

Management Operations Review

University of Kentucky College of Agriculture

March 6, 2009

Committee Members

John Obrycki, Entomology Department Chair, University of Kentucky

Michael Judge, Director of Operations, Governor's Office of Agricultural Policy

Chris Shotwell, Associate Budget Analyst, College of Agriculture

John Trott, Retired Director of Research Farms, Purdue University

Steve Isaacs, Extension Professor, Agricultural Economics, University of Kentucky, Review Committee Chair

Summary

Development of this report was initiated by Dean M. Scott Smith in August 2008 to investigate the causes of chronic budget deficits in Management Operations. The committee met collectively and separately with many MO personnel and with other College faculty and staff with an interest and stake in MO. This evaluation was not intended to be a financial audit, rather an objective look at the structure, organization, and operations of MO as it relates to the research, education, and extension missions of the College.

This report is structured with an **Activities Timeline** to describe the procedures followed by the committee, a set of consensus **Observations** about MO, and some **Recommendations** for consideration by Dean Smith and the College Administrative team.

The committee would like to acknowledge the cooperation and support of many individuals in College administration, faculty, support staff, and especially in Management Operations.

Activities Timeline

September 4, 2008

First meeting of committee with Dean Scott Smith and members of the College of Agriculture administrative team was held on campus. Participants: M Scott Smith, Nancy Cox, Linus Walton, Susan Campbell, Jim Lawson, and all committee members (John Trott participated via phone).

Dean Smith presented an overview of Management Operations, its organizational structure, and the integrated support role of MO with other College units. Supporting documentation including the Dean's charge to the committee is included in the Appendix of this document.

Key issues identified by Dean Smith and the administrative staff included:

- Chronic over-budget status
- Inflation of maintenance costs
- Accumulation of deferred maintenance
- Development pressures in Fayette and Woodford counties

Dean Smith indicated that some cost recharge policies have already been implemented or are being discussed. These included repair and maintenance through the Farm Service Center and feed cost recovery for Animal Science.

Dean's charge: *My charge to your committee is to review the budget, management, organization and operations of M&O with the objective of recommending measures or processes to reduce this unit's budget deficit.* (Full memo from Dean attached)

October 6, 2008

Committee met to review available budget data and to tour Lexington area research farm facilities. Chris Shotwell led the committee through the seven Cost Centers that are assigned to Management Operations. Deficits for the previous four years have averaged \$581 thousand dollars. Evaluation of specific units is often difficult as Facilities Maintenance and Farm Service Center account expenditures are spread across the other site specific accounts.

Bill Peterson, Management Operations Director, led the committee on a tour of research farm facilities including the Farm Service Center, Coldstream, Main Chance, and Spindletop farms in Fayette County and the Woodford County Animal Research Center. The committee met with some employees and farm managers at each of the facilities.

November 3, 2008

Review committee traveled to the Western Kentucky Research and Education Center at Princeton to meet with faculty and staff and to tour the facilities. All constituency groups were given an opportunity to interact with the committee. The committee met with the Faculty/Staff Advisory Committee, toured the farm with Superintendent Donnie Davis and faculty member Roy Burris,

met with groups of Plant and Soil Science faculty, Animal Science faculty and staff, WKREC support staff and research technicians, and members of the Management Operations farm crew.

November 24-25, 2008

The review committee met with academic chairs and directors, faculty, and research support staff on campus for nearly two days. Bob Harmon, Animal Science chair; Dewayne Ingram, Horticulture chair; Bob Brashear, Ag Design and Construction director, Scott Shearer, Biosystems and Agricultural Engineering chair; and Nancy Cox, Associate Dean for Research met separately with the committee on the 24th. On the 25th faculty and research support staff from Plant and Soil Science and Animal Science met with the committee. Mike Barrett, Plant and Soil Science chair and Steve Higgins, Environmental Director for the College of Agriculture met individually with the committee.

December 15, 2008

The committee met on campus with several staff from Management Operations. David Smith, Superintendent of North Farm, Mike Peters, Superintendent of the Animal Research Center in Woodford County, and Bill Peterson, Director of Management Operations all met individually with the committee. Sandy Nichols, the Administrative Staff director for MO, joined the committee for lunch and a discussion of budgeting and human resource issues. Mats Troedsson, Vet Science chair; Karen McDowell, Vet Science faculty; and Lynn Ennis, the animal resource manager for Vet Science met with the committee. Plans to visit Eden Shale and Quicksand facilities on December 16th were postponed due to inclement weather.

