

STAFF EVALUATION

# Natural Fibers and Food Protein Commission

A Staff Report to the Sunset Advisory Commission

# NATURAL FIBERS AND FOOD PROTEIN COMMISSION

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## **Summary of Recommendations**

The Natural Fibers and Food Protein Commission was created in 1941 to act as a funding pass-through mechanism to coordinate and fund research and marketing efforts primarily in cotton, cottonseed, wool, mohair, and other oilseeds. The presidents of four universities compose the commission and receive the funding. These universities are Texas A&M University, Texas Technological College (Texas Tech), Texas Woman's University, and the University of Texas at Austin.

The level of funding for fiscal year 1987 was \$1,414,904 in general revenue funds and \$1,583,359 in private funds. The combined state and private research funds are allocated to cotton, 39.1 percent; wool and mohair, 21.8 percent; and oilseed research, 34.1 percent. Administrative costs account for the remaining five percent.

The need for a state funded commission to serve as a coordinating mechanism for research on the state's natural fibers and food protein commodities was analyzed and the review indicated there is a continuing need for state involvement in this area. Although the commission's scope has expanded over the years, the agency is efficiently fulfilling the purposes for which it was created and should be continued.

The review of the operations of the commission indicated that no changes were needed in the policy-making structure or in the area of overall administration. However, the review documented several changes in the research areas carried out by the agency. If the legislature continues the agency, the following actions should be taken.

## Recommendations

THE COMMISSION SHOULD BE CONTINUED FOR A 12-YEAR PERIOD WITH THE FOLLOWING CHANGES:

## Policy-making Structure

The review of the policy-making structure indicated that it was appropriate for the functions performed by the agency and that no changes are needed.

#### **Overall Administration**

The review of the agency's overall administration indicated that it was generally effective and that no changes are needed.

### **Evaluation of Programs**

#### Focus and Direction of Agency Research

1. Commission funding should be restricted to current areas of research and should not be allowed to expand to new commodities. (Statutory) (p. 23)

The overall purpose of the commission is to prevent duplication in the use of scarce research dollars. This policy should be clearly reflected in statute. This recommendation would exclude new and more exploratory commodity research from NFFPC funding. The NFFPC's emphasis will thus be focused on research funding for the natural fibers and oilseeds areas.

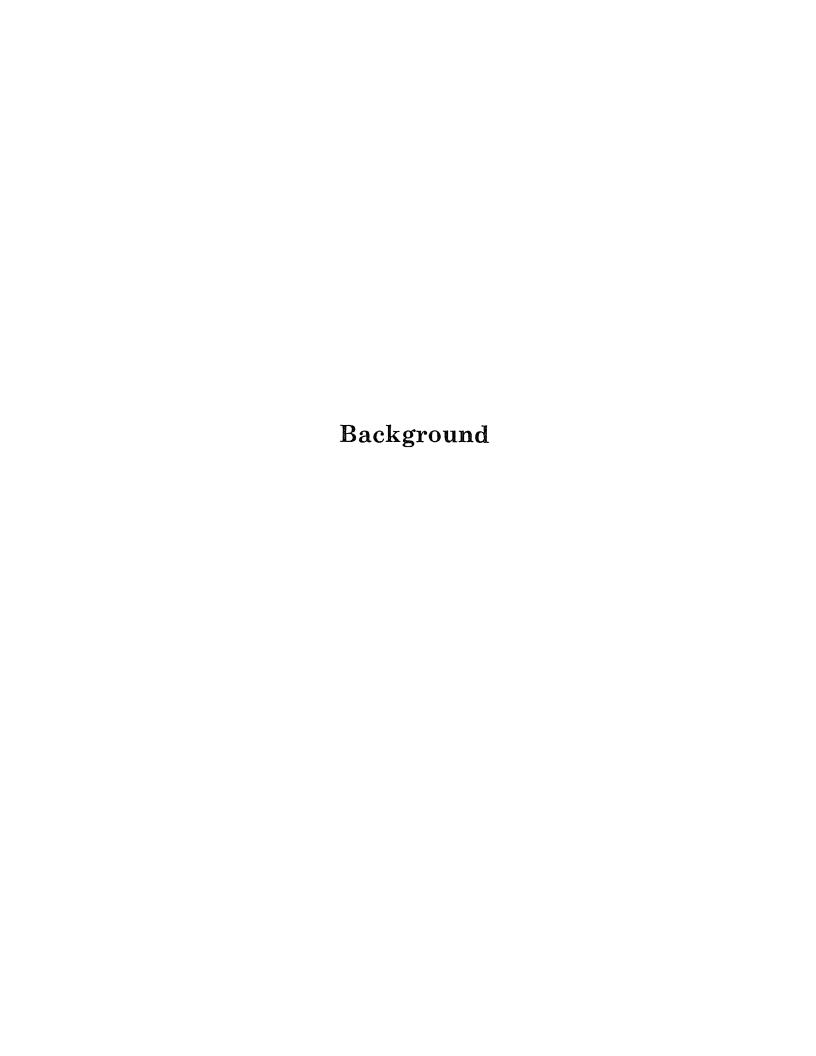
2. The statute should be changed to clearly state that research funding should be given priority over marketing and other efforts. (Statutory) (p. 25)

This recommendation would also protect the use of scarce research dollars by ensuring that NFFPC concentrate on the areas in which it best serves the state and the agricultural community and would prevent any potential future overlap with other regional, state and national commodity groups.

- 3. Procedures used by the commission to determine the funding for research projects should be changed to take into account:
  - similar research performed by the four member universities; and
  - marketing activities of the Department of Agriculture and the Department of Commerce. (Statutory) (p. 26)

The statute currently does not require NFFPC to review all similar research being done by the four member universities as part of its funding decision, nor is there any required input from two agencies that have an interest in the commission's efforts. Reviewing all related research and consulting with all interested parties before funding decisions are made would improve coordination, could prevent duplication of research efforts and would help NFFPC to better address the state's long-term economic development goals for agriculture.





#### **Creation and Powers**

The Natural Fibers and Food Protein Commission (NFFPC) is a state agency that developed from the Cotton Research Committee of Texas, created in 1941. The committee was originally set up to fight a growing loss of markets for Texas, which was and still is the major producer of cotton among states. At that time, there was an immense surplus of Texas cotton because of lack of demand, resulting in lower prices and lost revenue for the farmer. The committee was originally appropriated \$250,000 for the establishment of cotton research facilities in the state in order to find ways to expand current markets for cotton, cottonseed and their by-products, to develop new trade markets and to improve cotton processing and marketing technology. Presidents of three universities made up the committee and were to oversee the programs—the University of Texas, Texas A&M University and Texas Technological College (Texas Tech). Texas A&M University was designated to do genetic cotton breeding and cottonseed crushing research, while the University of Texas became the center for marketing and fiber testing and Texas Tech was involved as the textile spinning and weaving research center.

Several expansions of the Cotton Research Committee have been made since 1941. In 1959, the president of Texas Woman's University was added to the committee because of the university's research on fabric utilization and nutritional uses of cottonseed by-products. In 1969, several agricultural leaders in the state were successful in adding wool, mohair, textile products and oilseeds (including peanuts, soybeans, sunflowers and sesame seeds) into the research program.

