent of inventory was held by producers with less than 2,000 head, while herds of 5,000 or more held less than ten percent of inventory (USDA).

Likewise, the pork packing/processing market is concentrating both in the size of firms and the market structure. The four largest firms accounted for 56 percent of total slaughter in 1999, compared with a 34 percent market share in 1980. Livestock economist Glen Grimes reported in March 2001 that the spot cash market accounted for less than 20 percent of hogs marketed. Many hogs are marketed through contracts that price hogs based on the cash or negotiated market price. The thinning of spot markets increases volatility and as a result, greatly reduces the usefulness of this price as a benchmark indicator for producers. Packers and Stockyard Programs stated that the decline of the spot markets raised concerns among producers and has potential adverse effects on competitive behavior in the livestock and meatpacking industry (June 2001).

Accompanying these factors, the structure of the pork industry, similar to many agricultural industries, is transforming to a much more vertically integrated one. Mark Dopp, Senior Vice President of the American Meat Institute, testified to the Senate Appropriations Committee that “the food production, distribution and marketing sector has undergone phenomenal change in the past decade. Consumers demand a constant and geographically dispersed supply of consistent quality low-priced products. Tough competition in the meat industry is driving business to operate more efficiently and more aggressively than ever before” (Dopp 2001). One aspect of this more aggressive behavior has been expansion of packers and meat processors into hog production. With the acquisition of Murphy Family Farms in January 2000, it was estimated that Smithfield Foods had integrated production sufficient to fill 60 percent of its U.S. hog slaughter capacity. A study conducted by the NPPC and University of Missouri estimated that all processors directly owned a quarter of the hogs processed and marketed.

## **A Cooperative Response**

Continued concentration and structural change in agricultural processing, food manufacturing, and food retailing industries suggests that, to some extent, and in many cases, size matters. Paarlberg et al. (1998) stated that structural change has the potential to limit market access: “The development of tighter linkages in the food production and distribution industries may have a major impact on market access in both the input and product markets.” They went on to say that “cooperation and pooled production and marketing appear to be key to offsetting the impacts of consolidation and integration in today's pork industry.” They, nevertheless, recognized that “...the livestock producing community has little experience and expertise in using these alternatives and will likely need public policies and assistance to get them functioning.” Cook went further and suggested that cooperatives can provide a device for farmers to network with the rest of the supply chain and that consolidation may actually open doors for entrepreneurs using cooperative relationships (1999). The ability of relatively small agricultural producers to participate in these industries as strategic partners as opposed to cost centers may be dependent upon their ability to develop and maintain cooperative enterprises on a wide geographic basis.



Much of the pork processing industry's infrastructure is aging and obsolete. Some existing plants are poorly located relative to current hog supplies. Investor expectations and long-term goals of the investment community have caused some investor-owned firms to consider strategies to exit the industry. Independent processors appear to be eager to strategically partner with producer-owned firms to assure themselves of a source of consistent high-quality raw materials. A study commissioned by the NPPC Cooperative Task Force cited these factors as reasons why cooperative entry into the pork industry is feasible.

The Task Force study estimated that the retail value of product from a single hog was \$340, and that a substantial portion of this value, and the associated returns, could be captured through producer-owned vertical integration. These factors, combined with the pork industry's potential growth, suggested that viable opportunities existed for a national cooperative to enter the industry and return significant benefits to independent pork producer members. The study concluded that producer investment of 25 percent of the value invested in production enterprises would be sufficient for the cooperative to become a major factor in the pork processing industry.

The threat of competitive reaction to potential entry of producers into the processing industry was rapid and focused as demonstrated in a June 18, 2000 Des Moines Register interview with Smithfield Foods chief executive Joseph Luter III. Smithfield Foods is the largest pork processor in the world and is an investor-owned firm. Luter predicted that farmer-owned pork marketing organizations would fail. Luter declared, "They'll have their head handed to them... The idea that a bunch of farmers are going to get together and build a plant and make money is laughable." Mr. Luter's comments only seemed to increase producer resolve.

Pork America documents succinctly state that "producers who remain in non-integrated chains will face increasing downward pressure on average price until it reaches the long-run average cost of production for integrated chains, thereby eliminating profits from much of independent live hog production." The non-integrated independent producer sees increased pork demand at the retail level, while at the same time facing extreme price volatility, increased captive supply, expansion of investor-owned vertically aligned systems, and decreased slaughter capacity. The result is an ever-shrinking share of the consumer pork dollar being retained by the producer.

