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thesis entitled

Using Diverse Stakeholders to Advise on Land-Grant Research Priorities: A Case Study of Michigan's Agricultural Experiment Station and Extension Agricultural and Natural Resources Advisory Council

presented by

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has been accepted towards fulfillment
of the requirements for

M.S. degree in Resource Development

Major professor

Date December 18, 1998

USING DIVERSE STAKEHOLDERS TO ADVISE ON LAND-GRANT RESEARCH PRIORITIES: A CASE STUDY OF MICHIGAN'S AGRICULTURAL EXPERIMENT STATION AND EXTENSION AGRICULTURAL AND NATURAL RESOURCES ADVISORY COUNCIL

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A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF SCIENCE

Department of Resource Development

1998

ABSTRACT

USING DIVERSE STAKEHOLDERS TO ADVISE ON LAND-GRANT RESEARCH PRIORITIES: A CASE STUDY OF MICHIGAN'S AGRICULTURAL EXPERIMENT STATION & EXTENSION AGRICULTURAL AND NATURAL RESOURCES ADVISORY COUNCIL

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The Federal Agricultural Research, Extension and Education Reform Act of 1998 requires land grant institutions to establish and implement a process for obtaining stakeholder input to receive Federal formula funds. The reform recognizes agricultural research as a public good, which requires public involvement of its users.

This paper examines the experience of a stakeholder advisory group's attempt to guide a land grant's research priorities. It uses Michigan's jointly-administered Extension and Experiment Station's Agricultural and Natural Resources Advisory Council as a case study. Based on interviews of former Council members and key AES and Extension administrators, the study documents the Council's life span and operations, its members' attitudes toward agricultural research and of their advisory participation and it explores the Council's organizational limitations. It found that, as organized, a jointly-sponsored, broad-based advisory council lacked the ability to influence Michigan's agricultural research. Suggestions for organizing land grant stakeholder processes are offered.

Soli Deo Gloria

ACKNOWLEDGEMENTS

I wish to gratefully acknowledge the work of my advisor, Dr. Thomas Edens for his patient support and that of my committee, Dr. R. James Bingen and Dr. Lawrence Busch for their invaluable insight and contributions. In addition, this thesis would never have been possible without the interest, assistance and openness of past and present Michigan Agricultural Experiment Station administrators.

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LIST OF ABBREVIATIONS/ACRONYMS

Below is a list of abbreviations and acronyms and their definitions that are used throughout the paper.

AES	Agricultural Experiment Station
AoE Teams	Area of Expertise Teams. These teams bring together extension field staff, extension specialists, researchers and other stakeholders to address issues/problems within a sector.
Animal Initiative	A $70 million dollar legislatively-funded initiative to improve livestock facilities and research at Michigan State University. Also known as the "The Revitalization of Animal Agriculture in Michigan Initiative."
EANR	Extension Agriculture and Natural Resources
Land-grant	Refers to the institutions associated with the 1862 Morrill Act, the 1887 Hatch Act and the 1914 Smith-Lever Act.
MAES	Michigan Agricultural Experiment Stations
MSU	Michigan State University
MSUE	Michigan State University Extension
Project GREEEN	GREEEN (Generating Research and Extension to meet Economic and Environmental Needs). A legislatively-funded initiative to assist plant industries in Michigan. Also known as the Plant Initiative.
SAPMA	Status and Potential of Michigan Agriculture
SAPMNR	Status and Potential of Michigan's Natural Resources

Chapter 1

INTRODUCTION

The federal government periodically reaffirms its commitment to agricultural research, extension, and education funding by reauthorizing the Hatch Act of 1887 and to the Smith-Lever Act of 1914. These two measures originally established and funded America's agricultural research and extension education systems, respectively. Their recent 1998 reauthorization provided the 105th Congress with the opportunity to revisit fundamental principles in how the land-grant institutions responsible for fulfilling these Acts serve the public good.

When launching the reauthorization process in the Senate, Agriculture, Nutrition and Forestry Chairman Richard Lugar (R- Indiana) addressed the issue of the land-grants' accountability in agricultural research and extension by posing the following question:

> "Should receipt by land grant universities of federally-funded agricultural research and extension funds be contingent on their ability to demonstrate that a wide variety of stakeholders have effective input into a systematic prioritization of research and extension issues? (Senate Agriculture, Nutrition and Forestry Committee, 1997a)?"

Relevancy of Land-Grant Mission

America's land grants are comprised of institutions created under three different pieces of legislation: the 1862 Morrill Act, the 1890 Morrill Act and the

Equity in Educational Land-Grant Status Act of 1994. The 1862 institutions have historically hosted federal agricultural research and extension and received formula funds to carry out such programs, as designated under the Hatch and Smith-Lever Acts. Lugar's query reflected a growing concern that America's land-grant universities' extension and research agendas aren't reflective of a changing nation's needs. His introduction of reform legislation marks the latest chapter for the 136 year-old institutions' struggle to craft a research agenda that balances conducting standard scientific inquiry with responding to public needs (Danbom, 1992, Marcus,1985).

In 1862, when federal land grant legislation was passed, 75% of the adult population was engaged in farming (Miller, 1995). Early land-grant research priorities were designed--almost to the point of "being pedestrian"-- to win a skeptical farming population's –and thus society's—financial and political support (Danbom, 1992). As science-based public agricultural research gradually proved its effectiveness, it enabled the American agriculture sector to produce food abundantly at moderate prices and could claim proudly "to have contributed to world peace, justice and well-being for billions of people" (Hadwiger & Browne, 1987: 3).

As the land grants' original farmer-client base for food and agricultural research and education diminished to less than 2% of the population, the societal policy issues facing these institutions have likewise shifted (Phillips, 1997). Many now perceive that there is less justification for agricultural research that primarily

focuses on improving agricultural production efficiencies (Hadwiger & Browne, 1987, Madden, 1987, Smith, 1995). Instead, such critics suggest funds should be redirected toward research on food safety, pesticides, water quality, sustainability, and animal welfare concerns (Westendorf, Zimbelman & Pray, 1995). Skees (1992) argues that if land grant institutions are to maintain public support, they must provide society with relevant research. This means land grants must reach out to a wider variety of research stakeholders (National Resource Council, 1996) and address the issues most important to them within the land-grant's natural purview. Armbruster (1993: 77), in fact, calls for the renegotiating of the land-grants' social contract by reestablishing strong linkages and relationships between the land-grant institutions, agriculture and citizens." Without such linkages, he and others believe that the land-grants could lose their relevancy--and therefore their claim of public support and funding. Therefore, the system needs mechanisms, which will involve its constituencies in its priority setting.

Agricultural Research, Extension and Education Reform Act of 1998

As a reauthorization measure, Congress passed the Agricultural Research, Extension, and Education Reform Act of 1998. As a result of the Act's adoption, more than $600 million for five years was committed for agricultural research, extension and education spending–reversing several decades of real dollar budget stagnation (Senate Agricultural, Nutrition and Forestry Committee Press Release, 1998a). Within the Act, Congress addressed the calls for greater accountability in

America's agricultural research, extension and education system by including two new stakeholder involvement mandates in its' Section 102--one of which specifically targeted land-grant colleges and universities.

The first half of Section 102 concerns the U.S. Department of Agriculture's use of stakeholder participation in Department priority-setting by requiring the Secretary to "solicit and consider input and recommendations from persons who conduct or use agricultural, research, extension or education" (Senate Agriculture, Nutrition & Forestry Committee, 1998b). Congress meant for the term "stakeholders" to be interpreted broadly, so that the USDA consults with individuals other than its own scientists. (Senate Agriculture, Nutrition & Forestry Committee, 1997b)

The USDA Secretary is expected to utilize the 30-member National Agricultural Research, Extension, Education and Economics Advisory Board, which was established by the 1996 Farm Bill, in establishing departmental priorities and as a means of channeling stakeholder input to the Department. The Advisory Board, which is comprised of representatives of land-grant universities, producers, academic disciplines, agri-food industries, and other stakeholders is encouraged to form ad hoc committees and to participate in regional policy conferences (such as FAIR 95, CROPS 99 or the Cotton Beltwide Conferences) to gather stakeholder input for USDA's priorities (Senate Agriculture, Nutrition & Forestry Committee, 1997b). Land-grant involvement for the Department's priority-making process, while recognized, is therefore likely to be limited to

having representatives on the Advisory Committee and perhaps hosting an occasional discussion forum.

The second half of Section 102, however, is explicitly directed at land-grants. It requires that in order for land grant institutions to obtain federal agricultural research, extension and education formula funds, they must "establish and implement a process for obtaining input from persons who conduct or use agricultural research, extension, or education concerning the use of the funds". (Senate Agriculture, Nutrition & Forestry Committee, 1998b). The USDA is directed to promulgate the necessary regulations for land-grants to be within compliance of the law by October 1, 1999.

In the legislation's background (Senate Agriculture, Nutrition & Forestry Committee, 1997b) it is clear that Congress recognized that many land grant institutions already seek stakeholder input in prioritizing their institution's agricultural research, extension and education activities. This was the first time, however, that Congress saw fit to statutorily require such a process. The legislation, therefore, stresses the importance that Congress places on land grant institutions to adopt routine measures to ensure that stakeholder input is sought regarding the use of federal formula funds. In charging the USDA to establish parameters and guidelines for priority-setting processes, Congress realized that such rules should be broad, since "each state and region has unique characteristics, problems, and interests that may require their priority setting activities to be different than other programs throughout the nation" (Senate Agriculture,

Nutrition & Forestry Committee, 1997b). Thus, the bill's authors state that the new USDA rules should be flexible enough to account for these differences and also to acknowledge that there are processes currently in place that meet or exceed the law's intent.

An informal email and fax survey of state agricultural experiment directors, who manage their institutions' agricultural research agenda confirms that almost all land-grants claim to currently have stakeholder input processes in place for advising agricultural research, extension and education. (See Appendix A). Yet knowing that advisory structures are in place does not answer questions like, "Who is and who is not included on the stakeholder advisory groups?" "How do these groups set priorities?" and "Do these groups have access to decision-makers and, if so, are their recommendations followed?"

These questions are especially pertinent to those critical of how land-grants set research priorities. Critics such as Mayer and Mayer (1971), Danbom (1992), and Lockertz (1994) charge that the institutions' agricultural research system, in particular, does not adequately appreciate many societal changes and remains isolated from non-agricultural currents of American thought. Some argue that this is because land grants and their research agendas have been captured by "traditional" agricultural interests (Miller, 1995; Skees, 1992; McDowell,1992; Hite, 1992) and thus fail to pursue research in areas not of interest to this clientele. For example, the land grant system has largely ignored organic research (Lipson, 1997) despite the fact that over 10,000 growers use organic techniques and that the

organic industry has grown by 20% for each of the past seven years (Senate Agriculture, Nutrition & Forestry Committee, 1997c).

Will the new stakeholder accountability reforms alter such perceptions? The Sustainable Agricultural Coalition's Washington representative, Ferd Hoefner (1998), cautioned a 1997 audience at an Agricultural Research Institute conference that mandating land-grant stakeholder processes may be of limited value--since such processes can fail in key ways. For example, Hoefner is concerned that while advisory groups may exist at land-grants, some operate on an "ad-hoc" basis and lack formal guidelines for exploring and advising on issues. As a result, they are not effective due to their "unevenness" in dispensing useful advice. Hoefner fears that far too many stakeholder processes begin with preset categories, where last year's priorities are reviewed--and typically reaffirmed-- for the following year. Rather, he wants advisory organizers to guide more dynamic processes, which will surface and then consider new ideas. In addition, Hoefner, foresees another temptation for land-grant advisory committees to re-label existing research to fit the "hottest topics of the day"--and thus access the grants which accompany such topics.

Finally, Hoefner recognizes that member selection processes are central to a stakeholder group's success. For example, he believes that it is extremely important that the full range of farm types, farm size and types of farming systems be represented on a council. Advisory committees should not draw exclusively from farm organization or commodity group representatives. He prefers to see

advisory members who are selected largely from the private and non-profit sectors, rather than include government and university researchers.

Hoefner notes that very little has been documented on what works or doesn't work with land-grant stakeholder processes and suggests that research is needed in this area.

Michigan Example of a Stakeholder Advisory Group

This paper addresses the lack of documentation concerning land-grant stakeholder processes by examining one such advisory group through a case study.

Prior to the recent federal legislation, the Michigan Agricultural Experiment Station (MAES) and Michigan State University Extension Agricultural and Natural Resources programming unit (MSUE-EANR), jointly operated an advisory council from 1987-1995. The Council's origins can be traced to the 1970's when MSUE maintained separate statewide citizen advisory committees for its agriculture and marketing, natural resources and public policy, family living and 4-H programming. At some point in the mid-80's, the agriculture and natural resources advisory councils merged, due to the fact that both committees were struggling, especially the natural resources advisory committee.

During the early 1980's, MSUE's agricultural council members began asking for the Michigan Agricultural Experiment Station to report on its activities at each of their advisory meetings. MAES gladly obliged this request, as they

were interested in obtaining citizen input in shaping their priorities. At that time, only individual outlying research stations had citizen advisory councils. Such station councils only addressed local research priorities.

Once MAES became a "permanent fixture" at the extension advisory meetings, MSUE approached the Experiment Station in 1987 to share the council's operating costs. MAES agreed to pay one-third of the expenses. This agricultural advisory council then evolved to include natural resources representatives following the dissolution of MSUE's natural resources advisory council due to poor member participation and attendance. The advisory group was then re-christened the Michigan Agricultural Experiment Station/Extension Agricultural and Natural Resource Advisory (MAES/EANR) Council.

It should be noted that this new advisory council was created in a relatively benign political and administrative environment in Michigan for MAES and MSUE. Although administrators remember that they were facing budget pressures as personnel and fringe benefit costs began to skyrocket and outpace expected revenue, there was not any concerted thinking that creating a new advisory council would help the two units deal specifically with this or any other problem. Rather, the new joint Council evolved from previous advisory processes and because there was a general consensus that an EANR advisory committee should be broader than just agriculture. However, it was felt that campus administrators would benefit from closer grassroots contact in setting institutional priorities.

For the remainder of the study, MAES/EANR Advisory Council shall be

referred to as either "the Advisory Council" or "the Council". The term "Council sponsors" and "Council organizers" will be used interchangeably and collectively refers to the Michigan Agricultural Experiment Station and Michigan State University Extension.

According to its Operational Guidelines, the Council was comprised of representatives from agricultural and natural resources industries. Council organizers sought to balance members based on commodity and natural resource areas, geographic distribution gender, racial and ethnic background, farm size, production, marketing, policy sectors and organizational linkages. Members served four-year staggered terms and could be considered for a second term. In its final year the Council's 25 members represented the following: Michigan Department of Agriculture, Department of Natural Resources, waste management professionals, the dairy industry, fisheries and natural resources, forestry, parks and recreation, various field crops growers, greenhouse operations, migrants, food processing, economic development, wildlife, environmentalists and a Native American tribe.

The Council's purposes were clearly spelled out in their Operational Guidelines. They were:

- To advise the Michigan Agricultural Experiment Station and Extension Agriculture and Natural Resources Program (EANR) directors in clarifying priorities which will assist them with management and budget decisions.

- To raise, examine, analyze and integrate issues related to agriculture and natural resources brought forth by county Extension

programs, advisory committees, Agriculture and Natural Resources Program Committees (ANRC's) and others.

- To help develop, implement and evaluate educational programs to solve or diminish the impact of problems on individuals, families, business and communities.

- To advise MAES and EANR on how to deal with pressing issues in agriculture and natural resources; these may be referred to subcommittees or ANR committees to discuss alternative approaches (not to make decisions).

- To generate support for, and communicate the value of, MAES and EARN programs to key public government officials, leaders, decision makers and other key groups.

- To help secure additional resources for educational programs.

- To assist with annual and long-range plan development and program evaluation.

In 1995, after several years of operation, Council sponsors and key Council members concluded that the advisory group was of limited value. They decided to discontinue a state-wide advisory group and instead rely on other forms of stakeholder input.

Problem Statement

The failure of a broad-based, statewide advisory group raises serious concerns for proponents of stakeholder involvement in land-grant priority-making. As pointed out by Hoefner (1998), there is little published on stakeholder advisory processes and therefore little is known about which methods are useful and which are not. As the USDA begins to draft the stakeholder guidelines that land-grants

will need to follow to receive federal formula funds, it is important that decision-makers be aware of potentially problematic advisory group mechanisms which should be avoided. Similarly, if land-grants are interested in establishing dialogue with new constituencies, their advisory processes must be able to incorporate the non-traditional perspectives that these constituents represent.

This study will seek to answer the questions, a) "How did the MAES/EANR Advisory Council affect agricultural research priority-setting at MSU?" b) How did the Advisory Council membership view their Council experience? c) Why was the MAES/EANR Advisory Council discontinued?" and d) What lessons can be learned for establishing and operating land-grant stakeholder advising processes from the MSU experience?

Organization

In the pages that follow, stakeholder involvement in land-grant research will be presented. Chapter 2 will discuss how agricultural research is a public good. It will describe the historical context of stakeholder involvement in land grant research and will review stakeholder and advisory group literature. The third chapter includes a description of case study methodology, its' applicability for this study and the study's hypothesis. It will also explain the data collection and analysis techniques employed for the research. The fourth chapter will present the case study of the Michigan Agricultural Experiment Station/Extension Agricultural and Natural Resource Advisory Council and describe its membership

selection, operations, effectiveness in influencing the agricultural research agenda and its demise. This will be the study's findings and analysis. The fifth and final chapter will link the study's findings to the literature. It will also discuss the study's limitations and assumptions as well as its implications and recommendations.

Chapter 2

PROBLEM-FOCUSED LITERATURE REVIEW

A Brief History: Citizen Involvement in Agricultural Research Priority Setting

Citizen stakeholders have long been involved in determining public agricultural research priorities and the values behind such priorities (Schweikhardt and Bonnen, 1986) (Burkhardt, 1991). Decades before the passage of the Hatch Act of 1887, which formalized the federal government's role in funding state agricultural research, there was serious debate in the agricultural community over the nature and purpose of agricultural research and government's role in conducting it. (Marcus, 1985). Many farmers were suspicious of "book-learning" and doubted that academics could solve farming problems. They, therefore, saw no need for scientific research (Knoblauch, Law and Meyer, 1962). Other farmers viewed research more favorably, but from a limited perspective--they wanted unbiased fertilizer tests and/or model farms where new techniques and tools could be demonstrated. Several states financed experiment stations to carry out such narrow tasks prior to their federal creation in the Hatch Act (Kerr, 1987). Early agricultural scientists (often chemists) promoted the German model of laboratory and small-plot experimentation as the best means to address agriculture's problems. They, however, faced an uphill battle convincing farmers and state legislators of their model's merits (Knoblauch, 1962).

Despite these disagreements, the demand for public support of agricultural research grew during the 1870's and 1880's. Hadwiger (1982:15) identified three types of political supporters for agricultural research, who have existed from the debate's beginnings and who can still be found today:

> 1) Self-designated advocates of the public interest, who wished to improve agriculture through science;
>
> 2) Scientists, whose interest lay in the creation and funding of research agencies; and
>
> 3) "Clients", including farmers, who received some economic benefit from research findings.

These parties were instrumental in the eventual passage of the Hatch Act of 1887, which established the State Agricultural Experiment Stations. Busch and Lacy (1986:xvii) note that the Act was

> a compromise between the interests of basic research and application, the state and federal governments, urban and rural America, advocates of production and conservation, banks and farms, and science and tradition.

As is not uncommon with legislative compromises following a bill's passage, the arguments over the Hatch Act's implementation threatened to derail key goals, including the very establishment of the new experiment stations (Marcus, 1985). Fundamental questions such as site location, relationship to the land-grant colleges, staffing, research priorities and information dissemination endangered the stations' future (Busch and Lacy, 1986). Early experiment station promoters risked losing either scientific legitimacy or public support unless they could define and satisfy a public while simultaneously maintaining scientific

respectability (Danbom, 1992). A good example of this early conflict occurred in the 1880's and 1890s at Connecticut's two publicly funded agricultural research stations. At the Storrs station farmers helped shape investigations, which was in direct contrast to the New Haven station. New Haven was thus accused by Connecticut farmers of neglecting practical farm research and, as a result, became the target of strong farmer abuse (Kerr, 1987).

Not long after their establishment, most agricultural experiment stations (referred to throughout the paper as AES's) began a "popularization" effort to create supportive client groups among farmers (Danbom, 1992). After reviewing the history of many agricultural experiment stations, Zuiches (1986) was struck by the close interaction of station administrations with agricultural producers in their early days and the latters' demands for immediate solutions to their farm problems. These "perceptive pioneer" AES leaders quickly realized the health and survival of their institutions depended upon their own political acumen and the political alliances they made (Danbom, 1986). According to Marcus (1986) it was in New York where experiment station leaders struck the balance between scientific experimentation and application that won farmers' approval, thereby guaranteeing public funding. This model still guides agricultural experiment stations operations today.

Developing agricultural research clientele

Agricultural officials in public institutions worked hard to develop and maintain farmer-based client groups to support publicly-funded agricultural activities. For instance, Busch and Lacy (1983) restate how the United States Department of Agriculture was instrumental in organizing the Grange after the Civil War. It become the first established constituency for agricultural education and research (True, 1929 in Busch & Lacy, 1983) and played an important role in shaping the Hatch Act (Marcus, 1985).

Likewise, it was the Smith-Lever Act of 1914 that caused the Farm Bureau movement to gain momentum (Busch & Lacy, 1983) and which resulted in a closely-tied and organized clientele for land grant institutions. This Act created the Cooperative Extension system, which combined federal, state and local financing to bring advice to farmers and rural communities. Smith-Lever funds could only be dispersed for the hiring of Extension staff once the local farm population organized to demonstrate a minimum level of participation in the support of a county farm agent (Liefel & Maney, 1990). In Illinois, this meant that the land-grant would enter into an agreement to place a university-trained farm adviser in the county only after a local farm bureau was formed. While these agents' jobs were primarily directed toward farm management demonstrations--organizing and maintaining a dues-paying farmer organization became an important part of their work (Busch & Lacy, 1983). Indeed during the first few

years, some counties only allowed dues-paying farmers to be eligible for farm adviser assistance. Obviously this brought controversy when the public-funded farm bureaus began adopting a political agenda in addition to their educational agenda. By 1921, the USDA needed to clarify the separate roles of Extension and Farm Bureau to ensure that all farmers would benefit from extension services without having to endorse Farm Bureau politics. Yet, the creation of farm bureaus gave land grant scientists an extremely powerful lobby (Danbom, 1979 quoted in Busch and Lacy, 1983). The intermixing of land-grant education and local Farm Bureau activities continued for many decades after the 1921 USDA order, since land grant professors were common fixtures at Farm Bureau annual meetings, picnics and farm tours. In an era of farmer-dominated state legislatures, this informal cooperation was undoubtedly an important asset to funding state land-grant operations.

Hadwiger (1982) describes two patterns of twentieth century clientele support among land-grant researchers. One pattern took the form of pressure from specific commodity producers--which was often encouraged from within the college. In fact, it wasn't uncommon for land grant researchers and extension officials played an important role in launching many commodity organizations. (See Schmid & Soroko (1997) for a discussion on the origins of the American Soybean Association). Even at the local level, county extension agents started

local chapters of such commodity groups as part of their farm advising duties[1]. The researchers' organizational activities among producer groups helped to create an organized producer base for their efforts. The other, more generalized type of support came through the establishment of advisory councils, which gave status to farm interests by permitting farmers to participate in research decisions. (Hadwiger 1982:20). Farm representatives were then expected to help secure state legislative funding for the research priorities they helped develop.