These changes led to a need for a name change for the committee and in 1975 the Cotton Research Committee became the Natural Fibers and Food Protein Commission.

Today, the Natural Fibers and Food Protein Commission is the only state agency of its kind among states. The establishment of a unique agency such as this stems from Texas' ranking as the number one producer of cotton, wool and mohair (natural fibers) in the United States. Cotton is the number one cash crop in the state, with an estimated value of \$1.4 billion in 1987, while cottonseed ranks number eight, with an estimated value of \$159 million in 1987. It is estimated that the production of cotton alone results in about \$4 billion dollars of income for the Texas economy annually based on cash receipts at the farm level. Texas produces 97-100 percent of the nation's mohair and 19 percent of the wool. The total value of Texas-produced wool in 1986 was \$13,284,000 and of mohair was \$38,152,000.

The goal of the NFFPC is to bring additional revenue into the state by funding research aimed at improving the quality and spinnability of natural fibers, finding new markets and processing techniques for food proteins and oilseeds, and marketing the quality and utilization of Texas-produced natural fibers and food proteins.

## **Policy-making Structure**

The commission currently consists of four members: President, University of Texas at Austin; Chancellor, Texas A&M University System; President, Texas Tech University; and, President, Texas Woman's University. Commission members serve on NFFPC during their tenure as university president/chancellor. Chairmanship of the commission rotates alphabetically between the four universities, with terms beginning at the start of each odd-numbered fiscal year. The chairman of the commission, with the approval of the full commission, appoints a 50-member advisory committee which splits into a 25-member natural fibers advisory committee and 25-member food protein advisory committee. Both committees review university research proposals and make recommendations on research that should receive funding. A seven-member executive committee composed of the chairmen of the natural fibers and food protein advisory committees and five other industry committee members also exists to advise the commission on program and budget matters.

## **Funding and Organization**

The NFFPC is staffed by three people, an executive director, executive assistant and secretary. The administrative office is located in Dallas and is housed with the Texas A&M Research and Extension Center--Dallas branch.

The NFFPC's administrative office distributed state research and development funds in fiscal year 1987 totaling \$1,266,416 to the four contracting universities who employed 98.86 FTE in their NFFPC-funded research efforts. The agency also administered two federal contracts for fiscal year 1987 totaling \$190,000. The total for both administration and research and development in fiscal year 1987 was \$1,414,904 in state funding, all from general revenue. The funding provided to the four universities by NFFPC has remained fairly constant over time and is illustrated in Exhibit 1 which follows.

Exhibit 1
State Funds Allocated Through NFFPC
to the Universities

University	1975	Percent of Funds	1980	Percent of Funds	1987	Percent of Funds
Texas A&M	\$322,608	41%	\$599,859	55%	\$624,253	49%
Texas Tech	189,759	24%	197,440	18%	32,277	18%
University of Texas	75,674	9%	29,940*	3%	60,873	5%
Texas Woman's University	208,496	26%	267,583	24%	349,013	28%
TOTAL	\$796,537	100%	\$1,094,822	100%	\$1,266,416	100%

<sup>\*</sup>Funded through Cotton and Harvest-Aide Chemical Research at Texas A&M University.

State funds for research were matched with outside funds from various companies, foundations, and associations amounting to \$1,583,359 in outside funding for fiscal year 1987. Agency administrative costs for the same year amounted to \$148,488 and represented about 10 percent of their state appropriation, or about five percent of combined state and private funding. The combined total of state funds from NFFPC, outside funds and federal grants resulted in \$3,039,775 total funding for the various research projects administered by NFFPC in fiscal year 1987.

## **Programs and Functions**

The primary activity of the agency is to administer research funds for natural fibers and oilseeds at the four member universities. A total of 54 research projects are currently funded by the NFFPC. Exhibit 2 on the following page provides an outline of these major research projects.

As the exhibit indicates, the research covers every facet of natural fibers and oilseeds production, from the beginning cycle of breeding, growing and harvesting through the end product of textile manufacturing or use of food proteins in making baked goods. The primary goal of all the research being done is to improve the use and quality of the natural fibers and oilseed products in order to obtain more income for Texas farmers and the state's economy.

Exhibit 2
NFFPC-Funded Research and Development Project

University	Major Research Projects	Areas Research Covers
Texas A&M University System	Cotton and Harvest-Aid (TAES)	- Genetic breeding and growing of cotton resistant to pests and diseases
	Chemical Research (TAES)	- Improving quality of seed and fiber and improving yield
	Sheep and Goat Research(TAES)	<ul> <li>Improving quality and production efficiency of wool and mohair through breeding and diets of sheep and goats</li> <li>Improving marketability and use of lamb products</li> <li>Evaluating quality of wool and mohair fiber traits</li> <li>Developing new food, feed and industrial uses of food proteins and oilseeds</li> </ul>
	Food Protein Research and Development (TEES)	- Improving efficiency and economy of extraction and processing methods
Texas Tech University	Textile Research and Development of Wool, Cotton and Mohair	<ul> <li>Conducting instrument evaluations of the quality of cotton, wool and mohair fibers</li> <li>Disseminating data from fiber and spinning tests that show the benefits of Texas-produced natural fibers</li> <li>Developing new blends of natural fibers for textile production</li> <li>Spinning, dyeing and finishing of textiles</li> </ul>
Texas Woman's University	Nutrition Utilization Resarch	<ul> <li>Evaluating physical and chemical properties of oilseeds and food proteins</li> <li>Evaluating cottonseed protein and oil for improving quality of diets</li> <li>Examining effect of oilseeds on various diseases or illnesses</li> <li>Analyzing storage properties of foods containing oilseeds</li> </ul>
	Natural Fibers Utilization Research	<ul> <li>Improving flame retardancy of natural fibers</li> <li>Improving durability of textiles with different chemical finishing treatments and of laundering care</li> <li>Producing carbon fibers</li> <li>Promoting the use of natural fibers in the apparel design and manufacturing industries</li> </ul>
University of Texas-Austin	Natural Fibers Information Center	<ul> <li>Publishing and disseminating educational packets on Texas natural fibers</li> <li>Researching the marketing and economic value of cotton, wool, mohair and oilseed products</li> <li>Serving as a central depository for statistics and research on natural fibers</li> </ul>

With assistance from NFFPC's funding and research directives, Texas is recognized as the leader in oilseed research among all states and ranks near the top in textile development, laundering and nutrition research. Some of the more important research results using NFFPC funds at the four universities are highlighted in Exhibit 3, which follows. The projects were funded in part by NFFPC, along with outside matching funds, other state funds and some federal grants.

Because of the small size of the NFFPC administrative office, there are no program divisions. The major activities carried out by the three staff members in administering research funds for the four universities are: (1) public information; (2) research coordination; (3) funds acquisition; and (4) budgeting/accounting. These activities are briefly described as follows:

<u>Public Information</u>. One of the most important efforts by commission staff is to interface with state, national and foreign fibers and oilseeds representatives to promote Texas products. Marketing the use of Texas fibers is a natural extension of the research funded by NFFPC which has helped to improve the quality of Texas fibers and has resulted in new uses for the products.