## **New Generation Cooperative**

All of the primary alternatives that Pork America considered involved legal formation based on the new generation cooperative concept. This structure is often formed by producers who perceive the best opportunity for continued economic success hinging on their ability to retain more of the value-added dollars generated from their production. The distinguishing characteristics of these organizations are:

- Limited and defined membership;
- Delivery rights and obligations that have specified quantity and quality;

- Substantial up-front producer equity; and
- Tradable equity shares that can fluctuate in value.

Under this concept, the right to deliver hogs to the cooperative would be linked to a responsibility for the producer to provide hogs. This is accomplished through a stock purchase and legally binding marketing agreements.

New generation cooperatives require significant up-front investment of producer equity as opposed to equity retained over time in traditional cooperatives. Hog producers would provide the up-front investment to capitalize the business through the purchase of delivery rights, which also defines the cooperative's supply. In return, producers are ultimately compensated on the value of pork and pork products sold rather than short-term spot market hog prices. In most instances transfer pricing mechanisms would be non-discriminatory, but would include premiums and discounts to reflect cost-related differences, seasonality of production and delivery mechanisms. Incentives would be developed to spur producers to implement production practices that directly enhance marketable consumer-driven product characteristics.

This particular form of operation requires complex legal decisions in the organizational phase. Satisfactorily resolving these issues can be time consuming and the legal counsel required can be costly. Most new generation cooperative equity offerings have been legally defined as securities, therefore, businesses formed under this structure may require oversight by state regulatory boards at a minimum and in some cases by the Federal Security and Exchange Commission (Hansen 1999). Additionally, in many cases, more than one class of stock is issued for reasons of functionality.

More specifically for the case of Pork America, each participating producer purchases a general membership share. This share entitles the holder, regardless of size, to one vote, and the additional right to purchase a second class of shares linked to capacity. This second class of shares would include the right and obligation to deliver hogs, among other rights and duties. Additional specifications or responsibilities might be linked to hog quality, delivery time, or delivery location. These shares would be transferable to other general membership shareholders, at values that are allowed to fluctuate depending on demand for the limited number of shares issued.

Within this basic new generation structure, the Pork America Board considered five combinations of operating and governance structures to implement the umbrella model. Each of these structures had advantages and disadvantages that are discussed below.

### **NPPC Initiative: the Three-Plant Model**

The first of the proposed operational models considered was a national cooperative that would build three state-of-the-art plants of sufficient size to be competitive given the economies of the pork slaughter industry. This idea was put forward by NPPC leadership during the 1999 Pork Forum.

This concept assumed the construction of large-scale plants that would require large networks of coordinated producers to supply hogs. Operational efficiency and profitability, however, would be dependent on factors that were beyond the control of the organizers. These factors included the location and concentration of members able to invest capital. The competitive response of other market participants. The willingness of existing local, state, and regional groups to set aside traditional parochial interests to participate in a national endeavor. And, the “not-in-my-backyard” attitude of many communities where these plants might potentially need to be located. In addition, the NPPC believed that government intervention in the form of equity capital, estimated at \$150 million, would be needed to successfully initiate this project.

This concept focused on expansion of slaughter capacity, and was driven by fear that market access for independent producers would disappear or be severely limited. This followed from the NPPC’s conclusion that low prices were primarily driven by a misalignment of incentives. Producers had expanded hog production capacity in response to demand growth. Whereas, packers had closed hog slaughter capacity that was costly to maintain when cyclical and seasonal low hog numbers made it difficult to operate plants efficiently.

Problematically, this proposal developed from the top-down, was driven by political expediency, and would require great promotional effort to implement. In addition, the concept focused on plants, rather than the producer participation necessary to make the project viable. The project was to be financed by a combination of public and producer funds. Obtaining the necessary capital in this manner would have been problematic on both fronts. First, it did not appear that government funds of this magnitude would be forthcoming. Likewise, producers were limited in the amount of funds they could provide directly by losses at the production level.

The model envisioned that each plant would operate as an independent operational and cost center. Pork would be marketed through joint national channels with plants bidding internally on supplying a particular purchaser. Information was to be shared with the members providing incentive to implement production practices that provided the product characteristics most desired by consumers.

The board believed the most important position for this model’s success would be the CEO. This individual would need to have a high profile and be able to sell the cooperative idea to potential members. The CEO would also be required to be a Solomon-like arbitrator; the ultimate decision maker between parochial desires for plant location and the cooperative’s best interest as a whole.