Commodity groups, general farm organizations and agribusinesses make up the traditional supporters of the existing agricultural research system. Not surprisingly, the land grant system has often historically cultivated strong relationships among these groups. However, the system has also had its critics who have been on the "outside" looking in on the agricultural research establishment. In the past, it has not been easy for these critics to get its concerns regarding the longer-term environmental, health and social ramifications of agricultural research heard among the agricultural research establishment (Heffernan, 1986). Often, it was difficult for the agricultural research establishment to be seen reaching out to these groups, for fear of alienating their traditional constituents. Friedland and Kappel (1979), for example, documented the extreme difficulty some AES scientists had in publishing research, which questioned the dominant agricultural production efficiency paradigm. Hightower's

[1] As told to the author by Farm Agent Don Teel, a 40-year employee of the University of Illinois Cooperative Extension Service. 1993, Knox County, Illinois.

(1973) Hard Times, Hard Tomatoes accused the land-grants of ignoring the needs of small family farmers in favor of large farms and agribusinesses. Indeed, a common theme among agricultural research critics is that many of the system's non-traditional client groups (such as migrants and small farmers) have been ill-served in favor of a research agenda that benefited only a few, already well-off clientele (Thompson, Ellis and Stout, 1991). This raises the question as to what are the relations between agricultural researchers and such marginalized groups and what are the mechanisms, if any, which exist to improve such dialogue and cooperation.

Critics of Agricultural Research Priorities

Hadwiger and Brown, (1987) summarize the primary critiques of the agricultural research system and identify the stakeholders who make them:

> 1. Research benefits are sluiced to those producers seeking research and to the researchers themselves, rather than to farmers generally. This complaint arises from public interest groups who want benefits for small farmers, consumers, and others.
>
> 2. Products developed by researchers are not always safe and nutritious, say consumer groups.
>
> 3. Food industry groups complain that the products are not always developed to be most attractive to consumers.
>
> 4. Modern agriculture adversely affects the natural environment, say environmental groups. Economic development agencies add that agricultural pollution also impedes the development of recreation and tourism in states in which those industries are competitive with agriculture.
>
> 5. Private agricultural researchers complain that public findings are

> released into the public domain, providing unfair competition with those who seek to profit from knowledge.

Hadwiger (1982) refers to the above assortment of public interest groups as the "externality/alternatives" or "ex/al" coalition. "Ex/al's" define themselves through their concern with how the agricultural industry deals with its perceived "externalities" (Beus & Dunlap, 1993) or by their promotion of alternatives to traditional agricultural practices. Browne (1988) and DeLind & Benitez (1990) observed that many in the agricultural establishment view this loose coalition with contempt. Likewise, the externality groups tend to see traditional farm organizations, agricultural commodity groups and agricultural trade associations as adversaries (Beus & Dunlop, 1993). Browne (1987) described the agricultural research policy environment as being a "destabilizing environment of conflicting interests... rather than an environment of reciprocating decisional networks."

Funding & Prioritizing Today's Agricultural Research

Agricultural research's current finances and priorities can be traced to a mixed system of federal formula funding and state politics. Historically, a significant portion of land-grant system funding came from a federal formula funding mechanism that distributed research and extension funds to land grant colleges of agriculture based on each state's or territory's share of total farm and rural population (National Resource Council, 1996). For state agricultural research, these federal formula funds could only be released once the state agreed

to spend at least twice the formula amount on agricultural research. This resulted in an impressive system of state-driven agricultural research initiatives. State Agricultural Experiment Station Directors, in effect, set the research agenda in collaboration with their state's respective clientele (Smith, 1995; Huffman, 1997) as the decision on how to spend the allocated funds was solely the state's (Rawson, 1997). As a result, there is only a limited degree of coordination between the SAES's, since there is no effective federal mechanism to prioritize agricultural research (Smith, 1995). There is, however a competitive grants process, but its funding is inconsistent, ebbing and flowing with other federal budget goals. Batie and Swinton (1994) point out, for example, that even when areas like water quality and food safety are listed as top priority research areas by the Experiment Station Committee on Organization and Policy, alternative agricultural practices are not suggested as research topics to address these problems. It is fairly evident that "ex/al" concerns had little input in these agricultural research funding decisions.

Meyer and Dishman (undated, quoted in Browne, 1987) make an observation on federal agricultural political priority-setting that may be similar to that of the states: "within the agricultural establishment, highly centralized clusters or networks of participants develop their own agreements on priorities in a fragmented and decentralized political universe". Important players in these state networks are the SAES research leaders, farm and agribusiness leaders and legislators whose districts rely upon agriculture (Hadwiger, 1982). In fact, when

the experiment stations began to expand rapidly in the twentieth century, land grant staff often organized commodity groups and "advisory" groups which were expected to develop a legislative coalition in support of state agricultural research (Hadwiger, 1982). At least one commentator has concluded that these clusters were not conspiratorial, but rather a fraternity of "good old boys" (Hadwiger, 1982). Madden (1987) describes how wealthy farmers, agribusinesses and chemical and machinery corporations have shaped agricultural research by contributing a small amount for directed research, which leveraged substantial in-kind land-grant contributions of faculty time, laboratory and field resources, as well as general overhead. Hite (1992) views the process from the public choice literature: the transaction costs of organizing small targeted groups who receive direct benefits from land grant activities was easier than organizing rural people and consumers who receive diffuse benefits. Hite believes that land grant leaders allowed themselves to be "captured" by commercial agricultural interests, in exchange for reliable legislative lobbying support. Browne (1987) observes that such governing networks function well, however, only as long as no one destroys the legitimacy and expertise of the principal players.

Agricultural Research as a Public Good & Democratic Processes

Agricultural research has been framed as a public good (The National Research Council, 1996). Public good conditions apply, according to Frey (1996: 702) when the interest in providing the good-- the benefits (in this case:

agricultural research)--is shared by many peoples or firms--such as consumers and taxpayers--and when no exclusive benefits exist for a membership class. Professor Eugene Hilgard of California in 1882 described such a situation regarding agricultural research. His Atlantic Monthly article pointed out that the states most in need of improved agricultural technology did not have the resources and collective will to provide such support. Therefore, he proposed that funding agricultural research was a legitimate role for the federal government (Jordon, Connell, Robinson, 1986).

Buttel (1996) and Middendorf and Busch (1997) argue that as a public good, agricultural research is subject to democratic processes. Buttel (1996), therefore, prescribes that the land-grant research community expands beyond its historic constituencies and involve more diverse stakeholders in the research process. Likewise, Middendorf and Busch, (1997) reason that the "public good" in agricultural research emerges only after the broadest possible constituency is involved in selecting research priorities. Buttel (1996) further clarifies that such a public good is greater than meeting the goals of a bountiful food supply—the traditional justification for agricultural research. He promotes a process where land grant researchers: seek out groups, rather than dealing with groups when they complain; make new groups feel comfortable and respected; and educate all constituents that none are unique and have a privileged relationship to the college.

Stakeholders in Agricultural Research Priority Setting

If new stakeholders are to become engaged in the agricultural research process, a framework is needed to understand each group's role. Although the Senate Agriculture Committee's definition of stakeholder was introduced earlier, a better understanding of how to analyze stakeholders comes from Grimble and Wellard (1997). They define stakeholders as "any group of people, organised or unorganised, who share a common interest or stake in a particular issue or system . . . "(Grimble and Wellard, 1997:175). They further delineate among stakeholders those who affect or determine a decision or action *(active participants)* and those affected--whether positively or negatively--by this decision or action *(passive participants)*. The researchers also categorize stakeholders according to their importance and influence: *importance* refers to those whose needs and interests are the priorities of aid (in this case, research), while *influence* refers to the power certain stakeholders have over the success of a project (Grimble & Wellard, 1997:176). Since none of these classifications are mutually exclusive, a matrix can be constructed to analyze stakeholders based on their perceived importance and influence with respect to the decision (See figure 2-1).

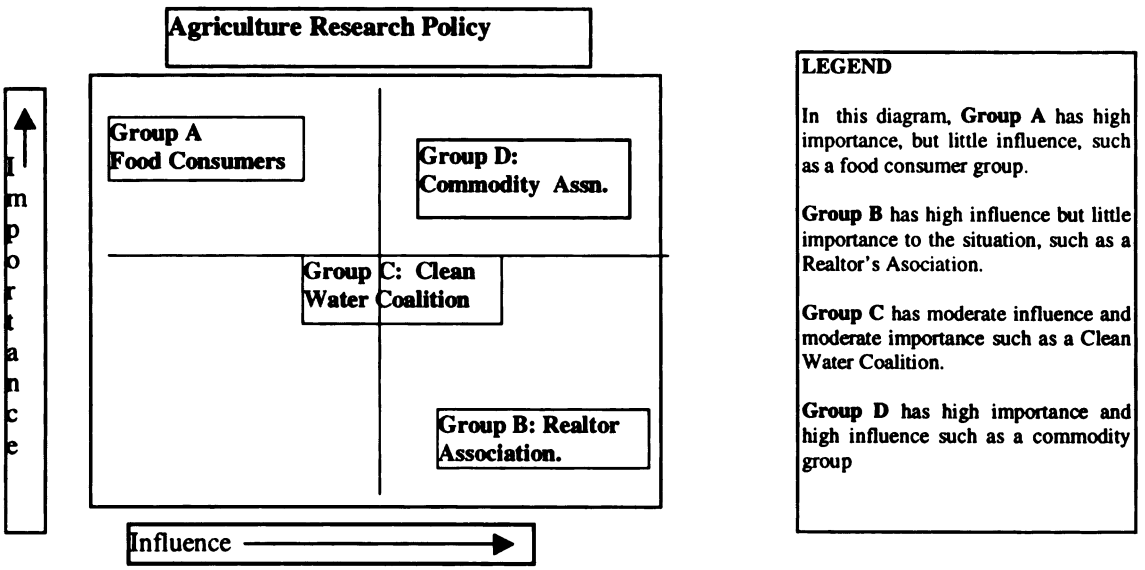


Figure 2-1: A system for classifying stakeholders according to importance & influence. Adapted from Grimble & Wellard (1997).

Stakeholder Influence and the Role of Values

While this classification system has its uses for agricultural research stakeholders, a fundamental concept must first be determined before importance and influence is to be meaningful: What is the purpose of agricultural research and who decides its goals? Goals have a profound (if subtle) impact on research precisely because research is a goal-oriented activity (Thompson, Ellis and Stout 1991). Institutional goals of either efficiency or sustainability will obviously produce different lines of research inquiry. In addition each goal would also require different evaluations of stakeholders' importance and influence to the process. A stakeholder concerned about groundwater pollution from fertilizer run-off has less standing in an agricultural research paradigm focused on production efficiency than in one where sustainability is the primary goal—unless run-off is

perceived as an inefficient use of a farm input. (For a thorough discussion of the values which shape agricultural research see the collected essays in Thompson and Stout's (1991) Beyond the Large Farm: Ethics and Research Goals for Agriculture.)

Burkhardt (1991:81) references Busch (1989) in noting that the business of research requires that matters of ethics, values, political philosophy and epistemology be settled, at least temporarily. Therefore, some legitimate values and interests may not receive the hearing they deserve, and thus are never reflected in the research system. Since agricultural research receives critical funding from public sources, Burkhardt further suggests that it is the nature of our political institutions--and the way they make decisions that may be the ultimate issue in determining agricultural research values (and therefore priorities). Ervin (1997) thinks that the first step in recognizing alternative values of agricultural research is to quantitatively measure the public goods which research produces, but which are rarely documented. Publicizing this measurement, he believes, would shift research priorities toward those that produce the greatest public good. He believes it may take the production of "hard numbers" to attract the attention of decision-makers and funders toward this type of research. Indeed, the advocacy of such an approach to agricultural research prioritization may be the best strategy for "ex-al" stakeholders--who typically lack political clout in defining their issues within the agricultural establishment (Browne and Cigler, 1990).

How then, can the values of the agricultural research systems' clients be

determined? Beus and Dunlap (1991) devised an instrument to measure the basics beliefs and values that constitute the two competing paradigms of conventional and alternative agricultural[2] production methods by surveying known archetypal members of each paradigm. Their scale was consistent in identifying the divergent paradigm perspectives of known conventional and alternative agriculture. A general sample of farmers who were surveyed took an intermediary perspective, although they were closer to the conventional philosophy. Beus & Dunlap (1993) later showed that each of the three groups identified different agricultural research goals. Conventional agriculturists thought that the primary aim of public agricultural research should be to increase productivity and efficiency, while alternative agriculture proponents want research that makes agriculture more environmentally sound. The general state sample of farmers sought research that preserves family farms and revitalizes rural areas.

Butler *et al.* (1994) analyzed agricultural research stakeholders through inter-organizational relationships. They divided the constituency base for agricultural and natural resources into two classifications: existing clientele (EC) and potential clientele (PC). EC organizations are directly involved in agricultural production activities either as producers or suppliers and have been the traditional clients of land grant agricultural research efforts. EC's tend to provide direct funding for land-grant research and to lobby legislators for research funding. PC organizations, however, focus on advocating for environmental and human safety

[2] [2]The 1991 concept of alternative agriculture has evolved into 1997's definition of "sustainable agriculture".

and their involvement with agriculture is indirect. They tend not to lobby on behalf of land grant funding, unless it is for specific projects that fulfill the PC organization's broader goals. Butler *et al.* (1994) call for establishing a communications process that reconciles the two groups' objectives and enhances collaboration between the academic disciplines and potential constituent organizations.

Fostering Stakeholder Participation

How should a stakeholder process function for agricultural research that actively engages the broad range of stakeholders, but which acknowledges the political realities of their influence and importance? Long, Matthew and Arnold (1994) are more blunt in summing up such stakeholder management dilemmas in public policy arenas. They in effect ask, "How does one identify affected parties and determine legitimate representation of these parties, balancing representation with the need to manage the process effectively?" Little is now understood about enhancing and institutionalizing broad public participation in U.S. agricultural research (Middendorf & Busch, 1997); (Lacy, 1996). Middendorf & Busch (1997) review six methods to foster citizen participation in science and technology, which include public hearings, consensus conferences, advisory and oversight councils/panels, public surveys, initiatives/referendums and assessing mechanisms. The authors have organized these methods on a continuum of their likelihood of enhancing democratic processes. (See figure 2-2).

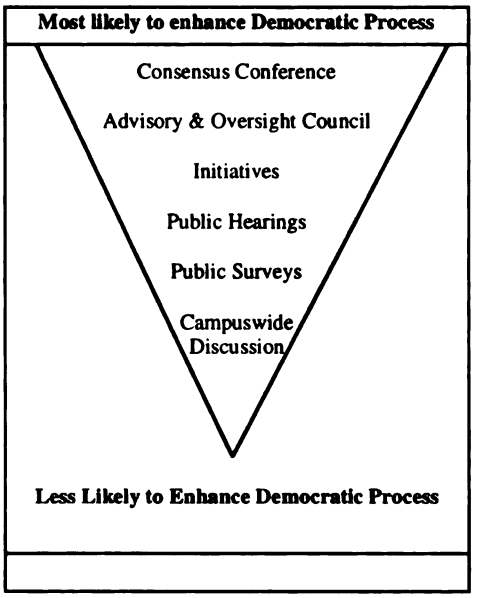


Figure: 2-2 Continuum on processes likely to enhance democratic processes. From Middendorf and Busch, (1997)

At a more local project level, Murray and Butler (1994) suggest land grant research and extension personnel incorporate whole farm case studies and focus groups to involve both farmers and the non-farm public in research and education projects. A whole farm case study carried out by a diverse mix of farmers, their neighbors, researchers and extension agents allows for the systematic examination of the biological, social and economic factors of an entire farming system. Focus groups are especially useful in identifying stakeholder issues and concerns with research and extension projects. The authors claim that both strategies are successful in building problem-solving partnerships between the land grant and both agricultural and environmental constituents in the local area.

VerSteeg (1992) details the five public accountability options Canada considered when it began to reform its pesticide regulatory process in the late 1980's after the existing process was deemed woefully inadequate by all sides.

Although his case study dealt with resolving a specific public policy issue, the options Canada considered and the one finally selected have applicability for agricultural research stakeholder participation methods. Rejected as being too limited for stakeholder involvement was an internal Ministry of Agriculture review, a public inquiry conducted by the judiciary and an independent task force. Other factors contributing to these methods' dismissal was their adversarial nature (the creation of winners and losers), their dependence on technical experts and the fact that only a few key personalities could control the final outcome. Public meetings were dismissed because they tend to be a poor method for problem-solving, despite their ability to obtain broad-based input. The process which emerged as the best option was a "consultative mechanism" comprised of 15 individuals who met for a total of 90 days over 18 months. Stakeholder participation was effectively solicited from this process because the 15 individuals on the committee were representative of five separate caucuses of pesticide manufacturers, pesticide users, environmental organizations, public advocacy groups and government regulators which the Ministry had organized for the purpose of seeking balanced representation on its consultative committee. Information flowed from the representatives to their caucuses and then back to the consultative group. The end result was a pesticide registration process that every major stakeholder in Canada accepted due to the fact that they were somehow involved in its formation. A similar mechanism could be used for organizing major agricultural research initiatives or to resolve profound research

programming dilemmas.

Advisory & Oversight Groups: Types and Purposes

As referenced elsewhere in this chapter, advisory groups--whether labeled as advisory committees, commissions, councils, boards, expert panels, or task forces (Priest, Sylves, Scudder, 1984)--are one of the oldest methods land-grants have employed to involve citizens in the research prioritization processes. Maine, for instance can trace its broad-based Agricultural Advisory Council to 1885 (Maine Experiment Station, 1993)--before the adoption of the Hatch Act! Kerr (1987) reports that by 1952, three-fourths of the agricultural experiment stations had formed advisory councils and that by the late 1970's nearly every station had one or more advisory councils where the laymen's research questions could be matched with the station's capabilities.

As agricultural research in the 21st Century moves into biotechnology and gene manipulation it is becoming more apparent to the scientific community that many health, safety and environmental issues must be sorted out. They realize that decisions on agricultural research priorities require advice from not only agriculture, but also from the environmental community as well as from the general public. Therefore, some are looking toward advisory committees to help identify and respond to such key concerns and to gain public acceptance for their work (Young and Jones, 1995).

Yet, despite their common use, different advisory committees or councils

can have quite different responsibilities, roles and authorities--which can be confusing to both the layman and the scientist. Because of their wide variety of connotations, it is quite possible that a sponsor of an advisory committee and the advisory member may have a totally different understanding of the committee's role and purpose--unless they are made quite specific. Brown (1972), writing for a public administration audience, places advisory committees into the following classifications:

1. **Committee of a general advisory nature**--Brown believes that this is the most frequent type of advisory committee. Typically its members are people held in high esteem who are appointed by an agency executive to advise the agency on all matters with which it is concerned. Usually key "minority" interests are represented on the committee. It usually meets infrequently--perhaps just once a year--and it may have a fairly large membership. The Committee may issue public reports and it may have some agency staff assigned to its administration--if it has an important enough role. Brown identifies a number of problems with these committees, such as their frequent inability to come to grips with the issues they presumes to advise on and their true lack of representativeness, as those appointed to the committee are likely to only be the people that the agency really wants to listen to.

2. Scientific and Technical Advisory Committee--These committees are usually comprised of professionals who are asked to grapple with an issue that an organization may not have the technical expertise to manage. Often it is an honor for its members to be asked to serve and the experience can give them insight into an organization or agency that they would not have otherwise had. The organization that assembled the committee often uses the professionals' recommendations to provide outside legitimacy for a course of action that was originally contemplated. On the down side, technical committees can often be slow to gather and issue recommendations and they may cause resentment among current agency personnel who believe they had the needed expertise on the matter at hand.

3. Special Clientele Advisory Committees--This committee is unique because it only represents a specific clientele group. Unlike the previous two committees, it is convened because the sponsoring organization wants the views of only that group (such as organic farmers or an ethnic population like Hispanics). They may

be gathered to rectify a past oversight in agency decision-making or because their support of an organization or program is seen as crucial. Members on such committees are typically given access to decision-makers and to organizational policies that they wouldn't have normally had. The forming of such special clientele committees can cause problems for the sponsoring organization, as it may become subject to charges of favoritism or bias by those not given similar privileges.

4. Specific Task Advisory Committees--This advisory committee is established to conduct a specific assignment on behalf of an organization and it is then disbanded. They are often assembled for delicate tasks where independence from internal organizational staff is seen as necessary. Brown includes such jobs as awarding grants, interviewing managers and conducting inquiries as appropriate for this form of the advisory committee. Its key attributes are that it is comprised of "outsiders" and that it doesn't, as an entity, have to live with the consequences of its actions.

5. The Research Study Committee--This committee is also sometimes called a fact-finding committee. While it shares similar characteristics as a technical or a special task advisory committee, it is unique in that the research study committee is often set up to deal with a controversial public problem. Most committees are comprised of 5-20 individuals who are an assortment of technical experts, academics, eminent persons, government officials and representatives of key constituencies. These committees may hold hearings and review research in the process of issuing a final report, which often contains policy recommendations. It may or may not be politically influential, depending upon its conclusions and who accepts or rejects them. Research study committees are often maligned for providing politicians with the aura of dealing with a problem, but never having to make a final decision.

6. Public Conferences--These are not truly advisory committees, but are often described by their organizers as being important avenues for soliciting public opinion on important issues since they allow for many voices to be heard under the banner of the sponsoring organization which defined the conference topic. It is common for a large conference to produce general recommendations, providing a process has been organized to solicit opinion in smaller groups. These opinions can be collected and summarized by a resolutions committee and then placed before the delegates for a vote. Sometimes, however, these small group recommendations are simply analyzed for common themes and presented as the conference's recommendations. While Brown ponders their true value, he admits that many participants view such advisory conferences as wonderful vehicles for citizens to directly express their views to public officials.

Another form of advisory committee is the sounding board (Axelrod, 1990). Although Brown never uses the phrase "sounding board", this form of advisory committee may be distinct from the "General Advisory Nature" committee that he describes. Like a general advisory committee, the sounding board is comprised of respected organizational clientele. However, rather than issuing reports or providing recommendations, a sounding board's primary charge is to listen to presentations made by the board's sponsor and then "to give advice and counsel" (Axelrod, 1990). Indeed, the sounding board model of an advisory committee may be more common in the non-profit sector than in the public sector. Useful for administrative decision-making, the sounding board provides a broader perspective that otherwise may be overlooked within the organization (Maine Experiment Station, 1993). Unlike the more formalized advisory committees described by Brown, the advice from a sounding board may be accepted, rejected or modified by the sponsor, with a minimum of "fuss". Its informality, may, in fact, allow for "franker" discussion than what would occur in a typical format, where reports are issued and minutes are kept. It is quite possible that sounding board members may become disgruntled if they learn that their advice is seldom taken, or if they believe their advice should carry greater weight than what the sounding board format allows. The sounding board sponsor must do a good job of communicating how the sounding board committee's input is used in the organization to avoid these problems and to maintain members' interest in participating.