Other marketing and public information efforts carried out by the director include reporting to federal appropriations committees to present research findings, serving on the American Standards for Testing Materials Committee; speaking to state, national and international groups promoting Texas fibers research and results; supplying information to the Texas agriculture extension services; and making contacts with industry representatives within the country and abroad.

Research Coordination. A major function of the commission, through its advisory committee, is to provide input into research selected for funding. Since the advisory committee members represent producers and various segments of the natural fibers and food protein industries, they are familiar with research needed to enhance their production or industry. The committee, along with NFFPC staff, prioritizes the research that should receive funding and makes recommendations to the four commission members who make the final decision. This is carried out in a biennial meeting after the agency's appropriation has been set by the legislature. The committee meets to review the research proposals presented by the universities, discuss research results and new priorities and recommend which proposals should receive priority funding to the executive committee. The executive committee presents the research priorities to the four commission members who make the final budget approval decision. The advisory committee then meets the following year to discuss changes needed in research funding or direction. While some research is

Exhibit 3
Research Results by University Funded in Part by NFFPC

Texas A&M University	Texas Tech University	Texas Woman's University	Univeristy of Texas-Austin
- Only oilseed processing laboratory in the U.S. serving the food industry containing \$3.5 million in donated equipment.	- \$44 million denim textile mill in Littlefield, Texas resulted from research and fiber quality control data.	<ul> <li>Official control testing laboratory for the National Laundering and Dry Cleaning Association with over \$1 million in donated equipment.</li> </ul>	- Research feasibility study leading to establishment of a \$33 million textile mill for an underwear manufacturer.
<ul> <li>Only wool and mohair top- processing laboratory in U.S. needed for spinning tests on wool and mohair.</li> </ul>	<ul> <li>Spinning, dyeing, finishing and cotton/wool/mohair blending,. done exclusively at the Textile Research Center.</li> </ul>	<ul> <li>Equipment and research have been used to save the state \$100,000 a year in institutional laundries.</li> </ul>	- Developed first fiber testing laboratory geared to the cotton breeding program in the state.
- Trains 85 percent of the cottonseed processing industry's operations supervisors.	<ul> <li>Fiber technology and spinning research justifying "light spot" classification of cotton funded by NFFPC has been estimated to have returned \$500 million since 1975 to Texas farmers who were receiving unfair discounts prior to this.</li> </ul>	<ul> <li>Research led to development of first accepted flame retardant upholstery used by furniture manufacturers.</li> </ul>	<ul> <li>This above laboratory led to the development of the HVI method of classing cotton, which is adapted to volume merchandising of cotton.</li> </ul>
<ul> <li>Developed non-toxic glandless cottonseed kernels and food protein flours, concentrates and isolates which are used for human consumption.</li> </ul>		<ul> <li>Accredited by NASA for doing research for first primate and manned space flights examining the impact of oilseed protein supplements on bone density loss in flight.</li> </ul>	
- Developed aflatoxin removal or neutralization for cottonseed and peanut meal.		<ul> <li>Ongoing research on affect of dietary oilseed protein on down's syndrome children and senior citizens.</li> </ul>	

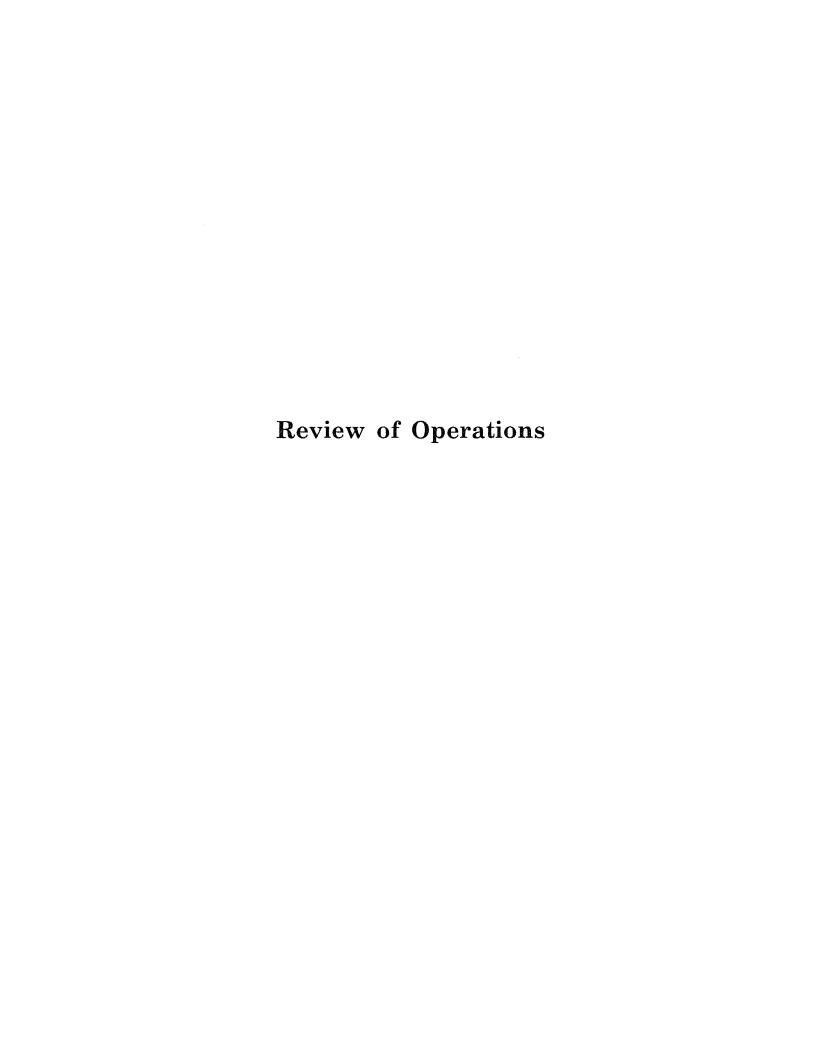
on-going, new areas of study are generated through university research proposals, the advisory committee members and commission staff.

Getting the results of the research out to the people who can use the information is another step in this process. Updates on research are obtained by visiting the university research centers and by reviewing annual research progress reports sent to the commission by all four universities. Many of the marketing efforts mentioned previously are connected to research findings.

Funds Acquisition. While the state appropriates "seed money" to the commission to distribute to the universities, outside matching funds are also sought to maximize the use of the state funds. These outside funds from various private businesses and foundations are roughly equal to state appropriations. These funds are obtained several ways. In many instances, interested companies are contacted to donate for specific research projects. In other instances, university researchers who are prominent in certain fields bring outside funding with them when they are hired by a university and, in some cases, university researchers seek out matching funds. The commission staff is also involved in obtaining matching funds and in courting good researchers to come to universities funded by the commission. In addition, the commission's close involvement with the U.S. Department of Agriculture (USDA) staff in Washington, D.C. aids in the pursuit of federal grants. For fiscal years 1986-1987, two federal grants totaling \$190,000 were awarded to the commission. Donations of equipment needed for research projects are also sought by the agency.