The three-plant proposal was reminiscent of earlier failed attempts to form national producer associations. Aaron Sapiro, the famous cooperative organizer in the early part of the 20th century, promoted organization around a common crop; cooperatives consisting entirely of farmers focusing strictly on business objectives. He was one of the first advocates of cooperative supply control, which he believed could be implemented through

long-term enforceable contracts, such as those used by new generation cooperatives today. Nonetheless, all of the associations that Sapiro helped organize eventually failed.

The three-plant model proposed by the NPPC did not reconcile Larson's arguments that early Sapiro associations failed for lack of member relations. The assessment of this model by the Pork America board was consistent with Nourse and Knapp's assessment that the National Livestock Marketing Association failed because of its top-down political origins. Likewise, Fox's (1959) critique of early cooperative livestock slaughter failures suggested a similar result for the three-plant model.

If producers had considered cooperatively implementing this option prior to the economic crisis, board member Linden Olson said "...the lost equity in 1998 and 1999 could have bought all the processing facilities in the United States; we could have controlled the whole thing." In the end, the Pork America Board determined that the equity needed to enter the industry on the scale advocated by the three-plant model exceeded the liquid capital pork producer members could generate.

Despite the decision not to proceed with this model, the investigation of the three-plant model focused producers' interest in a cooperative venture. Acknowledging that business objectives cannot be achieved in a social or political vacuum, the Pork America board identified one of its strengths as its ability to develop relationships with other producer groups, customers, and communities.

### **Single Large Plant Model**

The second operational model considered by Pork America was construction of a single large processing plant. This model has been utilized to start other successful new generation cooperative ventures; examples include Dakota Pasta Growers and the North American Bison Cooperative. Under this model, the cooperative would be a significant participant in all aspects of the value chain.

The cooperative would slaughter, process, and market fresh pork and further-processed pork products on behalf of its independent producer members. To further enhance the value added by processing and strengthen net returns to hog producers, the cooperative would establish a branded presence in the wholesale, institutional, hospitality, and retail markets, both domestically and internationally.

Financial requirements, while somewhat less than required for a network of three large-scale plants, were still substantial. Typically, new generation ventures tender an initial stock offering with the condition that construction and operations will not proceed unless the offering is subscribed to a preordained level. Organizational structure requires producers to purchase one membership share and allows them to purchase additional operational shares in proportion to the amount of product they intend to deliver to the cooperative. This creates a direct link between investment, participation in cooperative activities, and economic return.

Determination of the most efficient plant size is a critical factor in this model. This strategy requires sufficient size to be a least-cost producer because the cooperative would compete directly in the commodity pork market with other major processors for consumer market share. The ability to achieve least-cost operational efficiency is, therefore, critical because of the small margins in this market segment. The large single-plant model, like the three-plant model, would require the cooperative to compete head-to-head with the largest packers and processors in the industry. Additionally, because one plant could be isolated, the cooperative could be at greater risk for competitors to use predatory pricing practices to erode the cooperative's operational capital.

In considering both the large multi-plant and large single-plant models, the Pork America board discovered numerous factors that posed significant organizational challenges to entering the meat business. Producer communications must be broad in scope to obtain sufficient investment and hog production for efficient operations. Anecdotal evidence suggested producers would be hesitant to invest in a plant that entailed shipping hogs greater distances than which they were currently accustomed to. To operate efficiently, and have the greatest chance for long-term viability, the plant must operate at or near capacity. This would require that producers deliver hogs within narrow windows of opportunity to maintain quality and efficient operations.

Community relations would be critical. Many communities, even those in rural areas, have opposed the siting of new large-scale animal processing plants within their jurisdictions. Some have even opposed small-scale plants. Environmental, zoning and labor regulations limit where large plants can be successfully located. Often tradeoffs must be made between operational efficiency and the ability to obtain the necessary permits to operate a plant of this scale.

Difficulties in locating the labor pool for large plants can be quite an undertaking. Many communities oppose the influx of immigrant labor that these plants require to operate efficiently. This also increases costs because a major operational division must be organized to procure and train the workers required to keep the plant operating efficiently.

The principle/agent relationship is also an important factor in these large-scale business models. Marketing agreements require producer investors to deliver hogs unless they sell their shares in the business. Producers may be less likely to invest in an operation where they do not have the ability to "stop by and kick-the-tires". Employment contracts must also be structured so that managers' interests coincide with those of the majority of the producers whenever possible.