January 9, 2009

The committee met on campus to review surveys that had been returned from MO employees and other interested faculty and staff. Twenty-one surveys were returned. Most were anonymous and some were quite candid.

The committee held discussions with Linus Walton, Associate Dean for Administration, and Scott Smith, Dean of the College of Agriculture.

A first draft of procedures, preliminary findings, and early recommendations was circulated among the committee for feedback and revision.

January 16, 2009

Committee members Shotwell and Isaacs travelled to the Eden Shale farm in Owen County and the Robinson Station facilities at Quicksand. Farm superintendent Shannon Rudd led a tour of the Eden Shale facility and described plant and animal research activities on the farm. An informal listening session was held with the farm crew. At Robinson Station, farm superintendent David Ditsch led a tour of the facilities, including the auditorium, and substantial discussion was held with Dr. Ditsch and Jackie Allen, the accounts manager for Robinson Station.

Observations

Communication

Communications issues were the most often cited problem. The chain of command, lines of responsibility, understanding of role and mission, levels and direction of supervision, reporting, and accountability channels are not widely apparent or well understood. This situation seems pervasive throughout the organization. If a desired answer is not attained, employees seem ready to appeal around the organizational structure. Again, this situation was apparent from the most recently hired farm worker through the Dean's office.

The most obvious and prominent example of this communications deficiency is the absence of overall or unit-based operating budgets. Managers and superintendents often told the committee that they spent till they were told to stop. Other examples were cited in the research development and delivery structure. A substantial amount of research is conducted through relatively informal and ad hoc communications between research staff and MO staff. Solid interpersonal relationships and committed staff rather than a clearly defined communications structure are to be credited for the quality of work that is achieved by Management Operations.

Timely emergency repairs and service were cited as a positive element of Management Operations. Again, this was attributed to the quality and dedication of the MO staff.

Authority roles at WKREC are still less than ideal. The Advisory Committee has helped. A common statement to the committee was, "It's better than it was." This implies that it is still less than ideal, but it appears that communication between faculty and MO staff at WKREC has improved.

Shared Mission

Another area of widespread agreement was the lack of understanding of Management Operations' role in the College. Again, this disconnect was evident throughout the College from farm crew through administration. This deficiency may be explained in part by the breadth of MO's role. The committee found ample evidence that Management Operations may mean all things to all people. Clearly, MO has been called on to do a lot: from design and construction, maintenance and repair, procurement, security, motor pool, mail delivery, moving services, farm work, and research. Additionally, the service area is literally state-wide.

Further, while the committee did not quantify this trend, MO staffing at many levels has diminished over time, and the research role of MO has been supplemented or replaced by research technicians employed by the departments. Where MO staff were engaged in research it was more likely to be in support of animal research than plant research. MO generally seems to play a supporting, not direct role, in plant research activities. Though not always the case, MO's role was usually identified as

preparing plots, cleaning up plots, producing feed, disposing of waste, and maintaining the physical facilities and appearance of the farms.

In fact, a common theme among MO staff is to “keep the farms looking good.” This was often expressed as “that’s what the Dean wants.” Dean Smith confirmed that he has made requests to improve the appearance of facilities, and the committee agrees with the often-stated notion that University facilities should exhibit a professional and well maintained appearance, especially for public events like field days and demonstrations.

With the proliferation of research technicians and support staff reporting directly to faculty the technical components of research seem to be accomplished. However, there seems to be highly variable communication between researchers and MO staff. Good personal relationships serve to expedite the flow of research activities, but lack of planning may lead to inefficiencies and unnecessary reassignment of machinery and labor.

Financial Issues

The crux of the financial problem is a lack of historical budgeting and no budget control. On numerous occasions, in response to questions about purchasing procedures, the reply was “if we need it we buy it.” A complete absence of budget accountability was noted because several MO managers observed that they had never seen nor ever been asked to prepare a budget. Management Operations has a decades-long culture of spending as needed with no predetermined constraints on spending.