Budgeting/Accounting. The final major effort of the commission is the preparation of budgets, fund accounting and bookkeeping for university expenditures. The four universities, which are funded on a contract basis renewed biennially, pay for utilities and office space. The funding provided to the universities by NFFPC pays for salaries of the researchers, supplies and materials. University accounting departments compile research expenses into voucher forms on a monthly basis and send them to the commission for review and payment. Besides university purchase vouchers, advisory committee and commission member travel vouchers are reviewed and paid as part of this activity.





#### Focus of Review

The Natural Fibers and Food Protein Commission is a funding pass-through and coordination body that administers research funds to four universities. The first major area of focus of the sunset review was to determine if the NFFPC performs an isolated function in funding research geared to improving the quality and marketability of cotton produced in Texas.

The sunset review found that the NFFPC is responsible for funding a relatively small segment of agricultural research through its structure as a state agency. While there are no similar state agencies for other crops or commodities in the state of Texas, nor are there similar state cotton or natural fibers commissions in other major cotton and oilseed producing states, most other states do use state funds for agricultural research related to the state's major cash crops. A review of other states indicated all states contacted have devised methods to research and promote their major cash crops and underdeveloped or new commodities. Research generally focused on pest control, growing conditions and production problems. Research in most other states is conducted at the state's land grant university and is funded to only a small degree by producer associations, with the majority of funding coming from the state's appropriations. So, while the structure of NFFPC is unique, state-supported agricultural research is common in other states.

The sunset review also found that the function of funding agricultural research is carried out by both public and private agencies in Texas, as well as in other states. In Texas, there is a fragmented configuration of groups participating in research, marketing, promotion, education and lobby efforts. This includes the independent research done at the universities, various regional associations and cooperatives that assess a fee on producers, a national cotton "check-off", or levy system, and independent commodity boards. The primary research funding for natural fibers and oilseeds comes through the research body of Texas A&M University, the Texas Agricultural Experiment Station (TAES). This is similar for all states that receive federal "Hatch Act" funds in that each state must designate a land grant university to house an experiment station and extension service to be the recipient of federal funding for that state's major agricultural products. Consequently, federal matching funds and the majority of state funds for agricultural research are concentrated at the research body of Texas' land grant university, Texas A&M. Other universities also receive some state funding for various natural fibers and oilseeds research projects.

There are a number of independently formed regional marketing cooperatives and associations in the state that have been formed by producers to fund marketing, promotion and some education and research for cotton, wool and mohair. These groups generally finance themselves through a membership fee or voluntary levy based on quantity of production. Some of these groups, such as the Plains Cotton Cooperative Association, focus almost entirely on marketing while others fund some research, especially to address problems specific to their growing region.

A national commodity check-off system is also in place for cotton, wool and mohair, with the wool and mohair check-offs being tied to the federal price support system. The cotton check-off is overseen by the USDA and is administered through a quasi-governmental agency known as the Cotton Board. All cotton producers in the 19 cotton-producing states pay \$1 plus .6 of one percent per bale of cotton at the first point of sale into the National Cotton Board, with provision for a refund. This revenue is then used for research and promotion activities through a contract with Cotton Incorporated. The majority of the funds now go to promotion efforts, but the funding dedicated to research is often funneled back into the states on a contract basis.

Finally, the sunset review found that all major cash crops in Texas receive research funding through one means or another. Many crops, in addition to being supported by state-funded research at TAES, are supported through commodity boards administered by the Texas Department of Agriculture. These voluntarily instituted boards are active for eight different crops on a regional or statewide basis and are funded through a check-off system. The funds generated may be used for research, disease and predator control, education and promotion of the commodity. Creation of such boards must be initiated at the will of the producers of the commodity through a referendum. Other voluntary regional associations have been formed for most major crops besides cotton, wool and mohair, as well.

The second major area of focus of the sunset review was to determine if alternatives to the NFFPC structure existed that could produce the same basic results with less cost or with greater benefits. Several alternatives were examined. First, the review examined the alternative of abolishing the agency altogether and funding the four universities directly. This would have eliminated the current NFFPC coordination system, however, that assures that the money is used where it is most needed. Without NFFPC, there would be no formal mechanism for industry input into the research funding process. The loss of this mechanism would eliminate a valuable oversight role that helps link the research proposal to the needs of the

producer and the industry, thereby maintaining the relevancy of the research. It also provides an incentive for industry to provide matching funds since industry representatives have a voice in what research gets selected for funding.

Another alternative was examined which would have allowed the commodity board system to assume the current functions of NFFPC, thereby making it a private function with no state funding. This alternative, however, would not assure that the money generated through a commodity check-off would be used for research to the extent that it is now since the state research "seed money" would be eliminated and producers could elect to spend a greater proportion of the money on marketing. This would also result in a double taxation system for cotton producers since they are already subject to the national cotton check-off levy described earlier.

The review also evaluated the merits of transferring NFFPC's functions to four other state agencies, but identified problems that made recommending a transfer inadvisable in all four cases. First, the Texas Department of Agriculture (TDA), through its marketing and agricultural development program, does promotion and direct marketing for major commodities in the state, including cotton. However, TDA is primarily a regulatory and marketing agency and does not fund university research, which is the NFFPC's main function. The Texas Higher Education Coordinating Board does fund university research for agriculture and other areas through its relatively new advanced technology program. The funding, however, is distributed to Texas universities through an out-of-state peer review committee system that may choose to fund aerospace, energy or other research instead of agricultural research. The Coordinating Board also has no special expertise in natural fibers and oilseeds and has a different mandate than that of the NFFPC.

The Texas Department of Commerce (TDC) was also investigated because of its domestic and international business development programs which focus on textiles and agriculture, among other state resources. The TDC, however, does not fund university research as does NFFPC and has no special expertise in cotton, wool, mohair and oilseeds. Finally, the research body of Texas A&M University, TAES, was considered because the majority of agriculture research in the state already occurs here. Two major problems were found in transferring NFFPC's functions to TAES. First, it would allow one university to more tightly control the research funds distributed to itself and three other universities instead of allowing a neutral structure to do so. This would create a potential for biasing the flow of the funding to one university and could disrupt the flow of funding support for major research laboratories, facilities and projects already in place at the other three universities.

Second, the research selected for funding through the NFFPC industry prioritization process has a different focus than does the entire gamut of research at TAES. The NFFPC selects research proposals for funding that are close to fruition or have a time deadline and are market-oriented or have value-added goals. The Texas Agricultural Experiment Station does fund this kind of research, but also funds a substantial amount of more basic, experimental research across all agricultural research areas. Additionally, a potential exists for losing part or all of the \$1.5 million in industry-generated funds if the NFFPC's activities are transferred to another agency and if industry support is consequently lost or diminished. The special attention given to natural fibers and oilseeds would also be diminished if the functions were transferred since none of the four agencies focus efforts on these commodities to this degree.