Pursuit of the single-plant model exposed issues related to desire for local control and governance. Many members of local groups were not comfortable yielding control to the central structure of the national cooperative. Consequently, many local and regional groups would have probably withdrawn support of the national cooperative had these models been implemented.

The Pork America board believed the large single-plant model would have the national impact they were seeking. Nevertheless, the challenges described above made it difficult to enact. The return on investment for this model carried a higher risk than was acceptable. It was determined that this was not the best model to develop further.

The Pork America board did recognize that both the large single-plant approach and the large multiple-plant approach could be implemented through a partnering arrangement with other firms – such was the approach taken by U.S. Premium Beef Cooperative (USPB). USPB entered into a partnership with Farmland Industries by purchasing nearly 30 percent of Farmland National Beef Company. A joint venture or partnership would greatly reduce the capital cost necessary to enter the industry and would provide much needed market access and marketing expertise.

The Pork America Board, however, believed that a joint venture arrangement would need to be structured to assure that all participants in the venture shared equitably in the risks and rewards. They believed that the organizational structure would need to be transparent. To provide for economic return to partners while still maintaining producer voting control, a second class of non-voting stock might have to be issued to the partner. The Pork America board considered several possible partners, but was unable to find a situation that sufficiently met their criteria.

### **Business Services-Management Company**

Another model reviewed by the Pork America Board was that of a Business Service Cooperative. In this scenario the national Pork America cooperative would provide administrative and management services for producer projects developed at the local and regional levels. The national cooperative would be a relatively small entity, providing staff or access to highly qualified consultants in areas needed to develop local projects efficiently and effectively.

In this case, independent local or regional ventures would maintain local control of the product and process. The local cooperatives would make decisions on which projects to pursue and how to initiate those projects. The national cooperative would serve as a consultant, providing project design input and marketing coordination when requested. It was believed that this coordination would reduce the head-to-head competition between local groups seeking the same markets. Local groups, however, would not be required to use the coordinated system. Likewise, the service company could help to find or expand markets for the benefits of all groups, but again, groups would not be required to avail themselves of these services.

A benefit of this model was that financing for the national cooperative would be minimal. A small amount of capital would be required from the local cooperatives to allow the national cooperative to employ persons with the required management and project design skills. Additional cooperatives would have the opportunity buy into the service pool at a later date. Since the national cooperative would not build structures, no large scale financing would be required. Most of the operational funds for this cooperative could be raised on a fee-for-service-rendered basis.

With this approach, each local project would be independently controlled and financed. The national service cooperative would provide a pork-specialized outsourcer for management and administrative services. The use of Internet and communication strategies would permit much of this outsourcing to be efficiently conducted.

There is less need to educate producers as to the value that the national cooperative offers them individually. Individual producers would have primary contact with their local cooperative. Direct interaction would be between the national cooperative staff and the staff of the local projects. This model would be similar in structure to a federated model.

Pork America's Board, identified several disadvantages of this model from the perspective of the national cooperative. The overall impact on the pork industry was lessened. In addition, Pork America would be competing with established management services companies, although there may have been some advantages to a company that specializes in pork cooperatives. The small size and limited income potential of the pork management service company model might also make it more difficult for the cooperative to attract and maintain the top caliber staff and consultants needed for the services the cooperative would offer.

The Pork America Board believed that this type of organizational structure would also result in lower profits for all organizations as local groups competed among themselves for business opportunities. Though local operations could serve niche markets or produce for specific market segments, there was some question if the size of these operations would be sufficient to consistently supply the pork needs of even regional retailers. If not, these ventures would face a distinct competitive disadvantage.

Additionally, this structure would allow competitors to use a "divide and conquer strategy" against the local operations. Larger competitors could exercise market power inherent in geographic diversification and accept temporarily lower profits in the area of an individual cooperative until that cooperative's capital reserves were depleted and ceased operations. Though predatory pricing and other unfair competitive practices are illegal, they are often difficult to prove. Under this model, it would have been difficult to coordinate among the local cooperatives to prevent this type of predatory competition or to spread the cost of combating this strategy.

The smaller impact and the competitive response risk of the service company model made the Pork America Board decide that they did not wish to use this approach to implement the umbrella model.