Separate from, but related to, Brown's classifications of advisory committees, Axelrod (1990) in a pamphlet for nonprofit organizations lists the following reasons why organizations form advisory committees:

1) To raise money for the organization;

2) To serve as advocates for the organization to the community [or clientele] that it serves;

3) To provide feedback to the organization from the community [or clientele];

4) To review, monitor or assess a specific program;

5) To evaluate the performance of the organization;

6) To provide a means for involving people who are willing to give very critical assistance, but who have limited time;

7) Providing technical expertise;

8) Gathers input from or serving a liaison with relevant constituencies;

9) Building a corps of outside, experienced experts whose interest and support are important (including possible future board members or former board members who can make a contribution to the organization); and

10) Providing an independent, unbiased sounding board.

Depending on the sponsoring organization's objectives, any combination of these aforementioned reasons could be incorporated into a single advisory committee. While a public institution would not have the nonprofit need to fundraise or to groom and retain board members, inviting politically connected

individuals to serve on their advisory committee may be a wise strategy to ensure adequate public support and funding.

Geisler's (1986) paper on the role of Industrial Advisory Boards (IAB's) in technology transfer between universities and industry provides additional insight for constructing a model appropriate for agricultural research stakeholders. While Geislers' IAB involves only industry and academe--and ignores outside stakeholders--it is helpful in understanding how researchers and users can interact through an advisory process. The paper divides advisory board functions into two categories: research & development and administrative. The research and development responsibilities for an advisory board should be:

1. To establish general research priorities, directions and guidelines;

2. To assess balance in the R & D program between "basic", "applied", "development" and other R&D activities;

3. To implement, or assist in the implementation of knowledge, techniques, methods and technology generated by the cooperative effort; and

4. To diffuse, transfer, and channel information, knowledge, and techniques provided by the cooperative effort to the rest of the company (Geisler, 1986:36).

The administrative objectives for an advisory board are:

1. To establish performance evaluation criteria;

2. To select and implement performance evaluation models, techniques, and procedures;

3. To report to management on programs and performance of the cooperative effort;

4. To recommend to management any actions on termination, continuation, renewal or changes desired in cooperative effort;

5. To maintain communication mechanisms with the cooperation partners and to serve as "gatekeepers" for technical and administrative information from the cooperative effort and its participants. (Geisler, 1986: 36)

Hoefner's (1997:1) model of what roles a land-grant stakeholder advisory group (SAG) should undertake has many similarities with Geisler's(1986) IAB model:

1) [To give initial] advice on priority setting and program development, including advice on the formulation of requests for proposals (RFP's) priorities, when appropriate;

2) [To advise on] project relevancy and to review the overall portfolio for priority integrity after the research projects have passed scientific peer review;

3)[To provide] general oversight and [to] advise on the monitoring and evaluation systems that will be employed to track program performance and results; and

4)[To] host regular public forums for broad public education and discussion about the mission and direction of the program, agency, or institution.

A major element of both the Hoefner (1997) and Geisler (1986) models is the formal incorporation of research accountability by establishing the framework in which priorities are determined and activities are evaluated in conjunction with a user audience.

Advisory Committee Membership

Middendorf & Busch, (1997) describe the typical agricultural research advisory and oversight council participants as "lay" people who represent well-defined stakeholder groups, and thus have a more specialized interest in the institution than the general public would be expected to possess. Advisory committees are generally constructed to achieve "balance" (Mainzer, 1958), which may be defined in geographical, racial, gender, production sector (commodity group), partisan, or similar terms. In regards to new federal reforms, Hoefner (1997) posits that the guiding principle for the stakeholder advisory group (SAG) membership is that seats should be given to groups which receive benefits or incur costs from research or extension. He identifies a minimum set of stakeholders to include farmers and ranchers, agribusinesses, labor interests, sustainable agriculture organizations, consumer, nutrition, food safety and food security organizations, environmental organizations, rural development organizations and representatives of relevant local, state and national agencies. (Hoefner, 1997:2).

Stevenson and Klemme's (1992) model for the Center for Integrative Agriculture Systems (CIAS) chose to reduce the possibility of interorganizational rivalries by identifying and selecting respected members of diverse communities rather than organizational representatives to serve on research advisory committees. Hoefner, (1997) too, cautions against viewing any specific SAG seat as belonging—either explicitly or implicitly--to a specific commodity organization. This is consistent with Beus and Dunlap's (1991) review of the

literature for political activists, interest groups members and social movement participants. Their review suggests that these group members have more consistent belief systems and ideologies than the general public. Advisory group members selected to represent their specific organizations may be less willing to consider alternative views than those without such organizational roles and responsibilities. Such a conclusion was also borne out by Frentz, *et. al.* (1997). Furthermore, Gais and Walker (1991) document that many interest groups strive to place staff on subgovernment advisory committees as an insider strategy to influence policy, thus strengthening the concern with an organizational representative-only approach. Priest, Sylves, Scudder (1984) identify "clientelism" as a frequent outcome from public institution advisory processes. They see clientelism emerge when specific private interests and a specific agency develop a mutually beneficial exchange relationship. Soon private interests come to depend on the benefits, services, and protection afforded by an agency and its programs, while the agency come to depend on the political capital provided by private interests for public agency growth and protection (Chandler and Plano 1982:87 in Priest, Sylves, Scudder (1984)). As such, clientelism may discourage--if not totally shut out--perspectives that would challenge this arrangement or the agenda that results. While Klemme and Stevenson (1992) and Hoefner (1997) recommend excluding organized agricultural group representation on agricultural research advisory groups for precisely this reason, curiously, they both seem open to accepting organizational representation from ex/al groups.

Advisory Council Functioning

The literature on advisory processes for science and research is decidedly mixed on the concept's effectiveness. Despite the understandable appeal of science-based public agencies being advised by outside citizens and/or technical experts, a number of studies such as Skoie, (1993), Olson & Olson, (1994) and Tanaka (1995) all deal with the failure of such committees to meaningfully influence science policy and priorities. For the most part, such committees are ignored as the actual research decisions are made at decentralized levels. Even the U.S.D.A. has had to reorganize its commodity and research advisory committees several times in the past 50 years as each generation separately concludes that such committees "do little to inject new ideas for study in public agriculture institutions" (Kerr, 1987).

The advisory councils that seem to work best are not those with broad-based membership that deal with state and national priorities, but rather those more locally orientated to specific geographic locations (*e.g.*, such as a national forest) (Frentz *e. al.* 1997) or a specific type of problem or research focus (sustainable programs at a Center) (Stevenson and Klemme, 1992). Stevenson and Klemme (1992), identified 5 key characteristics of their successful land grant-based advisory/stakeholder model:

1) Council members recognize the administrative authority of the University and the academic freedom of its faculty.

2) The agricultural research center treats public input as an integral part of its decision-making process.

3) Early input and frequent feedback are the operating principles of staff/council interaction.

4) The Council's oversight authority empowers it to submit an annual report to the Governor and State Legislature evaluating the Center.

5) This highly interactive Council requires the use of innovative organizational mechanisms.

Mainzer (1958) points out that administrators must be willing to deal with the power that citizens' advisory committees can release. For example, a committee may both propose new research efforts or they could choose to cut existing areas--which could be quite threatening to higher powers. An advisory council must be given defined boundaries as to their responsibilities. Mainzer describes a situation where the United States Department of Agriculture had to warn its advisory committee that its role was only to advise and was not to make final decisions.

In reality, it may be more common that just a small portion of the advisory group participants actively review proposals and priorities in consultation with the organization's decision-makers, since most lay advisory members lack the technical competency. Middendorf & Busch, (1997) cite Krimsky (1984) in noting that it is typically the technical experts who dominate the actual decision-making process in a mixed group. Nonetheless, institutional decision-makers may present these recommendations to legislators as pure citizen-driven efforts to enhance the legitimacy of funding requests.

Summary:

Many "ex-al" proponents see land grant advisory groups as the best means to influence land-grant research priorities toward their concerns. The literature shows that while historically, advisory councils have played an important role in maintaining clientele support for land grant activities, stakeholder advisory councils may also have little influence on actual decision-making.

Chapter 3

RESEARCH DESIGN

This chapter describes the methods used in conducting this case study research. It explains why the case study methodology was selected, the components of a case study, the rationale for the procedures used in the case study and how the study was analyzed and reported.

Rationale of Case Study Approach

It is the research question's nature which leads a researcher to choose a qualitative method (Mertens, 1998) such as a case study approach. The analysis of the MAES Advisory Committee failure is well-suited for a case study. Campbell (1989) advocates a case study design for investigating real-life events, including organizational and managerial processes. Yin (1989:19) prefers the case study for examining contemporary events when the relevant behaviors cannot be reasonably manipulated for scientific research. Singleton, Straits, & Straits (1993:317) also recommend case studies when the item under study is a single social phenomena or a single unit of analysis, such as an organization. In addition, Singleton, Straits, & Straits (1993:319) acknowledge that sometimes field research, such as the case study, is simply the best research strategy because the problem under study precludes other methods. This especially makes sense when the goal is to reach understanding in a complex context (Mertens, 1998). In addition, the

MAES/EANR Advisory Group under study had only 23 members at the time it was disbanded, making the "N" effectively meaningless for statistical analysis from a standard survey instrument.

The case study has been a common method for investigating research and scientific advisory committees and drawing conclusions on their operation and effectiveness. For example: Stevenson & Klemme (1992) explored the Citizen's Advisory/Oversight Council of the Center for Integrated Agricultural Systems at the University of Wisconsin; Mainzer (1958) examined the USDA's research advisory committees which were created by the Research & Marketing Act of 1946; Wolek (1990) focused on the problems with the Mayor's Science and Technology Advisory Council of Philadelphia; Tanaka (1995) discussed the role advisory councils played in developing Japanese science and technology policy; Olson and Olson (1994) reviewed the birth and death of the Utah Seismic Safety Advisory Council and Skoie (1993) studied the dismantling of Norway's science advisory council.

Components of the Case Study

Yin (1989:29) identifies five components of a case study research design:

1) A study's questions;

2) Its propositions, if any;

3) Its unit(s) of analysis;

4) The logic linking the data to the propositions; and

5) The criteria for interpreting findings

This is a single case study. Like many case studies, it has descriptive, exploratory and explanatory characteristics. Yin (1989:19) notes that using a case study for explanatory pursuits is more powerful than using it merely for exploratory (or descriptive) purpose. According to Yin (1989:16) the case study analyst's objective should be to oppose competing explanations for the same set of events and to indicate how such explanations may apply to other situations. This study focuses primarily on exploratory and explanatory components--the descriptive part is necessary to describe the Council's functioning. The study's exploratory questions are: a) How did the MAES/EANR Advisory Council affect priority agricultural research priority-setting at MSU?; b) How did the Advisory Council membership view their Council experience? and c) What lessons can be learned for establishing and operating land-grant stakeholder advising processes from the MSU experience? Its explanatory question is: d) Why was the MAES/EANR Advisory Council discontinued?

One reason that the MAES/EANR Advisory Council was selected for case study analysis was because of its diverse membership (in both geographic and professional interests). This membership composition is similar to the broad-base representation that many "ex/al" critics have demanded in that membership went beyond agricultural producers and also included many who had environmental and conservation interests. Therefore, two possible competing explanations for the Council's cessation are: Did the Advisory Committee end due to problems

associated with its diverseness or because of the inherent weaknesses attributed to general advisory councils? Another alternative explanation is that other unknown factors contributed to the Council's demise.

Data Collection

Stake (1994) recommends that the following sources of data should be collected from a case study:

a) The nature of the case

b) Its historical background

c) Other contexts, such as economic, political, legal and aesthetic

d) Other cases through which this case is recognized

e) Those informants through whom the case can be known.

The unit of analysis for this study is the functioning of the MAES/EANR Advisory Committee. As an event, MAES/EANR Advisory Committee is further defined as only members listed on a October 1995 membership list and the MAES/EANR administrators who were assigned responsibilities for the Committee when it was disbanded in 1995. The names and contact information for both sets were obtained from a MAES administrator. This study did not attempt to contact MAES/EANR Council members who left the Council prior to October of 1995.

This study relied on four primary veins of information: advisory committee

member interviews, advisory committee members placement on the Beus & Dunlap (1991) conventional verses alternative agricultural scale, MAES/EANR administration interviews and MAES Advisory Committee documents.

The researcher obtained and reviewed relevant documents from the Advisory Committee, such as letters and other communiqués, minutes of meetings, agendas, administrative documents, including proposals, budget information for the committee, any news clippings or press releases that are available (Yin, 1989:85). Documents serve as substitutes for records of activity that the researcher can not observe directly. (Stake, 1995:68) These were used to corroborate or augment the administrators' and committee members' interviews, as well as to provide basic descriptions of Council activities.

Each individual Advisory Committee member was contacted via letter in January of 1998 informing them of the study and asking their permission to be interviewed. Included in this letter was a cover letter from MAES Director Ian Gray explaining the purpose of the research and encouraging the Council members to participate. The letter indicated that the researcher would phone to learn if the member was interested in being interviewed. If the member agreed, an interview was scheduled. Seidman (1991) stressed the importance of the researcher directly contacting the interviewees and warned against relying on third parties to introduce the research topic to the interviewee. The letter from MAES Director, Ian Gray, however, helped legitimize the researcher to the members.

The interview is a principal tool to obtain the descriptions and

interpretations of others for the case study (Stake, 1995:64) as it can gather the multiple realities inherent in the case. Seidman (1991) states that the primary way for a researcher to investigate an organization, institution or process is by interviewing the individuals who comprise the organization or carry out its processes. Kvale (1996) claims that the interview as means of obtaining knowledge is a relatively new phenomenon in modern social sciences. Brenner, Brown & Canter (1985) posit that the central value of the research interview is that it allows both parties to explore the meaning of the questions and answers involved. This observation was particularly relevant for the Advisory Committee case, where the reasons for its demise appeared ambiguous to many of the members. Being interviewed may cause former members to contemplate their participation and bring a new meaning to their experience.

Interview research has many limitations. The very act of conducting the interview influences the respondent's behavior (Foddy, 1993) which may lead some to question the study's validity. Since the committee has been disbanded for over two years, and many events took place 5 years ago or more, there could be problems with participants recalling information. Foddy (1993) reports that the salience of an event is important for how long people remember it. Generally, memory for salient events has been found reliable for up to one year. Since the Advisory Council disbanded almost three years ago, this poses a serious problem for the researcher. Although Seidman (1991) suggests that three interviews are necessary and questions whether a one-time interview can be seen in a proper

context, no follow up interviews were deemed necessary for the case study as the data gathering from the participants reached a point where the information collected became redundant (Bogdan & Biklen, 1992). It should be noted that Seidman wrote regarding in-depth interviewing, and not for case studies, when multiple sources help validate salient points.

Indeed, there is no common procedure for interview research (Kvale, 1996:13). Typically, interviews in a qualitative study are done with an unstructured or minimally structured format (Mertens, 1998: 321). For organizational research, Taylor and Bogdan (1984) recommend that the following issues be discussed prior to every interview with the interviewee:

1) The researcher's motives and intentions and reasons for conducting the investigations.

2) The protection of respondents through the use of pseudonyms.

3) Deciding who has final say over the study's content.

4) Reward for the organization (i.e., in-kind service, consultation, etc., if requested).

5) Logistics with regard to time, place, and number of interviews to be scheduled *en total.*

For this case study, interviews were conducted either in person or by telephone. Each interview setting and date was documented (Stake, 1995). Individual advisory committee members were told that the data and interview responses they provided would be kept confidential and that coded pseudonyms would be used when reporting direct quotes. Participants were also informed that

recent congressional legislation had been enacted to require land-grants to maintain stakeholder processes and that their participation may lead to recommendations to improve these processes.

Two sets of open-ended interview questions were drafted: one for advisory council members and one for MAES/EANR administrators. These questions served as a guiding template for the researcher and were not strictly followed for every interview. The researcher also asked other clarification and amplification questions as a result of the information respondents' volunteered. Herisse (1995) states that the open-ended interview enables the researcher to reformulate the problem and modify questions and categories during the course of the investigation Since case study fieldwork, by its nature, regularly takes the research in unexpected directions, too much commitment in advance is problematic (Stake, 1995:28) and can prevent the researcher from pursuing important insights not conceived of prior to the interview.

Once each potential interviewee was contacted and agreed to participate, an effort was made for a face-to-face interview. If the Committee member and the researcher were unable to find a common time to meet, the interview took place by phone. During the interview, the researcher collected handwritten notes. Most interviews were also recorded, but 6 of the 24 were not because the interviewee declined or due to technical difficulties. Recorded interviews were not transcribed verbatim, but used to clarify field notes made by the researcher (as advised by Stake, 1995:56). The researcher's interview notes were typed up into an interview

summary. These notes were then given back to the interviewees for their verification of what was recorded (Stake, 1995). This mechanism served to validate the researcher's notes, since any modifications made by the participants were reflected in the final interview summaries used to analyze the case.

All 23 of the MAES/EANR Advisory Council members were contacted for interviews and 20 accepted. 15 were interviewed in person, 5 were interviewed over the phone. All 3 MAES administrators and 1 EANR administrator agreed to be interviewed in person.

The Advisory Committee interviews explored: 1) members' backgrounds and expectations prior to joining the committee; 2) their perceptions of the committee's functioning; 3) their analysis of the advisory group's demise; 4) their recommendations--if any--on how a citizens' advisory committee might work; and 5) their opinions on the future direction of agricultural research. This information was linked to the study's questions to see if patterns developed from the participants' responses.

In addition, the individual Committee member's ratings on the Beus and Dunlap (1991) "conventional verses alternative agricultural" scale were measured. This scale was described in Chapter 2. The purpose of measuring advisory council members ratings on this scale was to learn if those representing natural resources fields had different ratings than those representing agriculture. If the members from each respective group had noticeably different ratings, that would imply that there were philosophical differences, which may have affected the council's

functioning. However, since only 14 Council members returned this instrument, its usefulness in this regard is limited. Administrators were not asked to complete the Beus-Dunlap instrument.

The MAES administrator interviews were designed to learn basic administrative facts about the Council and to compare administrators' and council members' perspectives on the Council's effectiveness. In general, these questions were focused on the administration of the Committee, how its members were selected, how MAES administrators thought the Committee could contribute to the MAES research agenda and why they thought the committee's execution did not meet MAES/EANR expectations.

Data Analysis

Two strategic ways that research constructs meaning in case studies are through the direct interpretation of the individual instance and through the aggregation of instances until something can be said about them as a class (Stake, 1995:74). Analysis thus involves a search for patterns (Yin, 1989) among the data collected. Three patterns were explored for this case study: if interviewees provided similar portrayals of the functioning of the council; what were council members' personal views on their council participation; and if there was consensus on how advisory councils help determine research priorities. From this exploration, recommendations are developed on how land grant institutions should select advisory council members and how they should be structured and

administered to effect agricultural experiment station research priorities

The case study analysis included "explanation building" (Yin, 1989) to determine which of the two possible hypotheses best explained why the advisory council was discontinued. Interviewee information and internal documents were assembled to address whether it was member diversity, council administration or some other factor that could best explain the Council's demise. Information to support both hypotheses is presented and analyzed. In this way, the reader can make an independent evaluation of the researchers' material (Yin: 1989).

Chapter 4

THE CASE: OPERATIONS OF THE MAES/MSUE ADVISORY COUNCIL

This chapter describes the operations of the MAES/MSUE Advisory Council and the Council's effectiveness in determining agricultural research priorities in Michigan using administrator and Council member insights. It also examines why the Council was disbanded by looking at two possibilities: that the Council's diversity made it "unwieldy" and ineffective or that the Council's organization hampered its ability to render useful advice. Special attention is given to the Council organizers' inclusion of sustainable and environmental agricultural issues throughout the functioning of the Council to determine if a broad-based council is a practical means to incorporate these topics in a research prioritization process.

Selection of Members

Most of the original MAES/MSUE Advisory Council members in 1988 were individuals from the previous Extension Agriculture Advisory Committee. These members were primarily farmers, but also included people in agriculturally related fields and included veterinarians, agricultural loan officers, cold storage managers and other agricultural businesses. They were merged with the remnants of the old (and largely defunct) Extension Natural Resources and Public Policy

Advisory Committee to form the new MAES/MSUE Advisory Council.

The membership selection process reflected the Council's Extension origins and also the belief among campus officials that county extension staff had an exceptional knowledge of key individuals in many fields throughout the state. Initially, the Council members were entirely inherited from the MSUE committees, but as MAES began to co-fund the Council, they also had a role in selecting the members.

When vacancies on the Council occurred, calls for nominees went out to county extension staff and state specialists through email and other organizational communication methods. A 1993 message from an Extension administrator seeking nominees set forth Council member criteria. According to this email, Council members should[3]:

1. Have some knowledge of, or at least support, Extension and/or the Agricultural Experiment Station.

2. Be a leader-type who is not afraid to participate in discussion.

3. Be available to come to two meetings per year (one during MSU's Agricultural and Natural Resources Week, and another meeting as a 3-day retreat in the late summer or early fall).

4. Be seen as a leader in the industry that they participate in, both locally and/or at the state or national levels.

Extension staff were urged to provide campus administrators with contact information and a summary background of their nominees (in effect, a brief

[3] Internal MSUE email. December 15, 1993.

rationale for their appointment), but were asked not to inform the nominee that he/she had been nominated. This was due to the fact that most nominees would not be selected, given the limited spaces on the Advisory Council. Administrators made the final decision on whom to select based on state geography, the need to balance agricultural and natural resource representations and other diversity goals. Campus administrators from the MAES and MSUE usually made the first contacts with nominees to explain the commitment, learn of their interest, and commonly, to convince them to join. Once a candidate verbally agreed, an official congratulation letter was sent to them. Members were also presented with a special name badge that identified them as an MAES/MSUE Advisory Council member. It was to be worn at appropriate MSU and industry events and was meant to lend prestige and official recognition to the position.

Although not officially and publicly announced, MAES and MSUE officials classified the nominees into several categories. The agricultural categories were fruit, swine, cash crop, beef, agribusiness, dairy and sustainable agriculture. For natural resources the categories were economic development, environment, sustainable agriculture, charter boat industry, underwater preserves, forestry, fisheries, waste management, Department of Natural Resources and "At-Large". Apparently, these classifications were primarily used to sort nominees for enterprise diversity and geographic considerations, because the final Council did not have seats allocated to several of these categories, including dairy, sustainable agriculture, charter boats and underwater preserves.

Out of the 20 members interviewed, 9 specifically recalled that county extension personnel nominated them. Three people couldn't remember how they were asked to join the Council--they just remember getting a phone call or a letter asking them if they were interested (these responses are consistent with the email's described process). Two others believe that their industry submitted their names to Council organizers, while the rest pointed to specific on-campus individuals (faculty members and 1 academic dean) as their nominators. In addition, there were two state government employees--one each from the Department of Agriculture and from the Department of Natural Resources--who came to the Council meetings to represent their respective agencies as an assigned job duty.

The Council was comprised of 6 women (26%) and 17 men (74%). Two were of Native American ancestry, one was Hispanic, while the rest were of European descent. Although there were no African American members in 1995, there had been one appointed to the Council several years earlier. As Table 4-1 illustrates, the Council's ethnic proportions reasonably mirrored Michigan for white-non Hispanic and Hispanic populations, over-represented American Indians and under-represented black-non Hispanics and Asian & Pacific Islanders.