The sunset review concluded that alternative organizational structures could not produce the same results at less cost or with greater benefits. The review found that the NFFPC provides a brokerage service for the universities and industry. The agency's use of state appropriations as seed money matched with outside industry donations ensures that the money goes farther for research and also creates a partnership between the two groups for prioritizing the research that should receive the joint funding. This partnership allows for the best use of the universities' expertise, which is in performing the actual applied research, and the best use of the industries' expertise, which is to provide input into the areas needing research based on knowledge of the industry and first-hand experience in producing the commodity.

The review concluded that none of the alternative solutions examined could preserve the focus of the NFFPC and that there is a need to maintain the commission as a separate body with certain improvements. The recommendations which follow would improve its ability to focus on research priorities and would expand the agency's coordination functions.

### **Policy-making Structure**

The evaluation of the policy-making structure was designed to determine if the current statutory structure provides a proper balance of interests within the composition; contains an effective means of selection and removal of members; and, provides for proper use of the agency's advisory bodies. The review concluded that the representation on the commission and means of selecting members is appropriate and provides for adequate oversight of the agency's activities. The four universities represented do the majority of the state's research in the natural fibers and oilseeds area and should be represented on the commission. The agency's use of its advisory bodies, the industry and executive committees, is also appropriate because it allows for discussion and prioritization of research funding without involving the four university presidents in lengthy, deliberative discussions, while still giving the presidents the final budget oversight.

No recommended changes were made in this area other than minor changes recommended in the Minor Modifications Section of the report.

#### **Overall Administration**

The evaluation of the overall agency administration focused on the budgeting, accounting and rule-making activities carried out by the agency. The review was designed to assess whether the management procedures and reporting requirements were appropriate for the internal management of time, personnel and funds. The review concluded that the agency's internal controls were generally effective. Four universities are funded by NFFPC on a contract basis. In its role as funds administrator, NFFPC keeps track of university expenses and checks them against authorized expenditures. If any deviations are found, the universities are notified and are declined payment on unauthorized expenses.

Only one minor change was recommended in the rule-making area, which is covered in the Minor Modifications section of this report.

#### **Evaluation of Programs**

The analysis of the agency's substantive operations focused on two major functions: marketing efforts made by the agency to promote cotton-related products; and, the allocation of funds to research projects.

The review indicated that the administrative staff has been cost effective in the dissemination of information and in the promotion of Texas natural fibers and food proteins. For instance, the executive director interfaces with state, national and foreign fibers and food protein interests to promote Texas products, lobbies USDA officials to adopt a more accurate mechanized fiber grading and pricing system for cotton, reports to U.S. congressional appropriations and agriculture committees on developments in the state, and travels across the nation and to foreign countries to promote the use of Texas fibers. The sunset review therefore concluded that no changes are needed in the handling of marketing initiatives by NFFPC.

The central focus of the agency's work is the allocation of funds to research efforts. The review indicated that several changes could be made to strengthen this process. Findings from this analysis follow.

#### Allocation of Resources

The allocation function involves two steps: the acquisition of funds for research; and the distribution of the funds to the four universities currently participating in NFFPC. Funds are allocated to research which addresses production and manufacturing problems as well as to areas that promise a greater economic return for natural fibers and oilseeds. For example, research money has been spent on improving varieties for processing, improving the efficiency of harvesting and ginning practices, developing automated machines for fiber grading in order to ensure a fair price to the grower of cotton staple, improving the processing of textiles and improving the care and laundering of natural fibers products. NFFPC-funded research is also directed to building a foundation for future study. As a result, the commission now partially sponsors the only textile research center, the only research oil mill and refinery for the processing of oilseeds, and the only wool and mohair top processing laboratory at any American university.

The review indicated that while allocation efforts were generally effective, the current methods for prioritizing research to be funded could be improved to strengthen statewide coordination of natural fibers and oilseeds research and promotion.

#### Structure for Focusing and Directing Research Needs to be Improved

The major purpose of the NFFPC is to fund specialized applied research. The successful accomplishment of this effort depends on the agency's ability to choose the most relevant research projects for funding. The agency should therefore have an appropriate structure for prioritizing proposed research projects and it should have information available to support its selection procedure. Examination of the allocation process from this standpoint indicated that the structure for making decisions on research could be strengthened in a number of ways. The statute is not clear as to what the focus of funded research and agency staff should be. In addition, the structure for determining research priorities could be improved by incorporating into it more information on related research activities being conducted elsewhere in the state.

Commission funding should be restricted to current areas of research and should not be allowed to expand to new commodities.

The agency was originally set up to fund research on cotton, cottonseed and their related products. In later years, the commission's focus was expanded to include wool, mohair, and other oilseeds, including peanuts, soybeans, sunflower and sesame seeds. This focus has been maintained in research funded through NFFPC.

Interest has recently been expressed by some university researchers as well as by NFFPC staff and some advisory committee members in changing this focus. Some of this interest has been to expand the oilseeds extraction processing techniques to non-oilseeds plants, such as the guayule and jojoba plants. Also, some of the interest has been in shifting some resources away from the current areas into other economic development projects, such as working with the problems of water availability by funding research on new crops to be grown in the arid regions of Texas.

The review concluded, however, that the current focus is appropriate and should not be changed. The steps taken in the expansion in focus that occurred in the past years were logical ones and were worthwhile progressions serving to strengthen the original mandate and increase the economic return of cotton and related products. The NFFPC was originally established because Texas had become the country's major producer of cotton, yet the cotton was not being used and was sitting in warehouses. This was due both to the substandard quality of some of the

fiber and lack of demand. Texas cotton producers have had problems both with producing an abundance of immature cotton that did not process well and with competition from man-made synthetic fibers over the years. The producers and the state, consequently, have suffered lost income due to the surplus of the commodity.

Later, the expansion of focus from cotton to other natural fibers such as wool and mohair was appropriate because of Texas' ranking as the major producer among states of all three natural fibers, similarity in end use of the fibers, the compatibility of spinning and blending technology and the compatibility in marketing approaches. Similarly, it was appropriate to expand research efforts from cottonseed to other related oilseeds such as soybeans and sunflowers because the oil and food protein extracting and processing techniques are similar, the end uses are similar and, since cottonseed oil extraction and processing is generally the most complicated and expensive of all oilseeds, the equipment can be efficiently used for other oilseeds once it is in place for cottonseeds.

However, to expand outside the natural fibers and oilseeds areas would dilute the resources still needed by these industries. While progress has been made over the years in quality improvement and marketability of Texas natural fibers through research, with indicators being higher prices, better yield per acre, increased consumption and infiltration back into foreign markets previously lost, more research efforts are needed to further improve the value of Texas' largest cash crop and reverse the historically bad reputation of Texas cotton, which is still affecting sales. Exhibit 4 illustrates the discount Texas upland cotton is still receiving compared to the average U.S. price for cotton.

Exhibit 4

Average Price Per Pound and Number of Bales Produced

Texas Compared to U.S. Average for Upland Cotton

	1965	1975	1980	1986
Texas Price	26.12⊄	45.8⊄	68.5⊄	45.6¢
U.S. Price	28.14⊄	51.1⊄	74.4¢	51.0¢
Texas # Bales	4,668,000	2,382,000	3,320,000	2,535,000
U.S. # Bales	14,973,000	8,247,100	11,017,900	9,583,100

Therefore, to ensure research efforts are maintained on the still pressing problems that natural fibers and oilseeds face, the statute needs to clearly indicate the boundary of the NFFPC-funded research.