## **Joint Marketing Model**

While Pork America is based on the concept of direct producer participation at a national level, the viability of Pork America appeared to require the participation of local and regional groups as well. To increase these groups' participation Pork America explored formation of a joint marketing agency. The national cooperative would act as a marketing agency in common and be directly responsible for marketing members processed products.

The national marketing agency would work directly for independent local ventures as an outsourced sales force. This model maintains local control of decisions related to project selection and how to initiate those projects. The local cooperatives, however, would not have direct customer contact. Customer relationships would be managed by the national marketing agency. It might also be necessary for the national agent to coordinate processing at the local level to fulfil contracts negotiated by the common marketing agency. These factors, represent a loss of local control that may reduce the level of local participation in the national marketing agency, resulting in duplication of services and excessive competition among local organizations.

Another benefit of this model is that of moderate financing requirements for the national cooperative. The local cooperatives would, nonetheless, be required to provide the national marketing agency sufficient capital to develop a national cooperative brand. Development of these intangible properties can be costly, especially if retail branding is involved. The marketing agency would also employ a sales force, which would require financing from the local cooperatives.

Through national branding, this structure could achieve Pork America's goals of a significant impact on the pork industry in the United States, increased market access for independent producers, and an increased proportion of retail value of pork to producers.

Despite maintenance of local control of the projects, the potential for dissention and mistrust among the local cooperatives would still exist based on variability of profits from various production contracts that would be distributed by the national marketing agency. Smaller operations might question the ability of larger locals to dominate control of the national marketing agency, and as a result, get the high value "glory markets" distributed to their operations to the detriment of others. Agency problems are also inherent in this model's design. Because the marketing agency is tasked only with sales, it does not control the costs of production or processing that precedes those sales. Consequently, the national marketing agency cannot control whether a product will be profitable when competitively priced.

Pork America would still face some significant risks from this arrangement. The national marketing agency would have little control over the quality of the pork produced. There also would be a strong tendency for the local cooperatives to produce without regard to demand and then require that Pork America market its product even if this product did not have optimal consumer characteristics. This approach could put Pork America in direct competition with the large processors and established brands. The cost of developing and maintaining a brand identity could be difficult under this structure. The risk of predatory pricing as a competitive response would be increased.

Given these drawbacks the Pork America board determined that pursuit of this model would not be in its best interest.



## **National Cooperative Network Model**

The final model considered by Pork America was to function as a national network of independent business ventures. This was the most complex model reviewed by the board. In this case the cooperative would seek out, develop, and present defined business projects to its members including individuals and groups. Each venture would be independently structured to optimally address the financing, operating, and marketing needs of each individual project including a clearly defined mix of national and local control.

Board member Jim Lewis stated "success in these types of ventures generally comes from good management, a thorough understanding of the industry and significant control of at least one vital segment of the industry. Our ultimate goal as a vertical food company is to participate in every segment of the business, sharing in the risks and rewards of our cooperative value-added enterprise."

In this model, the national cooperative would develop and maintain the accounting, legal, insurance, information-supply, marketing and other network-wide systems necessary for the independent projects to improve value, minimize costs, reduce organizational time and avoid duplication of service. The national cooperative would secure the best available expertise in areas of strategic planning, legal counsel, and business management. This model increases efficiencies by distributing many overhead and fixed costs over a larger number of projects. Personnel to staff these activities could be secured as direct employees or through negotiated consulting agreements.

### **Financing**

Each project would be developed independently and members would have the ability to determine their level of participation in each endeavor. Equity shares would be issued for each subsidiary business venture among members of the national cooperative. Each individual security offering would generate "at-risk" equity capital to develop a specific project. If the offering did not achieve a certain pre-ordained level of financial backing from Pork America members the project would not be pursued further by the cooperative. Any individual member could choose not to participate in any specific project. Non-participation in a project would not affect individual membership status (other than not participating in the economic returns or losses from that project).

This approach is somewhat unique, but also has characteristics similar to approaches being applied by some grain processing cooperatives to expand production. Legally unique cooperatives are formed to capitalize new production units. The new cooperative, however, procures management services through a contract from the original cooperative. The Pork America approach is different in that it eliminates the direct link between the membership and investment decisions. It is similar in that each separate business unit represents a separate risk and income pool.

The individual member can choose a priori whether a specific project is in their interest and can provide equity capital for those projects that fulfil each individual producers' investment and marketing requirements. This strategy permits the individual

producer to maintain a portfolio of investments within the cooperative rather than having to be a member of several distinct cooperatives. In this manner, a producer can participate in a number of ventures with differing degrees of risk and return. It also has the potential to increase efficiency because each member's hogs can be delivered to the project to which they are best suited while minimizing transportation costs.