Table 4-1 Demographics of the MAES/MSUE Advisory Council compared to the 1990 U.S. Census of Michigan

	White-Non Hispanic	Black-Non Hispanic	American Indian	Hispanic	Asian & Pacific Islander
1995 Advisory Council	87%	0%	8.7%	4.3%	0%
1990 Michigan Census	82.2%	13.9%	.6%	2.2%	1.1%

The Council organizers also strove for geographic diversity based on Extension's administrative regions. It had 3 members from the Upper Peninsula, 4 from Extension's Northern Region, 3 from its West Central Region, 3 from its East Central Region, 6 members from the Southwest Region (which includes both Lansing, the state capital and East Lansing, the home of MSU) and 2 from the Southeast Region. It should be noted that Michigan's population patterns--based historically on Detroit and growth of the auto industry--are not reflected in Extension's administrative regions (Table 4-2). Extension has historically served a rural audience and its administration reflects that most Michigan counties are still rural[4].

[4] The U.S. Bureau of the Census classifies a rural county as being under 50,000 population. 62 out of Michigan's 87 counties are considered rural. From Michigan: A Rural/Metro Comparison. Rural Data Book 1997. A joint publication by Michigan State University Extension and the Rural Development Council of Michigan.

Table 4-2. Comparison between state population and Council representation

	Upper Peninsula	North	West Central	East Central	Southwest	Southeast
Actual State Pop. in %	3.38%	4.32%	13.68%	8.74%	14.08%	55.8%
# from Region on Council	3	4	3	3	6	2
% from Region on Council	13%	17.3%	13%	13%	26%	8.7%

The Council's representation in its final year was professionally diverse. Eight out of the 23 members (35%) were agricultural producers--a significant minority. Nonprofit staff comprised 5 out of 23 (22%) and another 5 members (22%) came from private businesses (other than agricultural producers). Three members (13%), including the two ex-officio members were state government employees and two (8%) worked for their respective Native American tribes. (See Table 4-3).

Table 4-3 Professional Representation of MAES/MSUE Advisory Council Members

CLASSIFICATION	NUMBER	PERCENT%
Agricultural Producers	8	35
Non-Profit Employees	5	22
Private Business	5	22
State Government	3	13
Native American Tribal Authority	2	9

Specifically, the Council's 12 agricultural members (52%) included two potato growers, a fruit tree grower, a livestock and cash crop producer, a beef and field crop producer, a food processor, a swine producer, a vegetable and greenhouse grower, a field crop and greenhouse operator, a state official with seasonal farm labor responsibilities and a top manager within the Michigan Department of Agriculture. Its 11 natural resource representatives (48%) included two people with fisheries responsibilities, a forestry organizational representative, an environmental educator, a park and recreation operator, a lifelong civic leader and conservationist, a private consultant specializing in natural resources, a Christmas tree organizational representative, a waste management executive, an activist for a watershed council, a Chamber of Commerce director from a rural community with a large tourism industry and a Department of Natural Resources liaison. Despite these "listed" representations, many members wore several "hats" and also claimed roles as local officials (township and school board) 4-H youth leaders, consumers, and past officers of agricultural, natural resource, conservation and similar organizations (See Appendix B).

Generally, the members believed they had been asked to participate on the Council because of their professional experiences and their knowledge of Extension--and of Michigan State University. In their interviews, members identified what made them unique in Michigan's agricultural and natural resources fields, often stressing their multiple interests--*i.e.* Native American and fisheries, greenhouse and field crop production, MSU graduate and local Extension Council

member. For the most part, they saw themselves as being more diverse and having a "broader perspective" than others in their respective fields.

Most members were initially optimistic as to what they would contribute to the Council. Several spoke fondly of their long history with Michigan State University and MSU Extension--and their desire to return "something" to the institution. Others identified the experience and knowledge they possessed, which they felt were critical for helping MAES and MSUE determine its priorities for the future. Often this expertise was in areas "marginal" to the historic MAES/MSUE mission--such as balancing agricultural production and environmental concerns, protecting farmland and watersheds, strengthening rural communities and promoting Hispanic and/or Native American projects at MSU. However, approximately one-fifth of the Council members expressed uncertainty as to why they were on the Council and to what they might contribute. These members were almost entirely from natural resource fields. They questioned why they were discussing agricultural issues, when they had little practical knowledge in this area to share with the Council--let alone to help it set priorities.

The members claimed various degrees of familiarity with land grant research prior to joining the Council, with most (75%) responding that that they were somewhat or very familiar (See Table 4-4) with MAES activities.

Table 4-4: How familiar were you with land-grant research before joining the MAES/MSUE Advisory Council? N=20.

Not Very	Somewhat	Very
5	9	6
25%	45%	30%

Those that possessed the highest degree of familiarity had been involved with AES research prior to joining the Council, either as a graduate student--when their funding came from the AES-- or because their professional work had involved interaction with MAES researchers. Most Advisory Council members in the "somewhat" category learned of the AES through their various Extension experiences. This type of involvement was usually limited to a specific area of research that the member was interested in and had been introduced to MAES in Extension settings. Only a few members knew of the MAES's extension research mission before joining the Council. A more common response from members was that "the experiment station carried out more [research] than I thought". Those that stated no familiarity with land-grant research primarily came to the Council because of their Extension contacts.

Typical meetings

Members and campus administrators had slightly different recollections of a typical Council meeting. This is to be expected since all of the administrators interviewed participated in the Council as organizers during its entire lifespan,

while Council members experiences varied greatly in the amount of time they served, the number of meetings attended and from their substantially different role. Also, the Council had two distinctive types of meetings: the one-day on-campus meeting and the multiple day retreat held in one of MSUE's six administrative regions. Although organizers often mentioned their goal of holding three meetings a year--even if one was a conference call--it never happened due to the difficulty of scheduling so many people. While almost all of the members questioned indicated that they tried to make the Council meetings a priority and attended whenever they did not have a direct conflict, several Lansing-based representatives admitted that it was difficult to make the multi-day meetings out of Lansing.

All members received an agenda prior to the Council meeting. Initially, the campus staff largely formulated the agendas, although staff indicated that when developing the agendas they tried to develop topics from member suggestions at previous meetings. Where time and topic permitted, background reading would accompany the agenda. Some Council members thought that too much reading was sent, while others complained that they came to the meetings relatively unprepared and would have appreciated more advance information.

Administrators recalled that the on-campus meetings in East Lansing would begin at 9 or 10 a.m. during the annual Agriculture and Natural Resources Week. Originally, the directors of the Agricultural Experiment Station and Michigan State University would give Council members a general overview on

issues before their respective units. The administrators often discussed how recent federal and state budget decisions would affect MAES and MSUE. Next on the agenda would be reports from two or three MAES and/or MSUE faculty/researchers on topics that the Council organizers felt were timely. According to one administrator these topics were "emerging" issues that the institutions were just beginning to face. Once this information was presented, members were asked for their reaction. The last hour of each meeting was left open for unstructured discussion. On occasion, questions brought up at that time would be addressed at the next Council meeting.

However, it soon became apparent that this approach made the meetings quite boring for the members and did not provide many opportunities for Council input. This occurred despite the AES Director's explicit desire that the meetings would be more than "educating" Council members. The Director did not want to insult members' intelligence, as he knew that they had knowledge to contribute. Several administrators stated that they wanted Council members to take ownership of the Council and to be proactive in setting the tone of the meetings, but that it never happened.

Attempts were made to incorporate more member interaction into the meetings. For example, MAES & MSUE presenters were asked to speak for only ten minutes and then lead discussion for the rest of their time. This change was considered quite successful by organizers. However, when members were asked to help set the agenda for the next Council meeting, it became apparent that they

were not well enough informed on critical issues to create an agenda without the organizers' assistance. Therefore a process developed where the organizers and the Council co-chairs discussed the agenda before the meeting.

The off-campus meetings usually started at noon of one day and ended at noon two days later. As mentioned earlier, these meetings rotated around Michigan and were typically held in one of the state's numerous retreat centers. The region visited provided the topics for these longer Council meetings, as members toured nearby county extension programs and research facilities to learn of MAES/MSUE efforts in that part of the state. Organizers wanted members to appreciate the state's diversity and to better understand the different audiences and issues that the institutions address in the various regions. One administrator was quite pleased with the members' reactions to the tours, "A problem could be explained and then we could highlight it or show how it was being addressed by the institutions." Likewise, a capital-intensive farmer from Southwestern Michigan could understand why the economic returns for Upper Peninsula agriculture required a totally different research and extension approach.

At the latter half of the retreat, Council members assembled into smaller groups of five or six to discuss what they had seen on the tours and what should be MAES and MSUE's priorities for the next year. These groups were carefully intermixed with agriculture, natural resource and administrative representatives. The small groups then reported their results to the larger body. It was this process that gave MAES and MSUE administrators Council "feedback".

Finally, Council members were also encouraged to participate in other public forum and stakeholder input opportunities convened by MSUE and MAES. Members were invited to attend Agriculture and Natural Resources Week activities and some of the key events at the annual Agricultural Expo. Additionally, Council members were given the opportunity to participate in either the "Status And Potential of Michigan Agriculture" (SAPMA) or the "Status And Potential of Michigan's Natural Resources" (SAPMNR) processes. SAPMA & SPMNR were irregular (approximately every 5-7 years) prioritization processes independent of the Council, and were designed to bring commodity and natural resource organizations, industry, and researchers together to identify the most pressing needs in agriculture and natural resources and how Michigan's institutions could address them. SAPMA and SAPMNR materials and recommendations were shared with the Council.

The members' memories of Council meetings varied and, three years later, were not very specific. Interview responses on the meetings centered around four aspects: MAES/MSUE reporting of activities, the discussion process used to identify and sort priorities, the educational tours the Council undertook and the Council's social component.

More members had thoughts on the presentation/reporting dimension of the meetings than on any other topic. While several noted that the meeting reports were very informative and interesting--and necessary since members lacked specific knowledge on many topics--others were critical of their own passive role

in the report process. One member recalled the meetings as always being "them talking to us". Another described the listening to reports as "bureaucrats talking and then asking us for a rubber stamp". Two members were disappointed with the presentations. An agricultural representative observed that many presenters appeared to him that "they wanted to talk to heavy-hitters--not to the Council." Another person felt like the presentations were "too much 'shoot-from-the hip'," while still another observed that "the presentations were frustrating to Council members since it was obvious that the presenters already knew what direction they wanted to go in and members only knew what they had just been told."

Despite the fact that many members recalled the one-sidedness of the presentations, others remembered that a lot of discussion took place--especially when setting priorities for MSUE and MAES at the end of the meetings. Members reported on the breadth and volume of the issues discussed. Only one person suggested that these discussions were occasionally heated, while another indicated just the opposite--that the Council members had good rapport with each other.

Advisory Council members frequently and favorably mentioned the tours they participated in while on the Council. Several members described them as "real eye-openers" and listed specific items that caught their attention. Perhaps the tour with the greatest impact took place in Northeast Michigan, where members were introduced to research designed to eliminate the harm parasitic sea lampreys cause to Great Lakes fishing. Few--especially in agriculture--had any

idea that Michigan State University was involved in such work. Even some of those in natural resources were unaware of MSU's efforts in their field.

Another tour that stuck out in the minds of at least two Council members was the sustainable corn, hay and grazing operation near St. Johns. One of the state government members on the Council stated that she found the alternative method of manure management practice demonstrated was enlightening and useful for her job. Other farmers were also impressed by the degree to which the St. John farmer produced many of his own inputs.

Finally, one-fourth of the members--mostly farmers--commented on the enjoyable social aspects of the meetings. One farmer considered the multi-day events as his "agricultural vacation', since he was able to take a break from his farm work and explore agricultural and natural resource topics at someone else's expense. A few members brought their wives to the retreat centers. The organizers permitted this, as the members paid any additional costs. Members also fondly recalled the informal conversations they had with each other and MAES & MSUE administrators during breaks and immediately after adjournment. Picnics and barbecues also contributed to a social atmosphere. Because members were volunteering their time to advise MAES and MSUE, organizers wanted to ensure that members had a pleasant experience at the meetings.

Citizen Learning about the Agricultural Experiment Station Research Process

There were differences in what natural resource and agricultural members learned by serving on the advisory council. Absolutely no natural resource members stated that they learned anything about how research priorities were determined by MSU, while three agricultural members did. One farmer, who simultaneously served on a state commodity board, indicated that learning how MAES prioritized research proved quite a revelation to him and helped explain why his commodity group had not been very successful in launching research projects with MSU.

Only one natural resource member noted learning more about where funding for agricultural and natural resources research came from and how dependent it was on federal monies. Four agricultural members, however, said that they discovered how the availability of funding--particularly, specific project funding--shaped the research agenda. Two people--one from each of the representative groups--said that they appreciated learning more about who were the decision-makers that headed up research programs and allocated funds.

Natural resource members were more likely than agricultural members to say that they learned about the structure of MSUE and MAES while on the Council. Several indicated that they were not at all familiar with the research stations, or with the relationship between MAES and MSUE. A Native American tribal member involved in fisheries said that she now knows where the tribe can go

to at MSU to get assistance to market their fish products. Prior to her tenure on the Council, she wouldn't have assumed that MSU's College of Agriculture and Natural Resources would have been a source of information and expertise.

Both groups, however, gained exposure to the broader activities of the two institutions, since many were only aware of a few narrow arenas. A natural resource member remarked that she became informed about the new technologies farmers were using, while an agricultural member learned about the non-agricultural projects that MAES conducted. One member was so impressed with MAES and MSUE activities that she wished that the general public could be educated like she was. Likewise, both groups had members who expressed amazement at the diversity of agricultural and natural resource issues and problems in the state, and as a result, had a better appreciation for the challenges the institutions faced.

Two of the state government employees stated that their Council participation helped them at their jobs. One person, whose duties require him to spend time in agricultural counties, thought that his connection to the MSU-based Council helped reduce the suspicion those in agriculture often have of state employees in his position. Another government employee said that she gained a greater understanding of agriculture as a means of state-wide economic development, not just as a user of natural resources.

Determining Priorities For Agricultural and Natural Resources Research

Council members were asked what they considered to be the most important criteria for prioritizing agricultural and natural resources research. Their responses were extremely varied; no particular theme emerged. However, their answers reflect the diversity that comprise land-grants' stakeholders, including those holding views that would have been thought extreme in land-grants, only a generation ago.

For example, the large single criteria identified by members was that land grant research must consider the environment (n=5). Three people, including two from agriculture, stressed that research should take place within the paradigm of sustainability. These individuals both suggested that organic agriculture was an area that required more research. The next topic, which was close behind the environment and mentioned exclusively by agricultural representatives, was the need for research to focus on efficiency and lowering production costs (n=3). One gentleman wished that more research would consider the costs of adapting the "new results" to the producer--proposing that some new technologies are not affordable for the average farmer to adopt. Another producer combined these top two areas by stating that "land grants should focus on the environmental and economic aspects facing the producer."

Also tied for second place among Council members (n=3) was the view that research should be prioritized by its greatest potential impact among people, or as

one person referred to it as "the biggest bang for your buck". This was further clarified by one person to mean "urgent needs that affect the most residents--especially concerning safety and health [related to agriculture and natural resources]". Another member reduced and simplified the prioritization criteria as either "people or dollars". He thought research projects should be funded by either the number of people likely to be affected OR by the potential economic impact of the research and he did not state which criteria he preferred. Indeed, several people replied to the prioritization question by first stating that from their Council experience they believe it is the funding source that determines which projects will be researched, thus implying that advisory councils really have little say.

Another common thread found among a minority of the members' responses, especially among natural resource representatives, was their strong desire to see agricultural and natural resources research projects that went beyond production issues. One woman thought that research topics should be selected that "cover more than one group's interests--like water quality and land use." Another man wanted to see research that would help production, agricultural business and economic development.

There were other individual priority-perspectives that deserve further exposition. Three of these perspectives can be portrayed in terms of the land grant institution having an obligation to help "the small guy". One of the fisheries representatives left the Council pleased that someone was willing to help the small producer--which in her case meant the small commercial fisherman. An

agricultural representative thought that research priorities at land grants should target the agricultural producers and industries that were most in distress. Another natural resources member thought that all land grant research should factor in "justice issues", referring to research that is equitable and does not benefit one group at the expense of another.

Applied research was favored over basic research by the few that commented on this age-old land-grant dilemma. One farmer said that research should always be based on "what is crucial now." Similarly, an agricultural representative advocated for research that is basic, practical and relevant to agriculture--as opposed to highly theoretical".

Three separate producers each listed a specific plant or animal disease that needed additional investigation. Other individual projects which were volunteered as important areas for research included Great Lakes fishing, the eradication of exotic fish species in the Great Lakes, manure management, forestry production and deer management.

Several members observed how difficult it was to prioritize BOTH agricultural and natural issues as one body. One natural resource representative's observation was especially profound. She noted the fundamental difference in agriculture and natural resource priorities by stating that "...social issues drive the natural resources agenda and the marketplace issues drive agriculture. That's why it is so difficult to bring these areas together."

Council's Contributions to shaping research priorities

There was general agreement between administrators and Council members that the Council was not effective in shaping agricultural and natural resource research priorities. Although Council organizers admitted that the Council failed to produce the results they wanted, they all affirmed that they valued the citizen's viewpoint that the Council provided. While Council meetings may not have resulted in many specific results, members' thoughts and recommendations were factored into decisions made by the MAES. One organizer described the Council's contribution as "sensitizing" MAES to several issues, such as reexamining their funding of natural resource and social science research, the need for additional dry bean research, the problems of deer damage in Michigan crops and the devastating effects of sea lamprey in the Great Lakes. He stated that the AES discretionary funds were used to launch research into these areas. Similarly, another AES administrator argued that indeed "the Council did make a difference, although we could never convince Council members of that nor could it be documented". He also commented that "The Council lacked a crucial tool to be effective: the authority to prioritize how dollars were spent". According to another organizer, "in the real world, dollars equal priorities."

One administrator believed that it was MAES researchers who benefited most from meeting with the Council, since making presentations to lay leaders underscored that researchers work for the citizens of Michigan--a perspective that some MAES researchers may not have fully appreciated. For the most part,

administrators felt that the Council affirmed the direction that the Experiment Station was headed in Michigan. This view is likely valid because no members voiced strong objections to the programs and objectives presented while they served on the Council.

Organizers noticed that despite the well-roundedness of the individual Council members, as a body the Council remained narrowly focused on what should be researched. As a result, the Council's ability to wrestle with broader research issues like groundwater contamination or the deterioration of Michigan's shoreline was limited. Organizers observed, and several members confirmed, that Council members were reluctant to advocate for new, multi-faceted research proposals for fear that funds would be diverted from the existing projects that Council members and their representative industries currently used and liked. Organizers must bear part of the blame for this situation, as members recalled going to many meetings in the early 1990s where the first reports were on federal and state budget cuts for MSUE and MAES. According to some members, these austerity messages chilled discussion for the remainder of the meeting.

Council members almost unanimously expressed doubt--or worse--on their contributions to prioritizing research. In fact, the only individuals who believed the Council was effective were those who admitted to attending only one or two meetings. Four others thought the Council had a small or minimal impact on MAES priorities in a few specific areas. Yet, when specifically asked if their <u>own</u> participation affected MAES research, several individuals identified the following

contributions they believed they made:

- "I stressed that MSUE and MAES should focus more on agriculture before they spend money on other issues."

- "I helped a local wheat milling firm experiencing problems link up with MSU researchers."

- "I stressed environmental subjects and I thought the university was receptive in understanding their role in protecting the environment by researching manure run-off and the effects of pesticides on wildlife."

- "I presented an industry concern that MAES should continue funding bacterial spot research for the tomato industry"

- "I verified the concerns of other producers that work was needed in hog odor control and manure run-off"

- "I helped shape natural resource issues. I had more knowledge of land protection tools than others did and I shared them with the Council.

- "MAES seemed interested in the area I represented because they had follow-up calls with me as a result of things I said in the Council meeting."

- ..."I tried to convey the message that Michigan need land management tools to deal with growth and urban sprawl."

- "I was given the opportunity to put farm labor issues on the agenda"

- "I helped the Soil Diagnostic Center develop a faster turn-around."

- "I helped MSUE and MAES realize that they were drifting from the core agriculture clientele and encouraged the Council to get the Department of Natural Resources" perspective on issues."

- "I helped sensitize the Council to the environmental exemptions that agriculture [statutorily] has."

- "I helped my industry get more visibility at MSU and won our first SAPMA (Status and Potential of Michigan Agriculture) grant."

Despite these specific and individual recollections, members generally did not think that as a whole, the Council shaped research priorities. Perhaps one of the harshest criticisms came from an active natural resource member who claimed that he couldn't really remember being involved in any decision-making while on the Council. An agricultural member agreed, saying that the Council's advice was never "really" solicited. For members who shared this view, the Council was little more than a "talking shop" where issues were only raised and discussed. Similarly, a farmer member compared the Council's role to sitting in a church pew, "We were spoon-fed and sent home". Others were kinder in their comments, believing that Council organizers were interested in what Council members had to say as administrators politely listened when members spoke. However, these members, too, had difficulty in recalling tangible results from the meetings.

The rationales behind the doubts were divided between two separate notions. One reason mentioned by seven members for the uncertainty of the Council's impact, centered around the lack of feedback members received from Council organizers. These members complained that Council organizers never informed them of what happened to the research after the Council discussed it. "We never received reports if MSU had begun work on the topics we brought up," said one. A farmer remembered attending an interesting meeting where genetic manipulation was the featured topic, but was disappointed that it was never mentioned again. One natural resources member did recall a situation where a Council suggestion was implemented by MSU, but he learned of this fact from a

source other than the Council or its organizers. Another member quietly wondered if the lack of feedback was because the Council did not tell administrators what their units wanted to hear.

Natural resource members --by a 3-1 ratio--also faulted the Council's structure and organization as another explanation of the Council's failure to guide priority-setting. These people observed that the Council never truly understood its role. One person ascertained that the Council always seemed to be engaged in preparatory work and was never given decisions to make, while another claimed that she never left the "learning mode" while on the Council and thus felt that she never contributed. A Council member who has served on numerous state task forces diagnosed the Council as incapable of providing its own direction. "We required marching orders, since we didn't know enough to lead ourselves". A common comment heard from both administrators and members was that the Council members were reluctant to proffer advice on industries and subjects that were outside their own fields and about which they knew very little.

Several thought that the Council was designed to fail, either because citizen-laymen could not offer better advice than university administrators and researchers or because administrators preferred to listen to agricultural industry groups. One member wryly compared attending the Council to serving on the local school board, "The superintendent is running the show every day and then once a month as a school board member, you're expected to come in off of the street and tell the superintendent how to do his job".

Other members were even more cynical. At least three mentioned their view that all the tough decisions had already been made internally by the time the subjects were reported to the Council. One state government employee even wondered if the Council met simply because some "higher-up" wanted to report that he had citizen input or to satisfy a legal statute.

Council Members Reporting on Council Activities

While Council members were chosen as representatives of various agricultural and natural resource areas, none were officially recognized by any outside group or organization as their representative to the Council--with the exception of the state government members, who were assigned to the Council. This was, of course, how the Council was designed. One result of the Council's membership selection process was that Council members had no official duty to share the results of the Council with any other constituency, nor were they ever asked to do so by the organizers.