The statute should be changed to clearly state that research funding should be given priority over marketing and other efforts.

Besides funding research, another stated activity of the agency is promoting the use of natural fibers and oilseeds and their by-products. Throughout the years, however, the agency's main emphasis has centered on research as the best solution to the industry's problems. A breakdown of NFFPC expenditures for fiscal year 1987 in Exhibit 5 below illustrates the priority the agency places on research efforts:

Exhibit 5

	Funding Source		
	General Revenue	Total Funds	
Administration	10.5%	4.9%	
Information Services	2.8%	1.3%	
Applied Research on Natura Fibers and Oilseeds	al <u>86.7%</u>	93.8%	
Total	100.0%	100.0%	

This focus is appropriate. The agency was created to fund research and is structured accordingly, with the four university presidents comprising the commission. As shown in the previous recommendation, the problems of the cotton industry still remain and applied research is still considered vital in addressing the industry's problems. Although marketing is also a necessary ingredient for the industry, other organizations whose activities concentrate primarily on marketing efforts have arisen over the years for the purpose of supporting cotton and oilseed producers, as discussed in the Focus of the Review section of the report. The review concluded that the blend of activities on behalf of NFFPC, the universities and other regional, state and national associations complement one another in addressing the research, promotion, and overall economic development needs of Texas cotton, cottonseed, oilseeds, and textile products. Because research is considered so vital to

addressing the historical problems cotton producers have experienced in the state and because coordinating research funding was found to be NFFPC's strength, the review concluded that the agency's current focus on research over marketing or promotional efforts was the most appropriate role for NFFPC. This distinction, however, is not directly addressed in the statute.

In order to ensure the NFFPC continues as a natural fibers and oilseed research funding body, the statute should be amended to reflect the research priority over promotion. This will avoid duplication and keep the funding directed appropriately.

Procedures used by the commission to determine the funding for research projects should be changed to take into account:

- similar research performed by the four member universities; and
- marketing activities of the Department of Agriculture and the Department of Commerce.

The primary aspect of the agency's work is to select the research that is to be funded. A process for prioritizing research should incorporate into it sufficient expertise to help determine research needs. The NFFPC system generally works well in this respect by involving the producers and the industry who will directly benefit from the results in the process. The way in which research is coordinated by NFFPC is an interactive process that begins soon after the agency's budget is finalized by the legislature. This process is initiated by the 50-member industry advisory committee that meets as one group to review research proposals and budgets from the four universities. These proposals include only the projects for which the universities are requesting funding. The committee then divides into two separate groups, natural fibers and food protein committees, and looks at the funding for their respective areas more closely. After discussing funding priorities, the two groups then reconvene as one committee and vote on the research to be selected for funding. This decision is presented to the agency's director and is then carried by the executive committee (selected from the industry committee) to the four university presidents. The university presidents make the final funding decision when they pass the budget.

The system for prioritizing research needs should also be structured so that agency decision-makers can take into account all major applied research efforts being conducted in the same areas, including research not proposed for funding by NFFPC. The review indicated, however, that the NFFPC system could improve efforts in providing for this kind of statewide coordination. The decision-making process for funding and coordinating research could benefit by additional input in two areas.

First, a significant amount of cotton and fiber-related research is not presented to NFFPC for funding, does not get reported to the committee and is funded on the universities' own initiatives because it does not fit with NFFPC's general funding priorities. This is particularly the case at TAES which does a large volume of related research on cotton, sheep and goats outside of NFFPC funding or review. While the advisory committee members and the NFFPC staff informally stay in touch with the research the universities are conducting through site visits and interaction with the university deans and researchers, there is no systematic exchange of this kind of information between the universities and NFFPC, nor is this information formally reviewed as part of NFFPC's research selection process. Furthermore, there is currently no central body or agency that exists to coordinate all research efforts among the universities in the state. It is primarily the responsibility of researchers and other university faculty within each university to coordinate research and find out (for instance at conferences or through journals) what similar projects are already being studied at other schools. This holds true for natural fibers and food protein research. Therefore, since NFFPC is already serving a coordinating function, it would be beneficial to have NFFPC serve as a clearinghouse for all major research being done in the state on natural fibers and food protein. This should include coordination of research funded outside of NFFPC in order to identify gaps in knowledge where future research efforts could focus and in order to help prevent duplication of efforts.

A second concern is that there are other state agencies which carry out activities of importance to NFFPC yet have no formal coordination of effort with the commission. Two state agencies with a similar interest were identified, the Texas Department of Agriculture (TDA) and the Texas Department of Commerce (TDC). Within the Texas Department of Agriculture, there is a marketing and agricultural development program that encompasses such activities as promotion of agricultural products, direct marketing, international marketing and market news. The scope of TDA's efforts covers all agricultural products grown in the state, including cotton

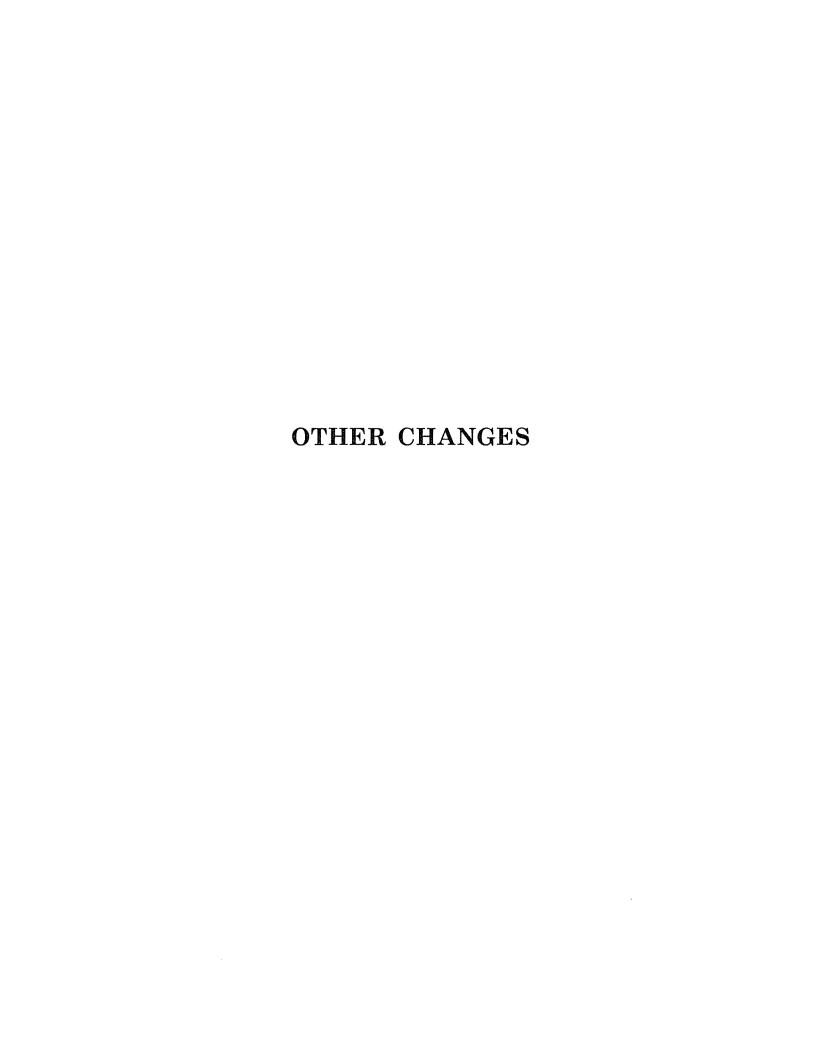
and oilseeds products, as well as new product development. The agencies work together in a cooperative fashion; there are occasional joint projects between the two agencies and NFFPC grants from the USDA are funded through TDA. Despite the similar interests the two agencies have for certain commodities, there is no formal representation from TDA on the NFFPC advisory committee. The agencies have notified each other of appropriate meetings to attend, but there is no method of securing input from a TDA representative in the NFFPC's process of prioritizing research and funding. Establishing a method to get comments from TDA would be very beneficial to directing the research and funding toward market improvement and could result in more representation for the small agricultural producer, toward whom TDA is gearing efforts.