The national scale of this model may facilitate the ability of each project to secure debt capital from financial institutions. The smaller scale of each individual project will mean a smaller group of financiers is necessary to capitalize each project. Combined, these factors may reduce the cost of debt capital, providing the cooperative a competitive advantage.

Expenses associated with administration of the national cooperative will come from assessments from each project. In addition, a developmental assessment may be used to pursue other potential projects. Corporate bond offerings and licensing agreements with third parties may also be considered as alternatives to finance operating capital.

The initial cost and financing for this model, may be higher relative to the other models evaluated, because fixed costs of a national administration, staff, and development teams must be distributed over less production. One opportunity to lessen the cash outlay for producers is for the cooperative to partner with regional packers or processors. This partnering would allow the cooperative to leverage the investment in production facilities with the market ties of these regional packers or processors. Each of these joint ventures will need to be designed with a clear focus of what the cooperative will obtain from the partnership and include an exit strategy for the cooperative.

### **Market Strategy**

This national network model adapts to opportunities for growth that Pork America has identified by facilitating the pursuit of new marketing strategies, most notably by catering to emerging consumer market segments and independent specialty processors that do not currently own harvesting capacity. Pork America plans to create a flexible and innovative supply chain in which customers determine product specifications based on appearance, taste and meat attributes. This will result in a transparent system that allows retailers and consumers to know when, where, and how their pork and pork products were produced and processed. Independent producers' genetics, nutrition programs, production conditions and processing methods will be tied directly to the needs of wholesale and retail partners. Customers and cooperative staff will jointly determine product and production specifications. American consumers are ready for choices in the type of pork and pork products that they buy and will pay more for superior, distinct products. Specialization also involves developing entirely new products and innovative packaging for various customers.

This model also facilitates opportunities to develop export market relationships with profitable long-term customers for a variety of specialized products. It also allows Pork America to identify and supply unserved and underserved domestic and international markets. The Pork America Board believes that this will allow the national cooperative to secure market agreements with less competition from existing packers. Pork America will

be able to match market demand with the producer-members best able to serve a given market. These tasks will create potential to increase pork demand and profits by better meeting consumer needs. In addition these opportunities will be created with long-term contracts that value the pork as near to the ultimate consumer as possible.

This model employs a strategy to minimize head-head competition with larger packers and processors. This approach, of avoiding direct competition with larger processors, allows for higher margins on sales. It also seeks market share and income in segments that will attract the least competitive response from these other packers or processors. This greatly reduces the risk that the national cooperative might face predatory pricing techniques; allows the national cooperative to build on brand recognition; and creates an income stream to finance the development of future business ventures. Furthermore, partnering with regional packers or processors co-opts them to defend the cooperative in the face of aggressive competition by the larger packers and processors.

### **Operational Structure**

The key aspect for the national network model to function is the staff structure of the national cooperative. Staff must perform a variety of duties to enable the cooperative to identify business opportunities, inform members of these opportunities, allow customers to state their needs, and educate members how to fulfill these demands. Attention to these functions will be necessary to implement the structure under the “Umbrella Model”.

### **Evaluation of Opportunities**

Potential business opportunities must be evaluated to determine if they fit the strategic vision of “win-win” opportunities and will result in long-term sustainable business relationships. Due diligence must be practiced by establishing terms, identifying product specifications, coordinating logistical support, defining pricing structures, costs and timetables. Non-compete protocols will be established among business units so that the individual units support each other, are competitive with non-network businesses, and reduce the risk of predatory competition from major packers and processors.

### **Supplying Consumer “pull-through” demand**

Consumers today are concerned about the safety of the food they consume and the conditions under which it was produced. The objective of this function is to create the free flow of information from the individual farm to the consumer’s table necessary to effectively supply consumer demand. Pork America will employ the most up-to-date technology to team together hundreds of independent producers and create a seamless supply chain. This system will align consumer demand with producers in order to gain customer satisfaction and effectively utilize the cooperative’s assets.

### **Member Education**

Sustainability of the national cooperative requires producer support. Member education and outreach will be necessary to maintain support. The national cooperative must inform producers about alternative investment opportunities. The education function must complement and facilitate producers’ decisions about their individual pork operations. The education may entail technical assistance on production techniques and sales or

marketing aspects of the business. This function will be enhanced through the use of information systems and communication with producer members.