Almost all of the Council members, however, discussed their participation on the Council with others outside of campus. With only a few exceptions, these discussions took place exclusively at a local level. For example, many of the members were employed by a local nonprofit agency or by a tribal council. Indeed, most indicated that they reported to their organization's board of directors when they went to a Council meeting. In fact, some needed official approval from the Board to participate on the Council. However, only one of these members

recalled giving detailed reports from the Council to their local boards or to any other audience--a regional environmental group of which this member served on their Board of Directors. Likewise, those members who worked with private businesses stated that they would informally share insights from the Council meetings with their employers or colleagues, but none indicated that they went beyond that. The farmer-members were more diverse in whom they spoke with about the Council. Several indicated that they would speak with their local extension staff about the meetings and a few remembered that county extension staff regularly approached them for information. Two farmers reported on the Council at local Farm Bureau meetings, while another did so at the area Horticulture Society meetings. These members emphasized the informal nature of this sharing.

There were five members who described their reporting of Council activities to outside groups in terms that were substantially different than detailed above. Both of the two state agency representatives explained that when they thought it was appropriate, they took certain issues from the Council to their agency management teams. Often this resulted in the agency providing technical or regulatory information back to the Council. One of the nonprofit members also served on her state association's board and she shared information with them and began to report MSU efforts in the association's local and state publications. Two members affiliated with state commodity boards--one as a member-director and the other as an executive--credited their sharing of Council information with their

respective boards as the turning point in how their groups viewed research. In both cases, the commodity groups realized that participation in Michigan State University research activities was an important board function, since public research could have a significant impact on their industries.

It should also be noted that neither minutes nor summaries of the Council's meetings were distributed outside of MAES and MSUE. In fact, Council minutes were not officially kept until 1993. In addition, no higher university officials such as a college dean, vice provost or vice president for research were officially presented reports of Council activities.

Demise of the Council

By 1995--seven years after the joint Council had been formed--MAES and MSUE administrators were having serious concerns regarding the Council's operations and effectiveness. A few members were heard complaining that the meetings were a waste of time, absences appeared to be getting worse among some members, and there was grumbling among members when key administrators failed to attend parts of the Council meetings. In addition, most participants questioned what the Council's tangible achievements were.

Two key events seemed to shape the Council's final destiny. Almost all of the organizers recalled a farmer-member who, upon leaving the meeting was heard to utter, "I'm never coming to another Council meeting because it's a waste of my time." Interestingly, no members mentioned this declaration and the member did

keep attending meetings and was generally positive regarding his Council experience. The other event concerned the lack of administrative attendance at the last Council three-day retreat. Normally all of the top MAES and MSUE administrators participated in the retreat, which was usually led by junior administrators. At the last retreat, scheduling conflicts and some last minute demands prevented all but one senior administrator from MAES and MSUE from sitting in on the final session, when Council members typically presented the results from their break-out groups. The organizers' absences appeared to neutralize their constant reassurance to Council members that MAES and MSUE valued the Council's advice. Together, these two events precipitated a call for a reevaluation of the Council.

A small meeting with six administrators and three Council members, who were current or past co-chairs and who represented production agriculture, agricultural business and natural resources, was held in February of 1995 to discuss the Council and to focus on its role and size. At that time the nine individuals concluded the following[5]:

a) The Council was too broad and needed more focus for valid input.

b) The Council is an advisory board, not a policy board.

c) The Council needed to look at resource allocation issues

[5] Internal MAES/MSUE meeting summary document. February 2, 1995

d) There should be more direction or focus on issues of administration.

e) A relationship should exist between the Council and commodity groups.

f) The Council should address emerging issues such as the Farm Bill, [the MSU Extension] Areas of Expertise Concept, and federal changes, etc.

g) The Council should provide input on research projects

h) MSU staff should pick one or two issues for focus [at each meeting] rather than provide council members with an opportunity to select them.

i) At retreats the Council should spend more time touring a site which is specific to one or two issues under discussion.

j) The Council should consider "sub-groups" that address different issues, e.g. agriculture versus natural resources, rural versus urban, etc.

k) Council members should spend more time advising than being informed.

l) Members should be provided background information in the mail prior to coming to the retreat, in order to prepare to discuss a topic.

m) The Council should continue on a trial basis.

These conclusions argued that fundamental change was needed. They acknowledged that the Council's breadth and lack of focus prevented the Council from issuing useful recommendations. Indeed, these conclusions insinuated that the Council's membership representation was ineffective and lacked context. For example, greater commodity group contacts were called for as were establishing

separate sub-groups committees. Interestingly, the proposed model of "agricultural versus natural resources" and "rural versus urban" subgroups imply that the Council's most valuable role might be to "referee" these key programming tensions. In this light, it is more understandable why the conclusions proposed that the Council deal with resource allocation issues and help prioritize which commodity and natural resource areas should be funded. Yet, it is also clear that the Council was supposed to see itself as policy formulation advisors to MAES and MSUE, rather than implementation only. It is therefore confusing that the concluding remarks by the Council advocate that it spend more energy on addressing administrative issues within the two institutions--an informal policy issue.

The meeting participants called for greater MAES and MSUE staff involvement in selecting the topics for Council meetings--a clear reversal of an earlier Council's complaint that staff dictated the agenda too much. However, it was now suggested that meetings should be organized so that Council members could counsel as well as simply listen. It was proposed that staff should prepare two or three specific topics that they wanted Council members to advise on. These subjects would ideally be emerging federal and state issues along with new program ideas identified by staff. The staff would then prepare and send background materials to members prior to the Council meetings. This process would permit members to be adequately briefed so that they could advise, without having to spend their Council meetings "getting up to speed". Likewise, any

retreat tours planned should be related to the issue at hand. One Council member who attended this meeting also hoped that such advance notice would allow members to explore the issue with their own industry and personal contacts, thus providing MAES/MSUE with better information on how the "outside (non-MSU) community" viewed it.

Despite these recommendations, it appears that few--if any--were actually implemented after the Council met for their annual March meeting. In June, MAES and MSUE administrators were still seeking for ideas on how to improve the Council and met with a Michigan State University rural sociologist and his graduate student--both of whom possessed knowledge on citizen input mechanisms. The two academics reviewed the Advisory Council's operations and with the administrators' input, offered insight on the following issues[6]:

- Council Goals: Organizers must first determine if they want the Council to be primarily advisory, advocacy, or to serve as a resource base. If the Council is advisory, then organizers must be willing to accept their advice and provide evidence as to how it was used. If the Council is to be an advocate for MAES and MSUE, then their purpose would be to influence key decision-makers. Finally, as a resource base, they would provide input, but not have any prioritization responsibilities.

[6] MSUE confidential memo. June 14, 1995.

- Membership: The group linked that Council's goal with the type of member which should be recruited. For example, an advocacy role would suggest key leaders and influentials--or people who serve these leaders in a support capacity. If the Council is a resource base, then a representation of the average MAES/MSUE clientele is acceptable. However, they concluded that adding well-known individuals would help ensure the Council's legitimacy and credibility.
- Discussion Issues: It was concluded that discussion topics should be set by MAES/MSUE and not by Council members to ensure that the subject is clearly defined and that meetings make the best use of time. It was determined that the organizers pose the question in the form of "This is what we want to do. What do you think?" Background materials would be sent to members stating what the two institutions were currently doing and then list several alternatives on what might be done in the future for the members to discuss. They also advised that the Council break into subgroups when members' specific subject knowledge makes that appropriate.
- Member participation: It was thought that a well-functioning council would result in strong member participation. They further suggested that "ownership" might be enhanced if the Council members met in

subgroups with the appropriate faculty members who work in their representative fields.

- Council Meetings: The group agreed that the Council's current format of one one-day meeting and one three-day retreat should be replaced with 2-3 one-day meetings each year. All assumed that this would increase attendance for both members and administrators. Occasionally, subgroups would be called on to discuss specific topics. The group allowed for the possibility of using conference calls for these meetings. They also recommended that Council meeting topics be planned out several meetings ahead of time.
- Council Name: There was also discussion among the administrators and sociologists as to what message the name conveyed. For example, it wouldn't be appropriate to call the Council an Advisory Council, if members only served as a resource or served as advocates.

At the conclusion of this meeting, the group decided to continue the Council for another two-year trial period using the principles outlined above.

Rather than proceed with this plan, a decision was made by the Michigan Agricultural Experiment Station several months later to discontinue their participation in the Council. The MAES became convinced that the Council was not functioning in the manner that they hoped it would. Additionally, it became more apparent that Extension and MAES had different philosophies as to how the Council could be effective. In fact, while efforts to improve the Advisory Council

were being explored, a new concept was simultaneously being developed within the university to link researchers, extension specialists and stakeholder representatives into what became "Area of Expertise" (AoE) Teams. Rather than one broad-based committee to determine research and extension priorities in Michigan, the AoE teams would assemble several self-directed work teams to focus on specific areas (dairy, horticulture, cash crops, etc.) which would ensure a more coordinated approach by MSU in addressing citizen and industry needs.

The decision to end the Advisory Council was made easier by the formation of the AoE teams. Although the AoE teams emerged separately from the Council's operations, administrators decided that they were to be their new vehicle of stakeholder involvement. At the last Council meeting, administrators planned to explain the new AoE concept to members and extend the possibility that some members--especially those relatively new to the Council-- might be able to transition their advisory role to an AoE team[7].

The Advisory Council's last meeting was December 7, 1995. Surprisingly, only the Council's co-chairs were given prior knowledge of the Council's demise. Council organizers thought that if members had advanced notice of the agenda, they wouldn't attend this last meeting. The administrators also felt strongly that they should explain the rationale behind the Council's demise in person, rather than through written correspondence or by contacting the members by phone.

[7] Internal MSUE email memo. November 19, 1995.

At the last Council meeting, the Council went through the regular AES and MSUE reports. Like many of the other meetings, MAES and MSUE administrators provided dispiriting news on the flat and declining budgets of their institutions. Next, the members were presented with an overview of the AoE Teams and how the teams fit into MSUE's restructuring goal of becoming more responsive to clientele. Members were then told that Extension and MAES would no longer need the Advisory Council due to the AoE Team's ability to get diverse stakeholder input. They were thanked for their time and service toward the university. Minutes of this last meeting indicated that MSUE and MAES administrators promised the Council that they would explore how to incorporate the former Council members into the AoE concept.

The Council members' reactions at this last meeting were mixed. One woman recalled that she was "surprised and disturbed and thought that it had been handled in a poor manner." She wondered who had been involved in making the decision. A farmer-member also expressed surprise. "They [the organizers] always said we were doing a great job". Yet another agricultural producer had the opposite reaction, saying, "I wasn't disappointed that it ended." Another representative remembers "The Council was headed in the wrong direction and members were getting frustrated with it."

Surprisingly, almost one-half of the Council members interviewed insisted that three years later they did not "really" know why the Council disbanded. The most typical explanation from both agricultural and natural resource

representatives was that the Council was ineffective. Members explained the Council's ineffectiveness using the following descriptions:

- "It was too much of a hodge-podge of interests to work well"
- "The Council probably wasn't providing good advice for the money spent."
- " I question if we were ever effective or [if] we were just too cumbersome to work with".
- "The Council failed because it tried to do too much by trying to represent commodity groups AND wrestle with broad interests."
- "I think the advisory group was disbanded because it became burdensome and cumbersome for the university and it took time away from [MAES/MSUE] administration, as it was going into a major reorganization at the time".
- "I believe that MAES and MSUE found no value in it [the Council]."
- "We were told that other industry councils could provide better advice...these groups wondered why we even operated."
- "We spent too much time educating members and we weren't providing useful advice. The producers felt that the meetings were a waste of time. The Council wasn't working and a cordial decision was made to disband."

The next most common (N=5) member hypothesis for the Council's demise was their thought that the Council consumed too many administrative resources: such as staff preparation time and travel. Two members--both in agriculture--thought that some administrators may not have liked the Council's advice and wanted to do away with it for that reason. Closely related to the demands of staff resources, was the belief held by some (n=4) that funding for the Council had dried up in budget cuts or that the value of the advice the Council generated was

not worth the expense.

Organizers' Perspectives

Three years after its demise, administrators were quite candid in describing the Council's problems. One organizer said it became apparent to him that the Council's diversity made it difficult to meet everyone's needs. His perception was that members wanted to respond to specific, rather than general issues. Two different officials were disappointed in the Council's members' breadth. One recalled being surprised that Council members had rather narrow perspectives. Another determined that the Council could not provide much help in suggesting longer-term (more than 5 years) needs, although it was certainly helpful identifying some short-term issues.

One administrator thought that the early merging of the existing agricultural board with a new batch of natural resource members, may have been a strategic mistake as it created 'second-class citizens' in terms of experience. This person now believes that it would have been better to start with a totally new group, rather than mixing the old with the new. Indeed, a different administrator recalled how much more background preparation was needed for members once natural resource representatives joined, as the group then lacked a common knowledge base. In looking back, it seems clearer to this person that the administrators probably did not give the Council the attention it deserved to help it function. Indeed Council organizing was juggled in with other administrative duties, which

may have unintentionally marginalized the Council.

Although one administrator felt that despite MAES and MSUE's wishes, Council members never took "ownership of the Council, another organizer remembered that there were a few Council members who wanted to get "too involved" and saw their role as a board director, helping to define policy. Conversely, an MAES official wonders if it was even possible for an advisory committee member to ever understand the complexities of the agricultural research system, with its fluctuating federal and state funding, commodity group recommendations and internal [within the five colleges at MSU] teaching, research and extension commitments.

Beus-Dunlap Survey

To determine any philosophical differences objectively on the nature of agricultural research between agricultural and natural resource Council members, the Beus-Dunlap Instrument on Conventional vs. Sustainable agriculture (Beus & Dunlap, 1991) was administered. Of the 20 Council members who agreed to be interviewed, only 14 returned the Beus-Dunlap instrument after repeated attempts were made to collect the instruments. Eight questionnaires were returned by Council members who represented agricultural interests and six questionnaires from natural resource members were collected. Due to the small size of the population (n=14 replies received) only a simple statistical analysis was undertaken in that the replies of the two groups were segregated and their means

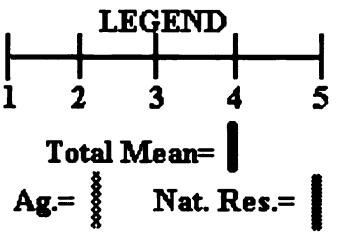
reported for comparative purposes.

The results of the Beus-Dunlap questionnaire are displayed below. For reporting purposes, the conventional agriculture responses are listed on the right, while the sustainable choices are on the left. In the original instrument, they were mixed.

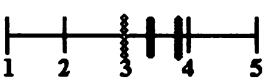
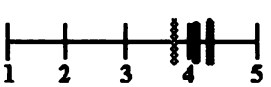
Beus & Dunlap (1991) Scale* (n=14; Ag=8; Nat. Res.=6)

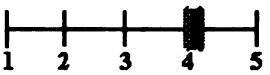
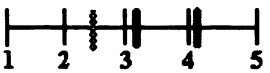
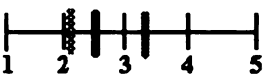
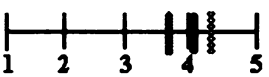
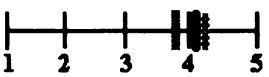
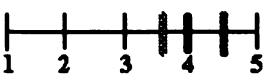
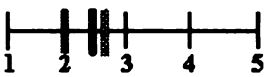
Scale Definitions

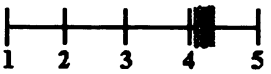
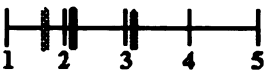
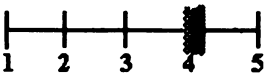
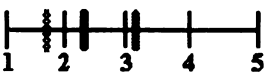
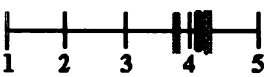
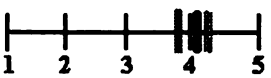
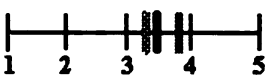
1=Strongly Agree with view in left-hand column
2=Mildly agree with view in left-hand column
3=Undecided
4=Mildly agree with view in right-hand column
5=Strongly agree with view in right-hand column

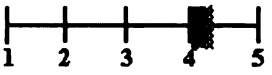
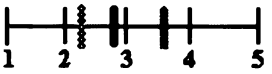
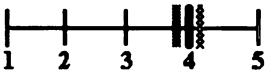
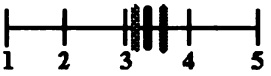
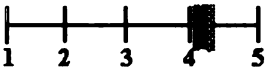
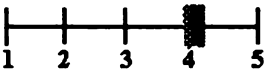
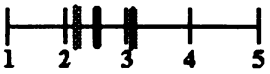


*For reporting purposes, the responses have been segregated into conventional and alternative agriculture columns. In the original instrument, the responses were mixed.

CONVENTIONAL VIEW OF AGRICULTURE	COMPARISON OF MEANS	ALTERNATIVE VIEW OF AGRICULTURE
A. Meeting U.S. food needs with fewer and fewer farmers is a positive outcome of technological progress	Total Mean=3.3571 Agriculture Mean=3.0000 Nat. Resource Mean=3.8333 	A. Meeting U.S. food needs with fewer and fewer farmers is a negative outcome of our free market system
B. Farmland should be farmed so as to maximize annual profits, even if this threatens the long-term productive capacity of the land.	Total Mean=4.0714 Agriculture Mean=3.8750 Nat. Resource Mean=4.3333 	B. Farmland should be farmed so as to protect the long-term capacity of the land, even if this means lower production and profits.

CONVENTIONAL VIEW OF AGRICULTURE	COMPARISON OF MEANS	ALTERNATIVE VIEW OF AGRICULTURE
C. Large inputs of energy into agriculture should be continued as along as it is profitable to do so.	Total Mean=4.0714 Agriculture Mean=4.0000 Nat. Resource Mean=4.1667 	C. High energy use makes U.S. vulnerable and should be greatly reduced.
D. The primary goal of farmers should be to maximize the productivity, efficiency and profitability of their farms	Total Mean=3.2143 Agriculture Mean=2.5000 Nat. Resource Mean=4.1667 	D. The primary goal of farmers should be to improve the quality of their products and to enhance the long-term condition of their farm.
E. The amount of farmland owned by an individual or corporation should NOT be limited, even if the ownership of the land becomes much more concentrated than at present.	Total Mean=2.6429 Agriculture Mean=2.1250 Nat. Resource Mean=3.3333 	E. The amount of farmland owned by an individual or corporation should be limited in order to encourage land ownership by as many people as possible
F. Agriculture scientists and policy-makers should expand efforts to develop biotechnologies and other innovations in order to increase food supplies.	Total Mean=4.0714 Agriculture Mean=4.3750 Nat. Resource Mean=3.6667 	F. Agricultural scientists and policy-makers should recognize that there are limits to what nature can provide and adjust their expectations accordingly.
G. Good farming depends mainly on applying the findings of modern agricultural science	Total Mean=4.0714 Agriculture Mean=4.2500 Nat. Resource Mean=3.8333 	G. Good farming depends mainly on personal experience and knowledge of the land.
H. The future success of American agriculture will NOT be affected if rural communities continue to decline.	Total Mean=4.0000 Agriculture Mean=3.6250 Nat. Resource Mean=4.5000 	H. Healthy rural communities are absolutely essential for American agriculture's future success.
I. Large to very large farms can best serve America's agricultural needs.	Total Mean=2.4286 Agriculture Mean=2.7500 Nat. Resource Mean=2.0000 	I. Small to medium-sized farms can best serve America's agricultural needs.

CONVENTIONAL VIEW OF AGRICULTURE	COMPARISON OF MEANS	ALTERNATIVE VIEW OF AGRICULTURE
J. Farm traditions and culture are outdated and of little use in modern agriculture.	Total Mean=4.2143 Agriculture Mean=4.1250 Nat. Resource Mean=4.3333 	J. Farm traditions and culture help maintain respect for the land & are essential for good farming.
K. Farming is first and foremost a business like any other	Total Mean=2.1429 Agriculture Mean=1.7500 Nat. Resource Mean=3.1667 	K. Farming is first of all a way of life and second a business
L. Farmers should use primarily synthetic fertilizers and pesticides in order to maintain adequate levels of production.	Total Mean=4.0714 Agriculture Mean=4.0000 Nat. Resource Mean=4.1667 	L. Farmers should use primarily natural fertilizers and production methods such as manure, crop rotations, compost and biological pest control.
M. Most people should live in cities and leave farming to those who know it best.	Total Mean=2.3571 Agriculture Mean=1.7500 Nat. Resource Mean=3.1667 	M. Many more people should live on farms and in rural areas than do so at present.
N. Modern agriculture is a minor cause of ecological problems and needs to be only fine-tuned periodically in order to be ecologically sound.	Total Mean=4.1429 Agriculture Mean=4.3750 Nat. Resource Mean=3.8333 	N. Modern agriculture is a major cause of ecological problems and must be greatly modified to become ecologically sound.
O. Farmers should farm as much land as they profitable can.	Total Mean=4.0714 Agriculture Mean=4.2500 Nat. Resource Mean=3.8333 	O. Farmers should farm only as they can personally care for.
P. Farms should be specialized in one or at most a few crops.	Total Mean=3.5714 Agriculture Mean=3.3750 Nat. Resource Mean=3.8333 	P. Farms should be diversified and include a large variety of crops.

CONVENTIONAL VIEW OF AGRICULTURE	COMPARISON OF MEANS	ALTERNATIVE VIEW OF AGRICULTURE
Q. Soil and water are the basic factors of production and should be used so as to maximize production.	Total Mean=4.2143 Agriculture Mean=4.2500 Nat. Resource Mean=4.1667 	Q. Soil and water are the sources of all life and should therefore be strictly conserved.
R. Farmers should purchase most of their goods and services just as other consumers do.	Total Mean=2.8571 Agriculture Mean=2.2500 Nat. Resource Mean=3.6667 	R. Farmers should produce as many of their own goods and services as possible.
S. The key to agriculture's future success lies in the continued development of advanced technologies that will overcome nature's limits.	Total Mean=4.0000 Agriculture Mean=4.1250 Nat. Resource Mean=3.8333 	S. The key to agriculture's future success lies in learning to imitate natural ecosystems and farm in harmony with nature.
T. Most farms should specialize in either crops or livestock.	Total Mean=3.3571 Agriculture Mean=3.1250 Nat. Resource Mean=3.6667 	T. Most farm should include both crops and livestock.
U. Production, processing, and marketing of agricultural products is best done at local and regional levels.	Total Mean=4.2857 Agriculture Mean=4.3750 Nat. Resource Mean=4.1667 	U. Production, processing, and marketing of agricultural products is best done at national and international levels.
W. Farm labor should be replaced whenever possible by more efficient machines and other technologies.	Total Mean=4.0714 Agriculture Mean=4.0000 Nat. Resource Mean=4.1667 	W. Technology should be used to make farm labor more rewarding and enjoyable, but not to replace it.
X. The abundance and relatively low prices of food in the United States are evidence that American agriculture is the most successful in the world.	Total Mean=2.5714 Agriculture Mean=2.1250 Nat. Resource Mean=3.1667 	X. High energy use, soil erosion, water pollution, etc. are evidence that U.S. agriculture is not nearly as successful as many believe it to be.