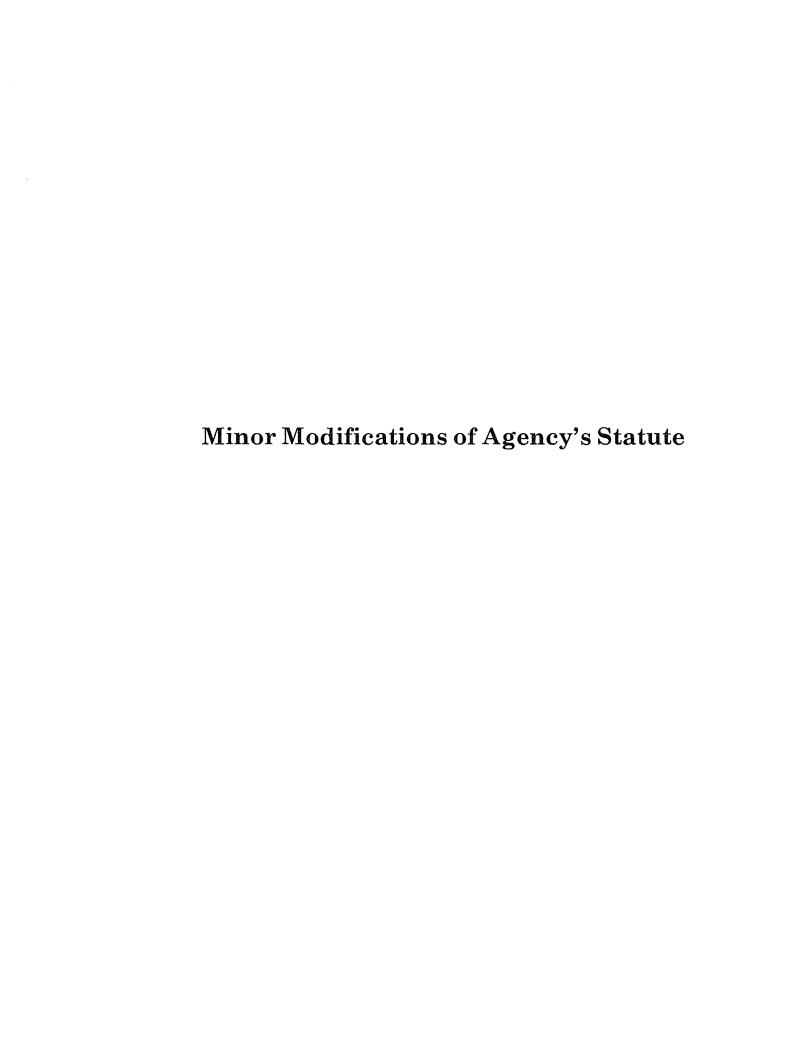
The same is true of representation from TDC. There is only an informal and sporadic dialogue between NFFPC and TDC. Through its domestic and international business development activities, TDC is working to improve the state's economic outlook by capitalizing on Texas' natural resources and industries. Textiles and agriculture are two major areas of interest to TDC. Providing an avenue for comments from a TDC representative would be helpful in improving NFFPC's economic development focus.

Two changes can be made to address these problems. First, universities doing NFFPC-related research should simply report all of this relevant research to the agency. The University of Texas at Austin, Texas A&M University, Texas Tech, and Texas Woman's University would submit to NFFPC biennially in summary format a synopsis of the research each school is conducting in cotton, wool, mohair, cottonseeds, oilseeds and textile products. This would be submitted to NFFPC by June of all even-numbered years, which would be prior to the industry committee's meeting in which they review and prioritize the research proposals that have been submitted for funding. An attempt should be made by the universities to present the information in a summarized fashion so that it can be reviewed by the NFFPC staff and industry committee without great difficulty. The NFFPC staff would also prepare this information submitted by the universities for presentation to the industry advisory committee at their biennial meeting. The industry advisory committee should then review this document prior to making recommendations on funding to the governing body. This reporting system should result in a good indicator of what other related research is already being funded at the universities in order to identify and verify research gaps and to avoid duplication of efforts. It would also allow NFFPC to better serve as a clearinghouse for natural fibers and oilseeds research.

Second, an additional advisory committee should be formed to provide for input from both the Departments of Agriculture and Commerce and to allow for additional dialogue with the universities. This committee would be composed of the commissioner of TDA or his designee, the chairman of TDC or his designee, the NFFPC executive director, and one representative from each of the universities represented on the NFFPC who is particularly knowledgeable of natural fibers and oilseeds research. The university presidents, or system chancellor in the case of Texas A&M University, would designate the school's representative. This committee would meet prior to the NFFPC advisory committee's annual meeting, after receipt of the universities' research summary, to set a focus for what areas should receive funding through a committee consensus and vote. Discussion in the meeting should focus on the economic development needs of the state and the planned future course of TDA and TDC efforts with regard to natural fibers and oilseeds marketing and development. Given the composition of this group, a dialogue should develop on the state's economic development needs in these areas and the research necessary to meet those goals. Through this dialogue, the group should be able to identify funding priorities, research needs and existing gaps. This committee's conclusions would then be carried to the industry advisory committee funding meeting by the executive director. Members of the new committee could also be present at the industry advisory committee meeting to make comments or answer questions, but they would not have a vote on this committee. Recommendations made by the industry advisory committee should be within the priority and funding parameters set by the new committee.

These additional advisory representatives should improve NFFPC's coordination task by giving the state agencies and universities most affected by or interested in NFFPC funding decisions an opportunity to help shape the focus of statewide fibers and oilseeds research.