### Governmental and Public Relations

Meat packing and processing are heavily regulated industries. Production is becoming more regulated. The cooperative, therefore, must function as liaison between its members, its individual business units, and local, state, and federal government entities. The cooperative must effectively keep members informed of government regulations that will affect them and their businesses. The cooperative must keep contact with government regulatory agencies at all levels to minimize risk of non-compliance.

The cooperative must also keep the it members and the public in general informed of its broad activities. This function entails preparation of speeches and presentations for cooperative staff, design of marketing campaigns, preparation of annual and other periodic reports, and development of Internet based information.

### **Summary**

After considering the governance and operational functions of these various models, the Pork America board of directors determined that the risks and benefits of the National Network Model were the most reasonable. They felt that the national network model best fulfilled the five requirements that they had identified for the Pork America venture. The national network model serves as the foundation of the business plan for Pork America as it continues to organize and determine its future operations. Pork America has taken the concept of local control of agricultural cooperatives combined this with the new generation concept and extended that to have national and international reach. Given the strategic advantages of the national cooperative model the board has taken the decision to proceed with this model as its core model for operations.

### **Network Model Project Example: America Pork of Iowa, LLC.**

The vision is becoming reality. Pork America has created a wholly owned subsidiary, American Pork of Iowa LLC (APIA), to develop its first network project. To facilitate entry of Pork America's independent producer shareholder-members into the pork value chain, APIA has acquired a plant in Estherville, Iowa.

The Estherville plant has the capability to process up to 600 pigs per day. The plant will be used to demonstrate that a producer cooperative can deliver product to customer specification and that innovation can occur in a consumer-driven, producer-responsive market. Additionally, the plant will help Pork America to attract larger customers and generate a revenue stream necessary sustain Pork America and develop additional business ventures. Purchase of this plant provided an opportunity for low-cost entry into the slaughter and processing industry and will be used to create a real presence in the pork supply chain. The plant will also provide opportunities to conduct key pilot projects, to develop and perfect customization requirements for specifically targeted consumer niche markets, and test branded product concepts. The plant will also provide reliable information on production and marketing costs.

As Pork America evaluated the Estherville plant location, capabilities for expansion and the facilities ability to be adapted to increase the production and marketing of slaughterhouse by-products were major advantages. Additionally, Estherville Mayor Hevern supported reopening the plant based on benefits to the local economy and Emmett County pork producers.

## Selected Bibliography

- Agricultural Statistics Board, National Agricultural Statistics Service, "Hogs and Pigs, Final Estimates 1988-92," Statistical Bulletin Number 904, United States Department of Agriculture, Washington, DC, December 1994.
- Agricultural Statistics Board, National Agricultural Statistics Service, "Hogs and Pigs" United States Department of Agriculture, Washington, DC, December 2000.
- AgWeb.Com, "U of M ag prof: New Generation coops [sic] may be key to ag future," accessed at [www.agweb.com](http://www.agweb.com) on August 1, 2001.
- Cook, Michael L., T. Reardon, C. Barrett, J. Cacho, "Agroindustrialization in Emerging Markets: Overview and Strategic Context", *International Food & Agribusiness Management Review*, 2(3/4), 277-288, 1999.
- Dobb, Mark D, Testimony before the Agriculture, Rural Development and Related Agencies Subcommittee of the Senate Appropriations Committee. May 17, 2001.
- Fox, R.L., "Farmer Meat Packing Enterprises in the United States," General Report 29, Farmer Cooperative Service, United States Department of Agriculture, Washington, DC, April 1957.
- Freese, Betsy, "Pork Powerhouses – 2000," available from [http://www.agriculture.com/sfonline/sf/2000/october/Pork\\_Powerhouses.pdf](http://www.agriculture.com/sfonline/sf/2000/october/Pork_Powerhouses.pdf), accessed on July 31, 2001.
- Freese, Betsy, "Pork Powerhouses – 2000," available from <http://www.agriculture.com/sfonline/sf/2000/october0011powerhouses.html>, accessed on July 31, 2001.
- Gehrke, Brad. "A Strategic Analysis of the Industry Environment Faced by a National Pork Marketing Cooperative" RBS Technical Assistance Report. United States Department of Agriculture, Washington, DC, October 2000. (internal document)
- Gehrke, Brad C and James Matson, "Is an national pork marketing cooperative viable? A case study of Pork America within the context of Structural Changes in the US pork industry," Presented at NCR-194 Annual Meeting December 12-13, 2000 Las Vegas, Nevada.
- Gehrke, Brad and James Matson. "The Concept of a National Pork Producer Cooperative Rural Cooperatives Vol. 45 No 5; Sept/ Oct 2000.
- Grimes, Glenn, and Steve Meyer, "2000 Hog Marketing Contract Study," University of Missouri and National Pork Producers Council, March 2000, from <http://www/nppc.org/PROD/HogMarketContractStudy.htm>, accessed on July 31, 2001.