To provide an overall basis for analyzing the Beus-Dunlap responses, an instrument average for all of the statements was computed on an Excel spreadsheet. The instrument statement average for Council members was 3.51. This means that as a whole, the Council possessed a slight agreement for an alternative view of agriculture. For agricultural members, their summary responses were 3.32 (an undecided view).The summary of the natural resource responses for all statements was 3.76 (a mild agreement with an alternative agriculture view).

In comparing the means of natural resources and agricultural Advisory Council members' means for each set of statements, there are differences of more than 0.5 (rounded to the tenth) between the two groups on responses A, D, E, F, H, I, K, M, R, T and X or 45.8% of the statements. In all cases, the statements where agricultural and natural resource members tended to agree showed each group favoring either a slight (over 3.5 total mean) or a mildly alternative view (4.0) of agriculture.

Differences of more than 1.0 (rounded to the tenth) between the means of each separate group exists for responses D, E, K, M, R and X or 25.0% of the topics. The differences on statements D and X, however, highlight the perceived tensions of agricultural profitability/efficiency and environmental sustainability, with natural resource members being more likely to agree with an alternative view.

In general, natural resource members favored a more alternative view of agriculture than did agricultural members. The two exceptions were on #F and #I.

Here, it appears that natural resource members were more likely to embrace a conventional view of agriculture for the sake of increased food production.

While many of the Beus-Dunlap statements have agricultural research components embedded within them, this study identified four that specifically mentioned agricultural science or technology (F, G, S and W). The two groups agreed (less than 0.5 difference in average means) on each of these statements, but one--#F. Interestingly, it was agricultural members who were slightly more suspicious of biotechnology than are natural resource members.

Future of Advisory Councils

The purpose of an Advisory Council

Assuming that Advisory Councils can be useful, interviewees were asked what they thought should be the purpose of an advisory council. Their responses were quite broad and, again, are indicative of the multiple perspectives the Council represented.

Members most frequently mentioned (n=6) that bringing an outside and/or industry viewpoint to the university is the primary function of a university advisory council. As an agricultural member stated, "the Council should be a place where industry needs and priorities are expressed". He saw that attending Council functions would "help industry understand the restraints of time, budget and management" that the university dealt with." Two members, however, took a more narrow view of industry. They thought an important council priority should

be to represent the smaller land-grant clientele. For one individual this meant that decisions should reflect the views of the small producer--*i.e.,* who has few resources to solve problems. For another member, it meant the small, specialty producer groups needed more attention. Unlike the larger, well-funded associations, "have trouble getting their message heard" on research issues that may threaten their very existence in the state.

One member stated that an advisory council "should provide the clientele perspective that faculty members may not understand." Similarly, a government-employed Council member thought its proper role was to bring the "real-world" to the university. One member slightly altered this concept by providing a more passive purpose, stating that a council "should act as a sounding board by providing public reaction to ideas generated on campus." Another saw the Council's role as more active, recommending that the council "serve as another source of ideas" for administrators and researchers. In addition, two members believed that a council should help the university define its role in society. Finally, two other members asked if Extension was the proper vehicle for ascertaining the type of research the university needed to carry out to meet citizens' needs. If so, and Extension can properly identify citizen needs, is a citizen advisory council truly necessary?

The next two most reported advisory council purposes (n=5) centered on the basic mission of advising and also on "areas for a council to avoid". Members, especially from natural resource fields, did not want to see an advisory

council organized around broad themes. One member forthrightly claimed, "the larger the board, the greater the diversity, the more cumbersome it becomes." Several mentioned the need for the Council to be structured to give specific advice. For some, this meant that subcommittees would be formed that would focus on their own area (i.e. livestock, fisheries, *etc.)*, with their suggestions reported to a larger, broader council. One member wanted to see the advisory council run more as a series of ad-hoc task forces. He proposed that the Council's membership vary according to the nature of the problem being discussed. Members would be selected to reflect the dimensions of that problem and then dismissed once their advice has been given.

Seeking consensus among participants and priority-setting were each identified by one-fourth of the members (n=4) as important council roles. The rationale behind those who identified consensus as a role was that members would represent different perspectives and through discussion as council, recommend the priorities that would govern MSUE and MAES programs. One member was more strategic and thought that a council's consensus recommendations should carry weight with the legislature--giving the Council an advocacy role. A more moderate member, however, viewed the Council's role more as a *balance* between advice and advocacy. There was also a small interest in an advisory council that would set policy for these two institutions--a mission that administrators strongly discouraged.

Three members proposed reviewing MAES and MSUE programs as a

primary council goal. As one member said, "we would help them avoid bad mistakes." He wanted the Council to provide an industry/citizen perspective after staff had developed a program or a critical change of course and before such a plan was implemented. Similarly, another member thought that the Council could help administrators evaluate existing programs for effectiveness. In fact, one natural resource member strongly preferred reviewing and evaluating to any other function, saying, "there is value in gathering a group of 'wise' people to review programs without getting into the priority-setting aspect". This reflected his belief that most citizens "off of the street" lacked detailed understanding of the institutions to provide priority-setting, but they would have enough knowledge to evaluate programs.

Interestingly, the natural resource members were much more descriptive in their responses to this question. In all of the categories listed above, except for consensus-building, natural resource members were more likely to mention and elaborate on sector-specific purposes for convening an advisory council. Agricultural members, on the other hand, were more accepting of a Council where many perspectives were first heard and then sorted out.

Organizers' Perspective

Administrators, being fewer in number with daily working relationships, had a more unified perspective on the role of advisory councils. There was a general agreement that public input was needed and is valuable and that members

of the general public can provide insight that is unlikely to be found on campus. As one research administrator stated, "An advisory council should be structured to allow for its members to reflect on how research will affect the world they live in."

Assembling a public group invites difficult decisions. For example, whom do you invite and what should be their roles? Initially, the Council was envisioned as a mechanism to sort out the level of "problem-solving" --*i.e.*, whether applied research versus basic research was needed--and what should be the distribution of resources between production agriculture and natural resources within the Experiment Station's budget. But in a diverse state like Michigan, assembling a single group to engage these issues is a difficult task. One administrator observed that just to achieve minimal representation would require that over 40-50 people be invited. A previous AES director, who served in the 1980's and prior to the establishment of the MAES/MSUE Advisory Council, decided to not to assemble an advisory group since he questioned if all the facets could come together and produce useful advice.

Among the MAES administrators, there was a consensus that questioned whether or not citizens could ever gain a clear understanding of the complexities of university research. One top MAES official concluded that even if the MAES had operated an advisory council independent of extension, council members would have drifted back to outreach and extension topics, because it is what they would be more comfortable discussing. Administrators also described the multiple publics that an agricultural experiment station serves. This includes not only the

states' citizens, but also researchers and their disciplines, the scientific community and even international institutions. Could citizens understand that their perspective was mixed in with these other, legitimate concerns, or would they feel they were getting "the run-around" when specific recommendations were not implemented?

Changes if an Advisory Council was Reconvened

Members were also asked what changes they would like to see implemented if the Advisory Council was to be reconvened. This assumes, of course, that they believed a good rationale for the Council meeting existed. Only two of the members interviewed thought that no changes were needed.

Indeed, over half of the Council members focused their comments on better defining the purpose of the MAES/MSUE Advisory Council. While a previous interview topic addressed the theoretical purpose of an advisory Council, this question asked for specific change. Four members desired that the new Council have a clearly defined role. Some proposed that the organizers must initially decide whether they wanted the Council to be political and lobby the legislature on behalf of Extension and the Experiment Station or whether the Council's purpose was to explain the university to the members' communities. Other suggestions were: that the Council primarily discuss environmental and health topics; that sustainability be the unifying theme; that the Council focus on reducing public/private research duplication; and that it spend more time on actually

prioritizing public policy issues for the university to address, rather than being informed about them. In addition, one member urged that the Council should examine "new facets" of an industry and explore how new developments might make society better; while another wanted the Council to eliminate all "short-range" topics and only focus on broad issues.

Two members had ideas in the "should do" and "shouldn't do" categories. For example, a member said that a revised Council's purpose should be to "go beyond production issues". As for things the Council' should not do, another member advised against the Council discussing MAES/MSUE personnel issues.

Over a third of the Council members (n=8) called for the Council to change its meeting schedule. With but one exception, all of these members advocated for 3-4 meetings per year. More meetings, it was thought,

- "would help us keep a common thread,"
- "could better allow us to cover the breadth of issues before the Council,"
- "would allow us to truly provide direction"
- "help us operate as a team"

One member, though, rejected the idea that these meetings should take place through video-conferencing, fearful that the Council "would lose the human dimension." This member, who questioned if meeting more as a Council would be helpful, instead proposed that industry representatives on the Council (*i.e.*, agriculture, natural resources) should meet separately with their resulting

discussions/recommendations then fed into the larger council.

The next sizeable change that members thought the Council should revisit dealt with organizational structure. One natural resource member echoed a common theme that the MSU model was "too complicated, and that specific advisory committees would be better". The need for more specialized committees was frequently voiced by Council members--even if they did not want to see a broad-based committee disappear. One such member wanted to see the Council divided into "cross-sectional" committees, which would meet independently of the large council to wrestle with issues in a small group setting. While some suggested that these subcommittees be organized by topic (*i.e.*, land use) or by industry (*i.e.*, forestry), another thought that no committee should advise both MSUE and MAES together.

Another member believed that the Council's membership composition and structure was not well suited for focused advice. Not only did few Council members officially represent their "industry", but also the Council's advice never went beyond the administrators in the room. Other Council members (n=5) wanted different changes in the Council's membership. One wanted more business and industrial representation. Two felt that the Council needed more outsiders for "critical" advice. One mentioned that he thought the Council was comprised of too many people with MSU ties. For the other person, outsiders meant people who did not represent commodity interests and could help place agriculture in a larger societal context. Yet a member from a natural resource organization thought that

all Council members should come from trade associations with a stake in MSU programs.

Finally, four members wanted the Council to implement a better feedback mechanism between the Council advice and MAES/MSUE action. One member requested that, "the staff ...tell the Council if their advice has been accepted."

Organizers' Perspectives

All of the organizers thought that their institutions had a legitimate role in organizing citizen-input processes. Of the four administrators interviewed, they were equally split as to whether or not a broad-based advisory council could ever work. Therefore, rather than describing modifications to the advisory council approach, two offered whole new models which are described later in the paper.

Of the two administrators willing to revisit the Advisory Council, both saw the need for a multi-tier approach (specific commodity/area of interest and industry coalition). They believed that an "overarching" mechanism was needed to bring all of the varied interests together to set priorities on a state-wide basis, rather than by sector. Therefore, they were more willing to suggest modifications to help a broad-based Council work.

One administrator questioned, however, if it was a good idea to bring Extension and the Agricultural Experiment Station together for stakeholder input. This person remembers that Council members had trouble differentiating between Michigan State University, the College of Agriculture and Natural Resources, Michigan Agricultural Experiment Station and Michigan State University

Extension. Indeed, member interviews bore out this observation; it was not uncommon for members to confuse the various units and their responsibilities. An administrative colleague asserted that all members were given a personal orientation by one of the organizers prior to their first meeting, but in retrospect, he wondered if they saw this individual meeting as a true orientation, given its informal setting at such an early stage in the member's involvement.

When different units jointly host an advisory council, it should not be unexpected that each unit administrator places different emphasis on the importance of the advisory group. Organizational personalities can play an important role in any organization's effectiveness. As a result, there inherently is a degree of uncertainty as to how best to use the Council and as to who possesses responsibility for carrying out its recommendations. It would be better, according to this organizer, that each unit have its own advisory group and that one staff person be assigned to coordinate it.

The other organizer said that convening a broad group means that only broad issues that affect a wide audience should be discussed ---"such as satellite technology or legislative issues". This member is convinced that it is simply better to let the specific commodity and interest groups address issues within their purview. Another administrator agreed, noting that the Council was most engaged when discussing water quality and land use---topics that cut across many fields.

Desirable Traits of Advisory Council Members

Council members were descriptive when they were asked to identify the ideal characteristics of a new Advisory Council member. For instance, over half of the members listed a wide range of skills related to effective communications such as: "good listening"; "good communicator"; "vocal in expressing ideas (or not shy and quiet) "; "the willingness to share insights"; "the ability to move the group forward"; "the graciousness to support group decisions--even when you didn't agree"; "good public relations skills"; and "good synthesizers of information". A few replies were quite unique and directly related to individual Council experience, including that members should: "have an understanding of the arena in which the university operates"; "be interested in new trends"; "possess the ability to suspend your private interest and work toward the public interest;" and "be able to bring wholesalers, producers and researchers together."

The next most common theme brought up by members centered on the importance of participation (n=9). While some members simply stated that a good member is one who will attend meetings, other phrases were also used to stress the importance of active involvement. "Have time" was a specific response of two members. Another person wanted members who would be willing to read the background materials prior to attending meetings. A few defined participation as being willing to solicit input from industry and peers to be injected into the Council. Agricultural representatives were twice as likely as their natural resource colleagues were to identify participation concepts.

Representing their respective industries well and having experience were the next most popular themes (n=7). Future advisory members should be known and respected in their fields, with at least two desiring that they have practical industry backgrounds. In addition, the new members must have recognized knowledge in at least one field that they bring to the table. One member further defined this, by saying that "experts are O.K., but only if they blend in and can talk about other issues." Several mentioned that council members should be able to represent more than one field--an important criteria for past Council membership.

Likewise, members (n=5) wanted advisory council candidates who are considered leaders in their fields and industries. One member however, disagreed, believing that a strong local leader, who was a user of Extension, was the best type of candidate. One natural resource member didn't think that advisory council members had to be the "movers and shakers" in a particular field, but that the member had to have regular access to these types of people. He further clarified that the Council "should never seek industry "representatives", but instead individuals who can represent their industry. " By this he meant that such members should have authority and be more than "note-takers" while at the meetings.

Natural resource members almost exclusively (4 to 1) mentioned the importance of breadth of understanding in selecting an advisory council member. Two such members said that a person on the council "must see the "big picture".

The lone agriculture member, who identified breadth, offered that members should have the ability to "think globally and outside the box".

Two members recommended that a "trial" period be established in order for members to choose to leave if they found that the Council wasn't to their liking or if they concluded that their operating or personality style didn't fit with the Council's.

The final theme that emerged from this question came from those who pondered the representativeness of the Council. One farmer wondered if consumers should be more involved in the Council, but he wasn't sure how that could be done. Another member suggested that the Council needed more organizational members such as Farm Bureau to be seen as truly representative of the agriculture industry. Similarly, another member stressed that the Council must be a place where trust can be built across agriculture and natural resource networks across the state, especially when these issues cut across fields.

Only one member volunteered that Council members should, as a condition of membership, be supporters of Michigan State University and the land-grant system. In a separate conversation, an administrator pondered this qualification and recalls that it was the one attribute that all former Council members shared--regardless of their professional background. He now questions, however, if it is healthy to have a whole advisory group comprised of such people. Rather, he would welcome "outsiders" who were interested in making positive contributions.

Generally, members agreed on the types of people who should not serve on

advisory councils. People to exclude are those who are one-dimensional--in the sense that they are only interested in promoting their own agenda and not in discussing broader issues. Likewise, members clearly wanted to avoid those who tend to dominate discussions and are poor listeners. A Council organizer also mentioned that some informal background checking is needed to make sure that a potential member has "politically correct" attitudes toward women, minorities and other diverse groups. He recalled that one member on the Council occasionally uttered some inappropriate remarks.

Future Research Challenges and Advisory Councils

Former Council members provided rich replies in identifying the challenges facing Michigan agriculture and natural resource research. Almost one-half (n=9) of the members saw environmental issues as the most important challenge. For Michigan, environmental concerns included being too dependent on pesticides, concern over water quality--including managing livestock manure and fertilizer run-off, noise pollution, global warming, suburban impacts on watersheds and the need to emphasize sustainability.

Not surprisingly, funding was the next most common challenge (n=8) described. After years of dealing with tight MAES and MSUE budgets, many members were convinced that funding was going to remain a problem for these two institutions. Several thought that more funding was needed. However, many were critical of how existing funding was now allocated. For instance, one natural

resource skeptic thought that researchers failed to take a long-term approach (more than 50 years) to address forestry issues and instead sought short-term project funding to justify their continued existence--since short-term issues result in more publications and attention. Additionally, a farmer member suggested that too many funds were going toward specific problems, instead of benefiting a larger constituent base. However, one member concluded from his Council experience, that research institutions have little control over their own destinies. Rather they simply walk a tightrope between state and federal priorities, monies available through outside sources and industry concerns.

A topic closely related to funding mentioned by members (n=5) was the Council's role to promote and educate the public on the importance of research. Two members thought that a Council could raise the awareness of research benefits to the public and specifically, to legislators and other decision makers. For example, one member thought the Council could better define the importance of research to economic development as one method of increasing public support. Generally, members believed that the public does not know the vital role research plays in their lives, which explains why it is poorly funded.

The importance of research being coordinated by a Council ranked high among Council members (n=6) as an important duty. Coordination took many forms. Two members thought that the Council could help MAES coordinate which research programs were conducted by Michigan and which could be carried out by neighboring states' experiment stations. In some cases, members thought that the

Council should be a setting where industries met and agreed on priorities. As one member put it, "If we could speak with one voice, we could overcome the lack of financial support [for agriculture and natural resource research]". Another saw that the Council's responsibility was to match researchers with people and organizations having research questions. One business member agreed, recommending that the Council promote more public-private research partnerships and avoid unnecessary duplication of efforts.

Indeed, many Council members wanted the AES to continue to listen to industry priorities (n=6). Focusing on production issues was mentioned by most of this contingent--such as computerization, disease research and increased mechanization. One fruit grower is convinced that research can change a whole industry in the state. He explained how California researchers created a state strawberry industry with the development of a new variety. Another farmer was more cautious about the determination on which industries' research should be funded. He recommended that only "stable" industries receive scarce research dollars, since Michigan has dozens of small, specialty crops that must compete for researchers' attention.

Organizers' Perspectives

One MAES administrator thought that a viable approach for organizing citizens to identifying researchable topics would be for the agricultural experiment station to identify a number of issues where they wanted external input and where

the results of such discussions would play a role in the final decision-making process. This would include inviting non-traditional audiences and would take place on an "as-needed" basis. For it to be successful, all participants would need to be interested in the final outcomes and be willing to make meaningful and appropriate contributions. Once this ad-hoc group had met and issued their recommendations, he envisioned that they would be brought back again and given feedback by MAES on how their suggestions were used.

Another administrator thought that regular meetings with commodity and interest groups by MAES administrators, department heads and research project leaders were more likely to elicit useful research advice. In fact, currently this sector-by-sector approach yields fairly defined and researchable questions, unlike the old broad-based Advisory Council process. Each industry and interest groups' suggestions are much more easily prioritized under this method --first, among themselves and then among administrative units.

Another model, whose purpose is to gain an even broader perspective than a single-interest organization can offer, would be a coalition of like-minded interests such as all of the animal, plant or nutrition groups. Official representatives of each group are invited to come together to discuss, sort out and then present a more unified research and extension agenda. Such a detailed "package" carries a great deal of weight in legislative and policy circles, because of the recognized difficulty in organizing separate groups around a common plan. Ideally, it is hoped that citizen-leaders in each of these coalitions might be able to

meet together to understand the relationship they have with each other in the larger priority-setting process.

The Area of Expertise Team concept was also identified by two of the organizers as a more suitable method of obtaining citizen input than the Advisory Council. This concept recognizes extension's existing field contact capacity. With Extension specialists working as a team with campus researchers, problems identified in the field are now much more likely to be turned into practical research. AES has even provided funding for county and regional extension staff to carry out limited local research.

One reason why one of the MAES administrators questioned the practicality of operating a broad-based Council, was because of the difficulty in providing Council members with enough general information to make informed priority-setting decisions. For example, the internal accounting system that an agricultural experiment station uses reflects funding across academic departments--and not by topics. Under current record-keeping, it is next to impossible to find out how much apple research is taking place since the work could be spread across four or five departments and even more individual projects. As a result, it is difficult to know if there is "too much" or "too little" apple research in relation to its economic impact on Michigan. Likewise, because terms like "sustainable agriculture" or "water quality" or "food safety" are poorly defined for reporting purposes, it is tough to know exactly how much and what kind of research is actually taking place in these areas. This administrator felt that even the Current

Research Information System (CRIS) lacks reliability due to poor researcher reporting. Therefore, in his opinion, if organizers are unable to provide a Council with useful information for analyzing trends, making comparisons and aiding priority-setting decisions, it is better not to have one.

Summary

Despite the good intentions of the organizers, the MAES/MSUE Agricultural and Natural Resource Advisory Council struggled throughout much of its existence. Organizers strove to create a diverse Council, which represented a broad cross-section of MAES and MSUE agricultural and natural resource interests. While they succeeded in comprising such a Council, they were less effective in organizing the Council to help their respective institutions set state-wide priorities.

While Council members were honored to be chosen and generally enjoyed their service to the Council and getting to know the other members, they expressed conflicting recollections of their Council responsibilities. Members saw their role in one of the following ways: as a sounding board, as directors of a policy board, as public policy advocates, and as program evaluators.

Organizers failed to realize how their constant message of budget cuts cast a pall on Council discussion and made members both cautious on proposing new ideas and anxious to defend the existing programs that their industries used. This situation aggravated the parochial tendencies of Council members. In addition,

many members admitted that they felt uncomfortable discussing industries and topics that they knew very little about. However, both agricultural and natural resource members did share a slightly alternative view of the role and direction of agriculture. While there were some exceptions, competing philosophies of the purpose of agriculture and natural resource research were never a dividing force for the Council.

Organizers were over-optimistic in their understanding of members' comprehension of the research and extension systems and in members' ability to discuss broad and far-reaching issues. Many members were surprised at the complexity of MAES and MSUE and were not familiar with most of the programs. Administrators were also reluctant to ask for too much of members' time, leaving Council members in the untenable position of neither knowing enough to properly advise nor of having adequate opportunities to learn. It is doubtful if either sponsor was willing to invest the resources needed to develop a citizen-based Council to provide meaningful advice.

Finally, the Council lacked connections to the larger environment within which decisions were made. At the individual member level, members did not possess the authority to speak on behalf of or report back to their respective fields. Only a few members simultaneously sat on industry boards or had access to industry decision-makers while on the Council. The Council also lacked linkages within the university. Their recommendations did not filter out to the colleges or to MSU administration. Council meetings were separate from other industry,

commodity group and similar MAES-MSUE "external" advisory efforts. In addition, within MSU, each of the sponsoring institutions had different levels of commitment to the Council's operation.

The flaws of a broad-based Council became apparent to organizers. A decision was made to switch to other stakeholder-input mechanisms to guide MAES and MSUE. Currently, these methods have abandoned a broad-based approach in favor of working with specific industries and coalitions to prioritize MAES and MSUE activities.

Chapter 5

SUMMARY & CONCLUSIONS

This chapter summarizes the case study findings and draws several conclusions and recommendations with respect to the structure, function and performance of the MAES/EANR Advisory Council. The study's original questions were:

1) How did the MAES/EANR Advisory Council affect agricultural research priority setting at MSU?

2) How did the Advisory Council Membership view their Council experience?

3) Why was the MAES/EANR Advisory Council discontinued?

4) What lessons can be learned for establishing and operating land-grant stakeholder advising processes from the MSU experience?