It is difficult to say that the current situation is a budget deficit given the absence of a realistic budget. Rather, it may be more appropriate to say that the recent expenditure levels are a reflection of the cost to support plant and animal research and the cost to acquire and maintain the equipment and facilities of the College without any strategically planned prioritization at any level.

While the committee examined budget accounts, this review was not a financial audit of MO as a whole, or of any individual units. Some preliminary attempts were made to evaluate the cost of production for feedstuffs and crops produced for resale. However, due to some personnel changes during the course of the evaluation, this enterprise budgeting was not completed.

Farm research is an expensive proposition. Plant and animal research is land, labor, and capital intensive. Aside from excessive amount of cell phone costs, an increase in use of temporary STEPS employees, and significant equipment leasing costs, the committee was unable to identify large areas of seriously excessive operating or capital expenditures.

Personnel Issues

Personnel issues were cited in a variety of forms and fashions. There is a widespread perception within MO that MO is understaffed, particularly compared to previous staffing levels. This perception is not universal across the college.

Over recent years there has been a gradual decline in MO farm staff and an increase in departmental technician staff. Plant and Soil Science is using department-based technicians almost exclusively for their on-farm work plot work. Vet Science is not only using their staff, but has purchased mowing equipment for their own needs. Animal Science uses a combination of MO and department-based staff to assist with research needs. It is not readily apparent whether the reason for the substitution of departmental technicians for MO farm crew has been 1) decreased MO staffing, 2) the technical qualifications of MO staff, 3) the demands on MO staff for maintenance tasks, or 4) some combination of these reasons.

The constraints of a 37.5 (or even 40) hour work week and “use it or lose it” annual leave policies impose some inefficiencies that make comparisons with traditional farm labor problematic. Farm work and farm-based research are quite seasonal. The University’s HR rules and the budgetary considerations of excessive use of overtime create demand/supply imbalances during some seasons. At planting and harvesting times the greater demand leads to resource allocations that are not always optimal for time sensitive research. One response has been to employ more or larger equipment and more labor than might be needed on traditional farms where longer work hours are the norm during busy seasons. This response may also create slack resources during the less busy seasons, thus some complaints that some MO staff seem to be underemployed or used in “make work” tasks such as excessive mowing.

Some observations were also made in several contexts about a possible discrepancy in the equity of staff pay vs. responsibility. These concerns were not evaluated for any specific positions or personnel. Also, a perception persists that preventative maintenance or construction jobs tend to be “drug along” in an inefficient manner.

Resource Allocation

The University of Kentucky has available a significant quantity of relatively high quality land and generally good facilities to conduct agricultural research. Over 6,500 acres on seven units are available for plant and animal research. This does not include nearly 15,000 acres at Robinson Forest, Halls Prairie, Stewart Farm and an additional 2,482 acres in four 4-H facilities. In total, the University owns over 24,000 acres with about 9,000 acres under Management Operations responsibility. No inventory of buildings, facilities, fences, roads, or utilities was attempted; however,

it is clear that MO has been given a major responsibility in maintaining the physical infrastructure of the College.

Unit	Acres	Scope
North Farm	2,230	Equine, dairy, crops and soils
Woodford County (ARC)	1,500	Beef, swine, sheep, environmental
West KY Research & Education	1,278	Crops, soils, beef, and horticulture
Robinson Station (Quicksand)	75	Horticulture, mountain farming
Eden Shale	950	Beef, forages, tobacco
South Farm	100	Horticulture (managed by Horticulture Department)
Griffith Woods	391	Crop production
Total	6,524	

Additionally, Management Operations acquires, services, and maintains most mobile and fixed equipment and rolling stock for the college. The College Motor Pool was outside the scope of this review, but is a significant service of MO and with cost recharge procedures in place is not a budget drain on MO.

Currently each department is assigned a portion of land at various facilities for research plots and operates their assigned space as semi-autonomous research sites. This land seems to be sacred for its assigned use and any other use or rotation may be deemed off limits. This policy may limit research land rotation opportunities and limit farm staff from utilizing assigned land not in use.

Positive Notes

Management Operations staff are generally reported to be helpful and cooperative. Numerous faculty and staff reported that MO responds quickly and efficiently to special needs or emergencies.