- Grimes, Glenn, "January 2001 Hog Marketing Contract Study," University of Missouri and National Pork Producers Council, March 12, 2001, from <http://agebb.missouri.edu/mkt/vertstud.htm>
- Glenn Grimes and Ron Plain "Hogs and Pigs Report Quarterly," University of Missouri , July 2, 2001, from <http://agebb.missouri.edu/mkt/bull8c.htm>
- Hayenga, et. al., "Meat Packer Vertical Integration and Contract Linkages in the Beef and Pork Industries: An Economic Perspective," American Meat Institutes, Arlington, VA, May 2000, from [http://www.meatami.org/industrcture\\_6700.pdf](http://www.meatami.org/industrcture_6700.pdf).
- Larsen, Grace H. "Aaron Sapiro: Cooperative Evangelist," in Great American Cooperators, Joseph G. Knapp Ed., American Institute of Cooperation, Washington, D.C., 1967.
- National Agricultural Statistical Service "U.S. Hog Breeding Herd Structure." United States Department of Agriculture, Washington, DC, Released June 8, 2001.
- Nourse, Edwin, G, and Joseph G. Knapp, "The Cooperative Marketing of Livestock," The Institute of Economics, Brookings Institution, Washington, DC, 1931.
- Paarlberg, Phillip, et al., "Structural Change and Market Performance in Agriculture: Critical Issues and Concerns About Concentration in the Pork Industry," Staff Paper 99-14, Department of Agricultural Economics, Purdue University, West Lafayette, IN, October 1999, from <http://www.agecon.lib.umn.edu/pu/sp99-14.pdf>.
- Packers and Stockyards Programs, "Packers and Stockyards Statistical Report – 1995 Reporting Year," United States Department of Agriculture, Washington, DC, 1996.
- Packers and Stockyards Programs, "Packers and Stockyards Statistical Report – 2000 Reporting Year," United States Department of Agriculture, Washington, DC, 2001.
- Packers and Stockyards Programs, "Assessment of the Cattle and Hog Industries Calendar Year 2000," United States Department of Agriculture, Washington, DC, Issued June 2001.
- Perkins, Jerry. "Interview with Smithfield Foods chief executive Joseph Luter III." Des Moines Register Des Moines, IA, June 18,2000
- Plain, Ron, "Structural change in the Pork Industry: What It Means for Hog Prices, Meat Consumption and the Future of Family Farms," University of Missouri, presentation text Marshall, MN, Austin, TX, and Nebraska City, NE, March 2000, from <http://www.ssu.missouri.edu/faculty/Rplain/papers/Swsuminn.pdf>.
- Pork America. "Pork America Posts Year End Report and Staff Changes" Pork America, Worthington, MN, Released January 29, 2001.

Pork America “Pork America: Progress and Potential” An internal white paper report. Worthington MN Issued March 20, 2001, Updated: June 12, 2001

Rural Business-Cooperative Service, “Cooperative Historical Statistics, Farmer Cooperatives in the United States,” Cooperative Information Report 1, Section 26, United States Department of Agriculture, Washington, DC, April 1998.

Sexton, Richard and Julie Iskow. Factors Critical to the Success or Failure of Emerging Agricultural Cooperatives, Giannini Foundation of Agricultural Economics, University of California; (Giannini Foundation Information Series #88-3): June, 1988.

Torgerson, Randall E. "Aaron Sapiro School of Cooperative Thought: Its Relevance to Contemporary Cooperatives." Speech to the Graduate Institute of Cooperative Education. Columbia, MO.: June 10, 1986.

Torgerson, Randall E, Bruce J. Reynolds, and Thomas W. Gray. “Evolution of Cooperative Thought, Theory and Purpose. Presented at Food and Agricultural Marketing Consortium, Las Vegas, NV January 16-17, 1997.