MAES/EANR Advisory Council Effects on Agricultural Research Priority Setting

There was general agreement among both Council members and MAES/EANR staffs that the Council noticeably failed to influence the priorities of the Michigan Agricultural Experiment Station. Indeed, many of the major priority-setting policy decisions affecting the MAES during the Council's existence, such as the Animal Initiative, the Status and Potential of Michigan Agriculture (SAPMA) process, the Status and Potential of Michigan's Natural Resources (SAPMNR) process, the origins of Project GREEEN, and the launching

of the Area of Expertise Teams (AoE) were implemented without significant Council involvement. Although the Council was consulted in each of these efforts, their role was to offer advice, rather than to contribute significantly in these efforts' development and implementation. In some instances, the Council did not truly have the opportunity to advise, but was only informed of the policy decisions that were made. MAES did, however, work with specific stakeholders and stakeholder organizations on these projects and processes, so that they were more than just internal affairs.

In reality, the Council never lived up to its designation as a priority-setting mechanism at the Michigan Agricultural Experiment Station. As a body, it lacked an overall knowledge of the issues and the external and internal authority to play such a role. The Council was useful, however, in three separate capacities: 1) It served to reinforce observations and trends that organizers were already aware of and often were acting upon (land use issues and the need to strengthen agriculture research and extension connections) and 2) It did identify some smaller niche projects (deer damage to crops, a particular horticultural disease) that had not gathered sufficient attention in other forums and 3) It served as an "exploratory forum" for citizens and administrators to discuss the future research and extension needs of the state in a neutral environment.

There were several barriers and structural issues, which prevented the Council from becoming effective in setting priorities for the MAES. For example, Baum (1982) described that ambiguity is the most salient characteristic of the

environment in which many bureaucratic organizations operate. This observation has relevancy for MAES and for how it managed the Advisory Council during a period of institutional uncertainty. First, there was no actual, pressing need for MAES to have an external group guide it's priority-setting. Contrary to some Council members' perceptions, no legislative body, provost or president was demanding that such a process occur. Although the Council's mission included priority-setting, it was MAES's internal decision to involve the Council in this task. This gave the MAES (with MSUE) the luxury of first constructing the issues and then using the Council's input as it saw fit. While this is a quite common reason why administrators use informal advisors and advisory groups (Baum, 1982, Brown, 1972, Axelrod, 1990) it differed from the Stevenson and Klemme (1992) recommendation that they become an integral part of decision-making. As several administrators noted in the interview, the Experiment Station does not have a large degree of freedom in how it allocates its budget. Most of its funds are tied to faculty salaries and other recurring expenses. Even if the MAES sincerely wanted to give the Council power over its priorities, the reality is that there is only a rather small percentage of discretionary funds available for that purpose. Therefore, an advisory council would probably be most helpful in determining priorities for initiatives resulting from newly appropriated money.

Second, the current research reporting system does not classify research projects in categories that would be useful for an external advisory committee to use for comparative purposes. For example, there is no good way to know how

much "water quality" or "sustainable" research is taking place at the MAES, since many research projects include several components that may include such diverse goals. To conduct priority-setting from year to year, benchmarks would need to be established and reporting standardized (and perhaps rigorously enforced among researchers) for advisory members to have the information that would allow them to discuss the best priority mix.

Third, the Council's membership was too broad and individual members' backgrounds too narrow for overall MAES priorities to be determined on the limited meeting schedule that the Council operated within. While a case could be made that additional meetings, better orientation and more knowledgeable members could overcome these problems, the question must be asked if such efforts would be worth the costs, given that the Council has no actual authority to make priority-setting decisions.

Finally, it is doubtful if the MAES/EANR Advisory Council was ever operated so as to provide priority-setting advice. Rather, the Council was more of a "sounding board" for administrators. Many Council members recalled that the meetings were primarily comprised of researchers and administrators giving reports, with only a small amount of time set aside for discussion. Others remembered the tight budget environment that existed during their tenure on the Council, which cast a pall on the discussions by making members reluctant to target programs to be cut and confused when administrators spoke of expanding non-agricultural and natural resource projects. Several members thought that the

tough decisions had already been made prior to the Council meetings and that their role was to "rubber-stamp" them.

Many Council members pointed out the difficulty they had in trying to advise for both agriculture and natural resources. In fact, members did not share a defined view of how agriculture and natural resource research priorities should be determined. As one Council member noted, each area is profoundly different with agriculture being driven by market issues and natural resources being driven by social issues. However, a minority number of representatives from both agriculture and natural resources did agree that special encouragement should be give to those publicly-funded research efforts that are sustainable, provide the greatest benefit for the greatest number of people and are "dual-purpose"--meaning that they address more than one groups' interest.

Advisory Council Members View of their Experience

Advisory Council members had decidedly mixed views of their terms on the Council. On one hand, most members found the experience to be stimulating. They enjoyed each others' company and the opportunity to meet other talented Council members. They also appreciated the "insider's'" view of how extension and research programs and projects were carried out. Members had kind words for Council organizers--even when they disagreed with some of their management philosophies. While the research and extension presentations were frequently less than inspiring, years later, members fondly recalled the interesting tours years

later. Indeed, almost all the Council members expressed their surprise at the scope of activities carried out by MAES and MSUE.

Council members felt honored that the primary reason for their selection was that their local and professional accomplishments had been brought to the attention of MSU administrators. In fact, many were especially proud of the fact that they represented "unique" and "special" interests to MSUE and MAES and were not members of traditional clientele. As a group, they all believed they had something to contribute and many indicated that they were willing to work harder to produce useful results--including attending additional subcommittee meetings between the Council meetings.

On the other hand, Council members found the experience to be frustrating and few believed that their efforts amounted to much--much like the advisory committee member experiences described by Wolek (1990). For example, a significant minority of them found the meetings to include too many lectures and reports and not enough time for discussion, interaction and problem-solving--a situation identical to that reported by Mainzer (1958) with the USDA's advisory committees. Some members thought that organizers did not use the Council to its full potential, but most others admitted that they were uncertain as to what advice they could realistically provide to MSUE and MAES, which the two units would find useful.

In addition, members were uncertain as to what their true role was as a Council member. Some believed that the Council set MSUE and MAES policy,

some thought that their job was to give professional advice, others saw themselves as grassroots representatives providing a "layman's" perspective, while others understood their role was to be one of advocacy. Members also complained that they did not receive any feedback from Council organizers regarding their advice and participation. For some, this lack or feedback made them question whether or not their advice was of value or was appreciated.

Reasons for the Council's Cessation

As noted in the previous chapter, the determination to end the Council was an administrative decision made by MAES and MSUE organizers in conjunction with several--but not all--of the Council members. Internally, MAES and MSUE had separate expectations and visions for citizen advisory processes and the continuance of the joint general advisory council--as previously operated--was unrealistic for both organizations. Despite the obvious mechanism for how the Council ended, this study sought to discover what were the key underlying factors governing this decision. Specifically, it examined whether the Council ceased to exist due to problems associated with combining both agriculture and natural resource members together on a broad-based council (problems of diverseness) or because of the inherent weaknesses attributed to general advisory councils (organizational and structural problems). It also sought to explain if other factors besides these two contributed to the Council's demise. Evidence to address each of these possibilities was gathered from an analysis of Council member and

MAES/MSUE administrator interviews, Council documents, differences between agricultural and natural resource Council members on the Beus-Dunlap Conventional vs. Alternative Agriculture Scale and from background information on each member.

There were indeed problems with the diversity of the Council's membership. It could be argued that members represented overly diverse backgrounds and fields--from commercial bedding plant owners to Native American fishermen to environmental educators to row-crop farmers. Because members lacked a common knowledge base, a great deal of time had to be spent by organizers during each Council meeting educating Council members on the issues that were to be discussed and/or presented. Unfortunately, this often resulted in Council members knowing no more about the subject than what had just been presented. While there were occasional insights from members with limited or no previous knowledge of the agenda topic, this was more likely the exception rather than the rule. Rather, Council members were reluctant to speak out on an industry that they knew very little about. Therefore, with respect to its advice-giving function, the Council was no greater than "the sum of its parts".

There is little evidence from the interviews that bringing the diverse agricultural and natural resource representatives together was acrimonious or disruptive to the Council's ability to carry out its objectives. Members were respectful of each other and generally found the meetings to be interesting because of the new subjects to which they were exposed. They appreciated learning of the

challenges and issues in each other's fields. Unfortunately, this good will could not usually be transformed into very useful advice for either of the sponsoring organizations. Some members, however, personally benefited from the diverse interactions, and there is anecdotal evidence that members carried insights from the meetings back to other separate activities/organizations that they were involved in. The results of the Beus-Dunlap (1991) instrument indicated that agricultural and natural resource members generally shared similar beliefs regarding agriculture. Both groups leaned slightly "alternative" on the conventional vs. alternative scale. Therefore, deep philosophical differences between the two groups should be ruled out as a reason for the Advisory Council's disbanding.

This study also identified several organizational and structural issues that hindered the Advisory Council's operations. To begin with, it was difficult for Council members to become fully "engaged" at Council meetings. This was a result of four factors: the lack of member knowledge of MAES and MSUE both prior to and following joining the Council, member's confusion over the what exactly was the Council's advisory role, the infrequency of Council meetings, and the failure of members to have "ownership" of the Council.

Both the Michigan Agricultural Experiment Station and Michigan State University Extension are extremely broad and complex organizations. Since members were typically familiar with only specific areas of one of the units, they had difficulty grasping the overall mission, organization, activities and operating

environment of the two institutions, which in turn, made it difficult for them to provide informed advice. Although organizers attempted to orient new members, this was often done in a piecemeal fashion and typically before the member had attended their first Council meeting. New members, especially those from natural resources--who were less likely to have MSU ties--complained that it took several meetings for them to understand the Council's operations.

The confusion among members as to what exactly was the Council's defined role was evident from the interviews and has already been discussed elsewhere in this chapter. To restate the evidence, members described their perceived roles in various ways: from advising on the undergraduate academic programs for the College of Agriculture and Natural Resources to setting policy for MAES and MSUE to acting as a grassroots "sounding board" for those two institutions. These multiple conceptions impeded the Council's ability to produce useful results and should be viewed as larger symptomatic organizational problems. They are also related to the many possible roles that any advisory committee can have (as described by Brown (1972) and Axelrod (1990)) and which both sponsors and members may unconsciously have mixed in regards to the Advisory Council's purpose.

Because the Council only met twice a year, with little sponsor communication between meetings, members suffered from the resulting discontinuity (also reported in Mainzer, 1958). If a member had a conflict with a meeting date, it might be one full year before they resumed their involvement with

the Council. Such a lengthy gap between meetings left both members and staff confused as to how they should follow up on the Council's recommendations. While Council sponsors did not want to have members meet unless a compelling agenda could be constructed, the biannual meetings actually worked against substantive issues being explored--precisely because the meeting schedule made consistent follow-through difficult to maintain. Indeed, a Louisiana Cooperative Extension Service (1986) study of parish advisory council members found that citizen-members expressed a desire for more council meetings than staff were currently scheduling.

The structural inability of members to take ownership of the Council also factored in its failure to meet organizer expectations. For example, Council members were selected and appointed by the organizers. Even the chairs were individuals targeted by the organizers to serve as intermediaries between institutions and the whole Council. In contrast, Axlerod (1990) believes that advisory committees that participate in the filling of vacancies select members who strengthen the committee's effectiveness.

In addition, the Council lacked a self-governing mechanism to develop its own identity or agenda--it existed strictly within the scope and management of MAES and MSUE administrators. Despite the desire of organizers to have members lead the meetings and set the agenda topics, members were simply not knowledgeable enough on MAES or MSUE's operations to do so. Members could not form an agenda on matters that they did not fully understand, for a Council

that was not their responsibility. Advisory Council membership required no further commitment other than attendance and respectful discussion. MAES and MSUE administrators were solely responsible for the management of the Council and therefore, its success depended upon the attention, information and charges that administrators gave to it.

A similar organizational issue, which impeded the Committee's effectiveness, was that members were selected as individuals and not as organizational representatives. Lacy (1996) states that determining appropriate membership is often a key factor in successful stakeholder advisory processes. Council members did not share their Council experiences with other industry and professional contacts and few had any formal reporting requirements to do so. As a result, Council discussions had no recognized impact outside of their meetings. While MAES and MSUE administrators appreciated and listened to Council's advice, they had no larger accountability motivation (to key stakeholders or from legal mandates) to actively manage the Council and follow-up on its recommendations. The Council, in effect, operated as a parallel advisory process separate from those already established with other key stakeholder groups. In political terms, it would have been unrealistic for those established stakeholder relationships to be sacrificed in favor of this disconnected broad-based Advisory Council. Choosing locally-effective leaders, who were not formally "plugged" into statewide decision-making networks as designated representatives, may have been conceptually appealing, but it resulted in a Council which lacked external

legitimacy, and thus an explicit internal reason for administrators to consciously respond to it as they would a traditional interest group. Such a conclusion is contrary to recommendations by Hoefner (1998) and Stevenson and Klemme (1992) Frentz, *et al.* (1997) who caution against advisory processes which rely on traditional organization representatives. Mainzer (1958), however, noted that placing organizational representatives on advisory councils gave administrators a valuable opportunity to attempt to broaden these representatives' points of view.

Others (Bingen & Roberts, 1995) (Lasley, Hoiberg and Bultena, 1993) have raised the possibility of establishing processes parallel to those dominated by traditional constituencies, who are less receptive of sustainable policy and practices. While this study shows that the lack of formal, traditional agricultural constituent ties resulted in a Council that possessed a slight alternative agriculture view, it also argues that an individual's accountability and formal networks to an organizational audience should be considered essential to an advisory committee's effectiveness. Therefore, the best strategy would be to place representatives of environmental and sustainable organizations on a Council rather than individuals who held such beliefs and did not possess official representation.

Recommendations for organizing a stakeholder advisory committee

Based on the Michigan experience and a review of advisory committee literatures, several recommendations can be made to increase the effectiveness of stakeholder involvement in public land-grant research, should a broad-based

advisory council be employed. However, it should be noted that this study did not attempt to evaluate the merits of a broad-based advisory committee against other advisory processes, such as those that would only deal with a specific crop or other topic. The results of this case study, however, do caution any research institution to think carefully before implementing a broad-based advisory committee similar to Michigan's attempt. Should any land grant operate such a committee that included broad-based clientele the following recommendations may be useful:

1) **Define a clear role for the advisory committee and orient all members toward that role.**

The Michigan case highlights the problems that result when members are confused about their roles and responsibilities as advisory members. Although the MAES/EANR Advisory Council had written purposes and objectives, they were not clearly communicated to all members and may not have always been faithfully followed by administrators. In fact, it appears that the philosophy and mechanics of operating the Council were somewhat fluid from meeting to meeting as organizers regularly "tinkered" with the format. Versteeg, (1992:17) noted that significant difficulties result when "... stakeholders who have been invited to take part in one process ... discover that in fact they were involved in an entirely different process." While many of the Council members weren't exactly sure what their involvement with the Council would be like, others were disappointed that the Council did not function as they thought it would. Both Brown (1972) and

Axelrod (1990) distinguish between the varied roles (general advice, advocacy, technical review, *etc.)* that different models of advisory committees may undertake. Not only should the advisory role be clearly defined, but should events necessitate a change in this role, such a change should be formally considered and discussed by all Council participants.

A question must then be raised, "What is the right role for a state-wide advisory committee?" Past Council members generally did not like the idea of being advocates for MAES and MSUE in the legislature arena, but this attitude may only reflect the characteristics of that group. In contrast, many liked the concept of serving as a "sounding board", but were simultaneously disenchanted with the ambiguity and lack of known accomplishment, which that role produced. In Wolek's (1990) case study, he noted that advisory members prefer to work on concrete problems as defined by the organizers. A similar sentiment emerged from this study. This observation results in three possible recommendations.

First, a diverse, broad-based advisory committee, by definition, can only address broad-based problems and issues that cut across any one particular industry or field. Therefore only these types of matters should be brought before a state-wide advisory committee at its regular meetings. Anything narrower should be dealt with at a more specific level. A statewide advisory committee should meet to discuss institutional issues--such as the allocation in budget categories, new initiatives and the like. It could also help resolve issues and dilemmas between separate research areas when they arise or when a narrower research

advisory group was seeking a broader perspective than their own committee was organized for (say the dairy group wanted to discuss BST research issues with the Council).

A slight modification of this model would be for the Council to only meet when staff had a defined issue where they wanted external advice. Rather than a fixed meeting time, members would be provided extensive background material and then hold a series of meetings to reach a committee consensus as to the best course of action to recommend to Council organizers. Ideally, to keep maintain Council cohesion, such issues should actively be identified on a regular basis.

Another advisory model would be for the AES to open its doors to an "institutional stakeholder review"--not unlike an accreditation process, but with organizational stakeholders as the reviewers. Rather than meeting on a biannual or quarterly basis, this process would only take place once every four or five years for a concentrated period of months. Such a process would provide a large number of stakeholder representatives with the ability to perform a "check-up" on the institution to see if any adjustments should be made and for them to produce a formal report. Stakeholder representatives would first review specific areas of interest and then compare these areas to larger institutional goals. In many ways, this would be similar to the SAPMA and SAPMNR processes, which MAES and MSUE already conduct.

2) Select knowledgeable and well-linked stakeholder representatives to serve on the Council.

In contrast to other writers (Hoefner, 1997, Frentz *et al.* (1997), Stevenson & Klemme, 1992), this paper argues that knowledgeable and "connected" stakeholder representatives may be the best individuals to comprise an advisory committee. In fact, Frentz *et al.* (1997)'s comment that such special interest representatives have better knowledge levels than average citizens[8] makes a strong case why they are needed in something as complicated as advising agricultural research. The combination of their organizational ties, their standing as a recognized industry/field representative and their knowledge of larger decision-making environments would result in an advisory process which would reverberate outside of advisory meetings, and would thus more likely to be effective and honored. While all of the Michigan MAES/EANR Council representatives were well-respected, talented individuals, as a group, they were not part of existing organizational and decision-making networks. Indeed they were primarily selected as local leaders who cooperated with local Extension and not necessarily because of their organizational ties. It was very clear from the interviews that prior to joining the Council few had a comprehensive understanding of the land-grant system, especially with respect to the Agricultural Experiment Station. It is likely that organizational representatives would have greater exposure to land-grants than a "non-connected" citizen. Such

[8] They identified this discrepancy as a problem in their case study of a forestry advisory committee.

organizational representatives should probably not be paid staff, but rather citizen-leaders with regional, state and national level experiences.

The practical problem with this recommendation in a state like Michigan, with over 100 organized commodity groups, is "which organizational representatives to invite?" A research advisory committee of that size would be too cumbersome to manage. A better suggestion is derived from Frentz, *et al.* (1997). They decided to allow special interest groups to nominate individuals for a fixed number of advisory seats. As Michigan has research advisory processes organized at the individual commodity as well as at the program level (Plant Coalition, Animal Coalition, Natural Resource Coalition and Family, Nutrition and Community Coalition), it may be wise to draw statewide advisory members from these established pools of citizen-leader/advisors. Such individuals tend to have strong industry/field organizational ties and could report back to these other constituencies.

Likewise, the construction of a stakeholder-based advisory group should strive for membership-ownership of the Council. While Council members need not have policy-making functions for the organization in which they advice, members must see their service on the Council as a contribution to their field and to the larger public. Therefore, the structure and operation of the Council should resulted in empowered, rather than passive members.

3) **Help stakeholder organizations and their individual members to develop the capacity to participate in advisory and research priority-setting processes.**

This concept is a logical extension of Recommendation #2. If organizational representatives are better able to advise public institutions then are general individuals, then the public institution has a responsibility to assist in developing the ability for under-represented stakeholder group representatives to participate in these processes. This recommendation is an adoption of Lacy's (1996) and Bingen's (1996) observations to increase small farmer involvement in research, but which could be applied to any other desired stakeholder group from which land-grants want advice. These authors argued that more should be done to develop the institutional base, skills and funding for non-represented stakeholder groups to influence the public research system to assure that these groups have their needs and priorities addressed. For example, this could include MAES and MSUE-sponsored leadership training, which would emphasize the functioning of relevant public institutions and how these institutions receive and consider public input. The establishment of a "Special Clientele" Advisory Committee (Brown, 1970) which would also send representatives to other advisory processes may also be a valid option. Another idea, already being done at Michigan State University with sustainable and organic farmers, would be to initiate small-scale (and relatively, low-risk) applied research partnerships between researchers and these under-represented stakeholder groups. The purpose of these partnership would be to

introduce these groups to public research and how the research process works and how it can address their key issues.

On one hand, it could be argued that researchers and research administrators should not be expected to undertake such stakeholder development tasks. The reality is that such industry and organizational capacity-building has long been an essential (if not widely-publicized) research administrative task to generate support for land-grant research (See Schmid & Soroko, 1997; Bingen & Roberts, 1995; Danbom, 1992; Busch & Lacy, 1983). If land-grants believe that general public support is essential for its future, it should follow its own well-established model to develop bases of new supporters.

In addition, this capacity-building must also be viewed as an essential part of the Council. Group and organizational dynamics, such as team and consensus-building should be incorporated in to Council meetings.

4) **Develop an institutional infrastructure to operate and maintain the Council.**

This study makes two recommendations concerning the administration of an advisory committee: 1) Identify one staff person in the organizing institution who will have the administration of the Council as a primary task. In Michigan, the Advisory Council was shared between MAES and MSUE. While both units identified key people to coordinate the Council, neither individual had the Council as one of their primary administrative assignments--rather it was included as one more additional task for each staff person. The nature of such assignments is that

they are squeezed in other among other daily tasks as best as one can do. Wolek (1990) comments on the importance of highly qualified staff being assigned to work and actively manage an advisory committee.

The second recommendation comes from Axelrod (1990) who advocates that sponsors must communicate with advisory committee members in between meetings to keep them informed of key organizational activities. While she cautions that the staff who prepare this must be able to separate the highly relevant from the marginal, it is important that committee members be kept abreast so that they do not enter each advisory meeting "totally cold". The regular flow of information results in members developing the capacity to consistently provide useful advice--since they will have context in which to analyze it. Implementing such a practice will require an institution to reflect on its activities in a new manner, if regular interim reports are to be sent to advisory members. No such process occurred for the MAES/EANR Advisory Council, which resulted in members suffering from "disconnectedness" between meetings. Regular communication between Council organizers and members can also address "feedback" problems reported by the MAES/EANR Council members.

5) **Communicate Council activities among all stakeholders and the public**

Few people outside of the MAES/EANR Council knew what took place at their meetings. Traditional, external stakeholders, who were aware of the Council, did not know how to view its activities--as being complementary, threatening or

irrelevant. Such confusion is counter-productive to democratic processes in public institutions. Young & Jones, (1995) suggest that advisory committee minutes should be published and available to the public, as is done with Federal advisory committees. With new web-based technologies, widespread public distribution is now possible and should be encouraged. Frentz, *et al.* (1997) see the advisory committee as meeting a public need for broad forums where trust can be created among different stakeholders. Publishing the results of advisory committee meetings reinforce this view of advisory groups.

For Further Research

Despite the fact that almost every land-grant institution in the country has established stakeholder advisory processes, little is known about how they operate, who serves on them, what their roles are, or if they are considered as "effective" in their defined roles. In addition to the institutional-level advisory committees, there are even more research station, department and other commodity-based advisory committees in existence. Likewise, almost nothing is known about them as a class.