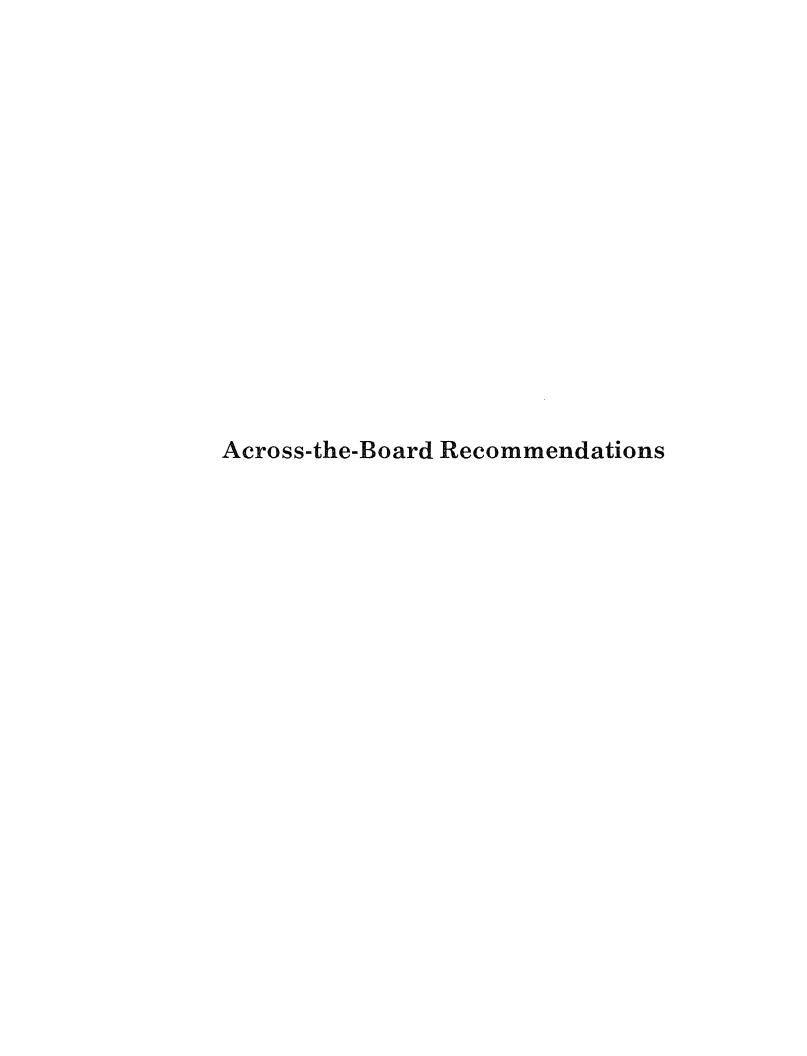


Discussions with agency personnel concerning the agency and its statute indicated a need to make minor statutory changes. The changes are non-substantive in nature and are made to comply with federal requirements or to remove out-dated references. The following material provides a description of the needed changes and the rationale for each.

## Minor Modifications to the Natural Fibers and Food Protein Commission Statute

Chapter 42 - Texas Agriculture Code

	Change	Reason	Location in Statute
1.	Add language requiring the Natural Fibers and Food Protein Commission to adopt rules on commission and committee proceedings and on the funding process.	To ensure standard procedures are followed according to the Administrative Procedures Act.	Section 42.003.
2.	Change the name of the Natural Fibers and Food Protein Commission to Texas Food and Fibers Commission.	To simplify the name and minimize confusion.	Sections 42.001-42.007.
3.	Change the language to rotate the chairmanship of the Natural Fibers and Food Protein Commission annually among the university presidents.	To reflect current agency procedure.	Section 42.003(a)
4.	Change the language to clarify that the five persons appointed to the executive committee are selected from the existing industry committee.	To clarify language in the statute which incorrectly implies that five of the seven members might be selected from outside the advisory committee membership.	Section 42.007(a)(3)
5.	Modify the language to require the industry advisory committee to meet at least once a year, but without reference to specific months.	The months specified in the statute are no longer relevant.	Sections 42.005(d) and 42.006(d).
6.	Change the agency's policy statement by deleting ", and the establishment of outlets for, farm products, especially"	The wording is confusing and incorrectly implies all farm products should be focused on by the commission.	Section 42.001.



From its inception, the Sunset Commission identified common agency problems. These problems have been addressed through standard statutory provisions incorporated into the legislation developed for agencies undergoing sunset review. Since these provisions are routinely applied to all agencies under review, the specific language is not repeated throughout the reports. The application to particular agencies are denoted in abbreviated chart form.

Natural Fibers and Food Protein Commission				
Applied	Modified	Not Applied	Across-the-Board Recommendations	
			A. GENERAL	
		Х	1. Require public membership on boards and commissions.	
	Х		2. Require specific provisions relating to conflicts of interest.	
Х			3. Provide that a person registered as a lobbyist under Article 6252-9c, V.A.C.S., may not act as general counsel to the board or serve as a member of the board.	
Х			4. Require that appointment to the board shall be made without regard to race, color, handicap, sex, religion, age, or national origin of the appointee.	
Х			5. Specify grounds for removal of a board member.	
Х			6. Require the board to make annual written reports to the governor, the auditor, and the legislature accounting for all receipts and disbursements made under its statute.	
X			7. Require the board to establish skill-oriented career ladders.	
Х			8. Require a system of merit pay based on documented employee performance.	
Х			<ol> <li>Provide that the state auditor shall audit the financial transactions of the board at least once during each biennium.</li> </ol>	
X			10. Provide for notification and information to the public concerning board activities.	
X			11. Place agency funds in the treasury to ensure legislative review of agency expenditures through the appropriation process.	
Х			12. Require files to be maintained on complaints.	
X			13. Require that all parties to formal complaints be periodically informed in writing as to the status of the complaint.	
		X	<ul><li>14. (a) Authorize agencies to set fees.</li><li>(b) Authorize agencies to set fees up to a certain limit.</li></ul>	
X			15. Require development of an E.E.O. policy.	
×			16. Require the agency to provide information on standards of conduct to board members and employees.	
Х			17. Provide for public testimony at agency meetings.	
Х			18. Require that the policy body of an agency develop and implement policies which clearly separate board and staff functions.	
		Х	19. Require development of accessibility plan.	

#### Natural Fibers and Food Protein Commission (cont.) Not Across-the-Board Recommendations Modified Applied Applied **B. LICENSING** Χ Require standard time frames for licensees who are delinquent in renewal of licenses. Χ 2. Provide for notice to a person taking an examination of the results of the exam within a reasonable time of the testing date. Χ 3. Provide an analysis, on request, to individuals failing the examination. Χ 4. Require licensing disqualifications to be: 1) easily determined, and 2) currently existing conditions. Х (a) Provide for licensing by endorsement rather than reciprocity. (b) Provide for licensing by reciprocity rather than endorsement. Χ Authorize the staggered renewal of licenses. Χ Authorize agencies to use a full range of penalties. Χ Specify board hearing requirements. Revise restrictive rules or statutes to allow advertising and Χ competitive bidding practices which are not deceptive or misleading. Χ Authorize the board to adopt a system of voluntary continuing education.