This study was also unable to identify any research that compared citizen advisory processes to gauge which process works best for a given situation/environment. Currently the literature on stakeholder advisory mechanisms is largely comprised of case studies--not unlike this one. Once the USDA, in accordance to the Federal Agricultural Research and Extension Reform

Act of 1998, determines the criteria for defining a land-grant stakeholder process, it may be easier for such a comparative study to be done.

Further research on the above topics is needed, especially if the new federal requirements are administered in anything but a *pro forma* manner.

SUMMARY

While the Federal Agricultural Research and Extension Reform Act of 1998 statutorily requires land-grants to operate stakeholder processes to receive federal formula funds, there is no guarantee that such processors will result in the research prioritization changes that many land-grant critics desire. One common barrier for this type of change may be in the structure and operation of the advisory committee. This study concludes that a broad-based advisory committee can fail to provide useful advice to research administrators.

Axelrod (1990:15) notes "Effective advisory committees do not form themselves. The art of creating successful advisory committees has been mastered by some and abandoned by others who choose not to invest the time and resources into building such a group. Others never learn it at all, waiting in vain for the advisory committee to 'work better' ". This paper has examined one advisory council, explored its problems and has identified several potential ways for a land-grant research stakeholder process to work better.

APPENDICES

APPENDIX A

State Agricultural Experiment Station (AES) Survey on Advisory Committee Processes

LEGEND:

A= We have an advising group (council, board, committee, etc.) that reports to the AES Director and is not shared with other administrative units.

B=We participate in a multi-unit advisory group, which may also consider Extension, College of Agriculture and other related areas, to receive advice on AES priorities.

C=We have several groups, which are organized along either departmental, commodity, outlying research or other program liens, who provide advice for specific AES areas of interest.

D=We utlize public forums, conferences and similar one-time events to solicit advice among external stakeholders and to discuss research priorities for the AES.

E=We do not currently have any formal process for obtaining external input for AES priorities--If not have you had a processes within the past 10 years?

F=Other, please describe

AES	A	B	C	D	E	F
Alabama	X		X			
Alaska		X		X		
Arizona			X	X		
Arkansas		X	X	X		
California		X	X	X		
Colorado		X	X	X		
Conn-Storrs					X	
Delaware		X	X	X		
Florida		X	X	X		
Georgia		X				
Guam			X			
Hawaii			X			
Illinois	X	X	X	X		

AES	A	B	C	D	E	F
Indiana		X	X	X		
Iowa	X	X	X	X		See #1
Kansas		X	X	X		
Kentucky		X	X	X		
Louisiana			X	X		
Maryland		X				
Mass.		X		X		
Michigan		X	X	X		
Minnesota			X	X		See #2
Mississippi		X	X	X		
Missouri		X	X	X		
Montana		X	X	X		
Nebraska		X	X	X		See #3
Nevada			X			
N. Hampshire		X				
New Jersey		X	X			
New Mexico		X	X	X		
NY-Cornell		X	X			See #4
NY-Geneva		X	X			
N. Carolina		X	X	X		
N. Dakota	X		X			
Ohio		X	X			
Oklahoma		X	X	X		See #5
Oregon		X	X	X		
Pennsylvania		X	X			
Puerto Rico		X	X			
Rhode Island		X		X		
South Dakota		X	X	X		See #6
Tennessee		X	X	X		
Utah	X		X	X		
Virginia		X	X			See #7
Washington		X	X	Informally		See #8
West Virginia		X		X		
Wisconsin		X	X	X		
Wyoming			X			
TOTAL=48	5	41	40	31	1	8

F. Other, please describe:

#1 Every five years Iowa does strategic planning. It also regularly conducts focus groups on research topics.

#2 Minnesota has a pilot project involving 3 regions within the state where citizen stakeholders set research priorities and agendas.

#3 Nebraska also uses focus groups, commodity organization input, surveys of need, mail back questionnaires in their research magazine, individual contacts and Extension agents. The process is largely informal, except for focus groups.

#4. NY-Cornell has a system of eleven statewide program committees for research and extension which include faculty extension field staff and stakeholders.

#5. Oklahoma AES administration meets frequently with the leadership of a broad spectrum of groups throughout Oklahoma. These are ongoing discussions that complement input from the items check above.
#6. South Dakota maintains formal linkages between research and Extension. This assumes that Extension presents the needs of the clientele as questions to be addressed by research.
#7. Virginia AES conducted a strategic plan two years ago that involved meetings with 20 academic departments, 12 off-campus research & extension centers, 107 county extension councils and dialogue with 80 agriculture and natural resource organizations.
#8. Washington meets regularly with their Agricultural Presidents organization. They will also assemble specific task forces to address special issues such as funding initiatives.

APPENDIX B

Background of MAES/EARN Advisory Council Members

AGE

AGRICULTURE	1945	1956	**NATURAL RESOURCES**	1958	1941
1930	1945		1937	1950	
1945	1951		1959	1928	

Years of EDUCATION

AGRICULTURE	16	17	**NATURAL RESOURCES**	15	18
16	13		13	21	
16	18		16	17	

CODE: 21=PhD 18=Masters 16=4 years degree 12=High School

EMPLOYMENT

AGRICULTURE	Hog, corn, wheat, barley and grape producer	Farm Owner & operator	**NATURAL RESOURCES**	Oversee natural resource program for tribe	Vice President Consulting Firm
Fruit farmer and township maanager	Farm & Greenhouse owner		Executive Director, Tribal Mgmt Authority	Program administration & development for learning institute	
Retired Food Processor	Michigan Department of Agriculture Executive		Executive Director, Chamber of Commerce (Tourism)	Retired Director of Watershed Council	

COMMUNITY--Agriculture

NAME OF ORG	RESPONSIBILITIES	YEARS INVOLVED
Michigan 4-H Foundation	Trustee	10 years
Bargaining & Marketing Board	Member	10 years
Michigan Horticultural Society	Member	20 years
Grace Lutheran Church	Trustee	4 years
Grace Lutheran School	Board member	4 years
High School Athletics	Scorekeeper, Various assistance	2 years
Little League	Umpire	10 years
Football	Umpire	2 years
4-H	Assistant Swine Leader	1 year
Farm Bureau Community Group	President & Member	5 years & 15
St. Joseph's School	Education Commission, President	3 years
St. Joseph's Pastoral Council	Member	2 years
St. Johns Athletic Boosters	Member	5 years
St. Johns Mint Festival	Chair of 3 on 3 Basketball Tourn.	3 years
Leland Methodist Church	Chairman	20 years

COMMUNITY--Natural Resources

NAME OF ORG	RESPONSIBILITIES	YEARS INVOLVED
Tribal Child Welfare Committee	Member	18
Kiwanis	Member	3
Tribal Elderly Commission	Member	1
Frankenmuth Civic Events Council	Board Member	2
Bavarian Festival	Chairman of Activities	4
Freshman Cheerleading	Coach	2
Jaycees	Member	
Rotary	Member	
Grand Traverse Land Conservancy	Board Member	6
Faith Reformed Church	Board member, member	10
Oakland Co. Land Conservancy	Board Member/Secretary	5
East MI Environmental Action Council	Board Member	30
Supporter of Parks in Oakland Twp	Co-Chair	1
League of Women Voters	Member	40
Lutheran Church	Vice President	2
Kiwanis Club	Community Serv. Chair	3
Impression V Museum	Board Member	1
E. Lansing High Sch. Lacrosse Team Parent Supporter	Member	3

PROFESSIONAL/TRADE--Agriculture

NAME OF ORG	RESPONSIBILITIES	YEARS INVOLVED
National Food Processors Assoc.	Committees	10 years
Michigan Canners & Freezers	Committees	20 years
Michigan Vegetable Council	Committees	20 years
SW MI Research & Extension Advisory Committee	Chairman	6 years
SW MI Growers Association	President	6 years
National Grape Cooperative	Alt. Delegate	3 years
Mid America Food Processors	Member	3 years
Wisconsin Tobacco Association	Member	4 years
Michigan Livestock Co-op	Member	15 years
National Grape Cooperative	Member & Nominating Committee	22 years and 2 years
Western Michigan Agricultural Advisory Board	Member	3 years
Van Buren Co. Farm Bureau	Board member, Executive Board	10 years & 2 years
Van Buren Co. Pork Producers	Member & President	15 years and 3 years
Marine Corps Reserve Officer Assoc.	Member	10 years
American Agricultural Econ. Assoc.	Member	10 years
Soil & Water Conserv. Society	Member	10 years
Leelanau Horticulture Society	Board Member, Chair	15 years
MI Association of Cherry Producers	Chairman	10 years
Graceland Coop	Board member	5 years
B &W Coop	Board member	

PROFESSIONAL/TRADE--Natural Resources

NAME OF ORG	RESPONSIBILITIES	YEARS INVOLVED
Native Am. Fish & Wildlife Society	Board Member	7
Michigan Travel Commission	Member	4
East Michigan Tourism Association	Board Member, President	3
American Fisheries Society	Member	10 years
American Scientific Affiliation	Committee Chair	6 years
North American Bethological Society	Member	6 years
Organization of Biological Field Stations	Vice President, Member	10 years
American Water Resources Assoc.-MI Section	Member, Vice President, Program Chair	15, 5, 1
Water Environment Association	Nat'l Member	15
MI Society of Planning Officials	Member	20
MI Stormwater and Floodplain Assoc.	Member	8
Association of State Wetlands Managers	Member	15
Am. Fisheries Society	Member, Program Chair	20+
Am. Society of Limnoloyg & Oceanography	Member	20+

CIVIC/PUBLIC--Agriculture

NAME OF ORG	RESPONSIBILITIES	YEARS INVOLVED
City of Fremont	Various Committees	30 years
Farmers Home Admin.	Advisory Board Member	3 years
St. Johns School Board	President, V.P. Member	9 years
St. Johns Cemetery Board	Member	5 years
Clinton Co. Republican Party	Chairman, Exec. Committee Member	15 years
Township Supervisor	Manage Township	8

CIVIC/PUBLIC--Natural Resources

NAME OF ORG	RESPONSIBILITIES	YEARS INVOLVED
Tribal Natural Resource Committee	Member	4
Oakland Township Parks Commission	Elected Member	24
Point Creek Trailways Commission	Appointed Member	18
Env. Policy Advisory Council for SE MI Council of Governments	Appointed Members	10
Areawide Water Quality Board of SE MI	Appointed Member	10
MI Trails Advisory Council	NRC Appointed	6
SE MI Greenways Initiative	Steering Committee	6
MI Relative Risk Nonpoint Sources Task Force	Member	1
EPA Southeast MI Initiative	Forum Member	4
Lake Erie LoMP Forum	Appointed as EPA/MDEQ member	3
Clinton River Remedial Action Plan- Public Advisory Council	Member	10
E. Lansing Planning Commission	Commissioner	3
E. Lansing Schools--Alternative School Use Committee	Member	1

APPENDIX C

Research Invitation Letter to Council Members and Consent Form

February 6, 1998

Dear Former MAES/EANR Advisory Member:

I am a Masters student in the Department of Resource Development who is conducting case study research for my thesis. My research will be a case study of the Michigan Agricultural Experiment Station's Advisory Council. This topic is extremely relevant right now as proposed federal legislation may require all land grant colleges and experiment stations to have a stakeholder process or advisory council in place to receive federal dollars. Since you previously served on the MAES/EANR Advisory Council, your perceptions on the functioning of that council and the role of citizen involvement in research would be very valuable.

A primary method of case study research is to conduct face-to-face interviews with the participants of an event. In treating the MAES Advisory Council's operations as an event, it is important for me to interview those who served on the Council. I would like to visit you in your home, office or another mutually-agreeable location to conduct a 1-2 hour interviews in the next two months. I am focusing on the agricultural research activities of the Council.

These interviews will be audio-taped to assist in preparing summary notes, but no detailed transcript will be made. You will have an opportunity to review and comment on the interview notes to ensure that they accurately reflect your thoughts. The audio tapes will be kept by the researcher and no one else will have access to them, although the interview notes will be included as an appendix in my thesis submission. To ensure confidentiality all interviewees will be assigned an alias and all interview results will be reported using this alias. The audio tapes will be destroyed upon completion of the research.

In addition, I would like to gather other information about your personal background (age, gender, education, etc.), and the organizations you belong or belonged to. Also, I wish to administer a 20 question survey. Again, all data will be kept confidential. Your identity will be kept anonymous in any research report.

Participation in this research is entirely voluntary. You may choose not to participate at this time or you may choose to withdrawal from the research at any time without penalty. You would be under no obligation to answer any question that you are uncomfortable with, should you decide to be interviewed.

I will be attempting to contact you by telephone in the next two weeks to seek your participation in this study. If you agree, we will try to schedule a time that is convenient to both of us. At the time of your actual interview, I will collect a formal consent document, which is enclosed with this letter. If you know at this time that you do not wish to participate, please indicate so on the enclosed consent form and return the form to me.

Thank you very much for considering to participate in my thesis research. I believe the results of this study will be very useful to those who administer or influence agricultural experiment station research throughout the United States. If you have any additional questions, please call me at (517)355-8469.

Sincerely,

Thomas R. Johnson

CONSENT FORM
to participate in case study research on
The Michigan Agricultural Experiment Station's Advisory Council

1. PURPOSE
The proposed research is a case study of the functioning of the Michigan Agricultural Experiment Station's Advisory Council. MAES administrators and Council members will be interviewed to explain the functioning of the committee, possible reasons for its cessation and the role of such advisory councils in the future.

2. TIME INVOLVED
The proposed research will involve a 1-2 hour face-to-face audio-taped interview with the researcher. In addition, a 20 question survey will be filled out and additional background information will be sought, which will take approximately 20 minutes.

3. CONFIDENTIALITY
All results will be treated with strict confidence and the subjects will remain anonymous in any report of research findings. All research subjects will be asked to review the researcher's notes for accuracy before the final analysis occurs. Audio tapes will become the property of the researcher, who has agreed not to let others have access to them. The tapes will be destroyed upon the completion of the research.

4. PARTICIPATION.
By signing the line below I AGREE to participate in the research. My participation is voluntary. I reserve the right to withdraw from this research at any time. I reserve the right not to answer any question that the researcher may pose to me.

_____ _____
NAME DATE

_____
Please print signed name.

By signing the line below I DO NOT AGREE to participate in the research.

_____ _____
NAME DATE

_____
Please print signed name.

APPENDIX D

Interview Outline For Advisory Council Members and Organizers

DRAFT QUESTIONS TO ASK MAES ADVISORY GROUP MEMBERS

I. FORMATION & BACKGROUND OF ADVISORY GROUP

1. How were you asked to participate in the Advisory Group

2. What did you initially understand to be your responsibilities on the Advisory Group? Were these the group's responsibilities? Did they evolve during your involvement?

3. Why do you think you were asked to participate?

4. What did you initially feel you could contribute to the Advisory Group? Were you actually able to make use of this _____ during the Advisory Group meetings. What assets did you bring to the Advisory Committee? What weaknesses did you bring?

5. How familiar were you with land-grant research before you joined the committee?

6. What are your thoughts about the representation of the advisory committee members? Did it represent all facets of agricultural and natural resources research? Were any groups missing? Were any groups under or over-represented?

II. ADVISORY GROUP FUNCTIONING

1. What did you learn about the agricultural and natural resources research process?

2. How important was the Committee's input in directing Michigan agriculture and natural resources research priorities?

3. How would you describe your attendance and participation in the advisory group?

4. Describe a typical advisory group meeting and what took place.

5. How were the Advisory Committee's contributions utilized by MAES researchers and administrators?

6. Did you ever report to any organization or to any gathering on the results of your involvement on the committee?

7. What do you feel you contributed to the research process?

8. MAES lists you as representing the _____ sector. Do you think that your participation affected the MAES research in this area? Why or why not?

9. How was the agenda set for each MAES Advisory Committee meeting?

10. What are the most important criteria for prioritizing agricultural and natural resources research?

III. THE DEMISE OF THE ADVISORY GROUP
1. Why do you think the advisory group is no longer meeting?

Note: Likely to be more questions based on responses.

IV. FUTURE CITIZEN PARTICIPATION IN AGRICULTURAL & NATURAL RESOURCE RESEARCH
1. In your opinion, what should be the purpose of an advisory research committee

2. If the MAES Advisory Group would meet again, what changes would you like to see implemented?

3. If you were asked to write a job description for new Advisory Committee members, what would you list? What qualities/traits would hinder Committee membership?

4. What, in your opinion are the challenges that Michigan agricultural research faces in the future? Is there any role for an advisory group to help deal with these changes?

DRAFT QUESTIONS TO ASK MAES ADMINISTRATORS

1. Where did the idea for an advisory committee come from?

2. What was the goal of forming an MAES Advisory Committee?

3. How were advisory committee members selected? What criteria were important?

4. How was the agenda for MAES Advisory Committee meetings established?

5. Describe what occurred during a typical MAES Advisory Committee meeting.

6. How did the MAES Advisory Committee help direct MAES research?

7. How often did the MAES Advisory Committee meet?

8. What did the MAES Advisory Committee do well?

9. What did the MAES Advisory Committee do poorly?

10. How did the diverseness of the MAES Advisory Committee affect its functioning?

11. Why did the MAES Advisory Committee cease to meet?

12. What lessons were learned from the MAES Advisory Committee experience?

13. What do you think is the future of citizen involvement in MAES research?

14. How can the citizenry help direct MAES research?

APPENDIX E

Background Survey for MAES/EANR Members

MAES Research Advisory Council Member
Background Information

NAME_____ **YEAR BORN**_____

OCCUPATION_____

HIGHEST LEVEL OF EDUCATION:_____

JOB Responsibilities_____

_____

Using the following categories, please list any organizations that you have belonged to in the past 10 years. *(Use reverse side if necessary)*

COMMUNITY *(Neighborhood associations, parent-teacher org, religious, community festival)*

Name of Organization	Responsibilities	Years Involv.
Ex. High School Athletic Boosters	*Member, Treasurer*	*3*

PROFESSIONAL/TRADE

Name of Organization	Responsibilities	Years Involv.

CIVIC/PUBLIC *(Include elected office like school board/ township official, local task force, politcal party)*

Position	Responsibilities	Years Involv.

BEUS & DUNLAP (1991) SCALE

See Back Page for Scale Definitions

A. Meeting U.S. food needs with fewer and fewer farmers is a positive outcome of technological progress	**1**	**2**	**3**	**4**	**5**	**Meeting U.S. food needs with fewer and fewer farmers is a negative outcome of our free market system**
B. Farmland should be farmed so as to protect the long-term capacity of the land, even if this means lower production and profits.	**1**	**2**	**3**	**4**	**5**	**Farmland should be farmed so as to maximize annual profits, even if this threatens the long-term productive capacity of the land.**
C. High energy use makes U.S. vulnerable and should be greatly reduced.	**1**	**2**	**3**	**4**	**5**	**Large inputs of energy into agriculture should be continued as along as it is profitable to do so.**
D. The primary goal of farmers should be to maximize the productivity, efficiency and profitability of their farms	**1**	**2**	**3**	**4**	**5**	**The primary goal of farmers should be to improve the quality of their products and to enhance the long-term condition of their farm.**
E. The amount of farmland owned by an individual or corporation should NOT be limited, even if the ownership of the land becomes much more concentrated than at present.	**1**	**2**	**3**	**4**	**5**	**The amount of farmland owned by an individual or corporation should be limited in order to encourage land ownership by as many people as possible**
F. Agricultural scientists and policy-makers should recognize that there are limits to what nature can provide and adjust their expectations accordingly.	**1**	**2**	**3**	**4**	**5**	**Agriculture scientists and policy-makers should expand efforts to develop biotechnologies and other innovations in order to increase food supplies.**
G. Good farming depends mainly on personal experience and knowledge of the land.	**1**	**2**	**3**	**4**	**5**	**Good farming depends mainly on applying the findings of modern agricultural science**
H. The future success of American agriculture will NOT be affected if rural communities continue to decline.	**1**	**2**	**3**	**4**	**5**	**Healthy rural communities are absolutely essential for American agriculture's future success.**
I. Small to medium-sized farms can best serve America's agricultural needs.	**1**	**2**	**3**	**4**	**5**	**Large to very large farms can best serve America's agricultural needs.**

J. Farm traditions and culture are outdated and of little use in modern agriculture.	**1**	**2**	**3**	**4**	**5**	**Farm traditions and culture help maintain respect for the land & are essential for good farming**
K.Farming is first and foremost a business like any other	**1**	**2**	**3**	**4**	**5**	**Farming is first of all a way of life and second a business**
L. Farmers should use primarily natural fertilizers and production methods such as manure, crop rotations, compost and biological pest control.	**1**	**2**	**3**	**4**	**5**	**Farmers should use primarily synthetic fertilizers and pesticides in order to maintain adequate levels of production.**
M. Most people should live in cities and leave farming to those who know it best.	**1**	**2**	**3**	**4**	**5**	**Many more people should live on farms and in rural areas than do so at present.**
N. Modern agriculture is a major cause of ecological problems and must be greatly modified to become ecologically sound.	**1**	**2**	**3**	**4**	**5**	**Modern agriculture is a minor cause of ecological problems and needs to be only fine-tuned periodically in order to be ecologically sound.**
O. Farmers should farm only as they can personally care for.	**1**	**2**	**3**	**4**	**5**	**Farmers should farm as much land as they profitable can.**
P. Farms should be specialized in one or at most a few crops.	**1**	**2**	**3**	**4**	**5**	**Farms should be diversified and include a large variety of crops.**
Q. Soil and water are the sources of all life and should therefore be strictly conserved.	**1**	**2**	**3**	**4**	**5**	**Soil and water are the basic factors of production and should be used so as to maximize production.**
R. Farmers should purchase most of their goods and services just as other consumers do.	**1**	**2**	**3**	**4**	**5**	**Farmers should produce as many of their own goods and services as possible.**
S. The key to agriculture's future success lies in learning to imitate natural ecosystems and farm in harmony with nature.	**1**	**2**	**3**	**4**	**5**	**The key to agriculture's future success lies in the continued development of advanced tech-nologies that will overcome nature's limits.**

T. Most farms should specialize in either crops or livestock.	**1 2 3 4 5**	**Most farm should include both crops and livestock.**
U. Production, processing, and marketing of agricultural products is best done at local and regional levels.	**1 2 3 4 5**	**Production, processing, and marketing of agricultural products is best done at national and international levels.**
V. The successful farmer is one who earns enough from farming to enjoy an above average standard of living.	**1 2 3 4 5**	**The successful farmer is one who truly enjoys farming even if it provides only a below average standard of living.**
W. Technology should be used to make farm labor more rewarding and enjoyable, but not to replace it.	**1 2 3 4 5**	**Farm labor should be replaced whenever possible by more efficient machines and other technologies.**
X.The abundance and relatively low prices of food in the United States are evidence that American agriculture is the most successful in the world.	**1 2 3 4 5**	**High energy use, soil erosion, water pollution, etc. are evidence that U.S. agriculture is not nearly as successful as many believe it to be.**

Scale Definitions
1=Strongly Agree with view in left-hand column
2=Mildly agree with view in left-hand column
3=Undecided
4=Mildly agree with view in right-hand column
5=Strongly agree with view in right-hand column

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