Facilities are generally well maintained and the appearance of the farms is good. Appearance is perceived to be a high priority, particularly at WKREC.

Emergency repairs appear to be taken care of in a timely manner.

Universally positive feedback was received about Field Day preparation and delivery. It was noted that this is important to the educational mission of the College, and that field days are of high quality and well done. High marks were given to ALL Management Operations staff for their efforts to present the College and University in a positive light at Field Day events.

Recommendations

Mission

- The research/teaching/extension mission of the College needs to be explicitly incorporated into the core values of Management Operations. It is recommended that MO conduct a strategic planning exercise to address what can be described as an identity crisis. The role of MO needs to be clearly understood by every College employee. Currently, it is not understood consistently even within Management Operations. As part of this process consider what the name Management Operations communicates to stakeholders in the College.
- Develop a means of communicating research/teaching/extension needs to Management Operations. There should be a formal research work plan process that communicates the scope and timing of resources needed to fulfill the R/T/E needs. This planning process should take place well in advance of the field research season.
- Group meetings of faculty with similar research needs and MO staff could help avoid ad hoc application of resources on an “as needed” basis.
- A clear and united consensus should be reached concerning the balance of research that supports the mission of the College and production of plant and animal products whose sales generate offsetting income for Management Operations. A clear accounting of the variable and fixed costs of production of farm products (both for cost recharge purposes and to assess the profitability of sale of excess products) should be made.
- Develop means to quantify the contribution of farm-based research to the overall mission of the College.
- The Dean needs to make a clear and specific statement about the appearance level of the farms that is expected.
- When appropriate, MO staff should be included in planning, conducting, and reporting of research, including acknowledgement and attribution on published materials.

Organizational Structure and Management

- A complete evaluation and restructuring of Management Operations should be considered. It is doubtful that current management is able or willing to undertake changes necessary to address the serious concerns identified in this review.
- A succession plan should be developed to ensure that future managers are being trained within the organization to facilitate sustainability of MO services.
- Responsibility for research farm operations should be with the Director of the Ag Experiment Station and she be given both complete responsibility and authority to carry out this function.

- Farm superintendents should report directly to the Director of Experiment Station or their designee.
- Consider development of a faculty advisory group to facilitate communication and development of a shared mission of for MO and the research, teaching, and extension components of the College.
- Implement an orientation, training, and mentoring program for new MO employees to facilitate their understanding of their role of the research, teaching, and extension missions of the College.
- Remove Ag Design and Construction from Management Operations and create a direct reporting line to the Dean. However, it should be noted that serious flags were raised about the efficiency of work in ADC. It is further recommended that these work scheduling and efficiency concerns be addressed.
- Assign Motor Pool to budget office or to Farm Service Center
- Farm Service Center should be operated in a manner similar to the Motor Pool as a cost recovery center.
- WKREC may still require significant organizational restructuring. It is recommended that the recent changes toward an advisory committee be evaluated. With a farm superintendent, a farm manager, and an advisory committee it is not at all clear who is “in charge” or who reports to whom. This should be clarified.

Budget

- Develop a realistic budget for each unit and establish an expectation of accountability. These budgets can help determine the true costs of supporting the research/teaching/extension missions of the University with farm based research. This may require a detailed financial audit.
- Evaluate the budget personnel structure and staffing pattern and consider what budgeting activities need to take place at the unit level and what should take place at the College Budget Office level.
- Conduct a resource inventory of facilities and equipment and prepare a rolling, 5-year plan for anticipated replacement, renovation, and repair needs.
- Evaluate what research costs should be borne at the research project level and what costs are considered fixed costs for conducting research. Variable costs directly related to the research should be covered at the project level. The distinction between fixed and variable costs is standard procedure for commercial farming operations and the principles could be applied to research as well.
- Consider employing one of the recently retired UK Farm Analysis specialists (there are several) to conduct an enterprise budgeting analysis to determine the fixed and variable costs of production of animal and plant commodities produced on research farms. This would help address the net income questions surrounding sale of farm

products and could establish accounting and budgeting protocols to determine the cost of feedstuffs and services provided for research needs.

- Seek endowment opportunities to ensure long run funding. This may include disposing of some land resources to establish an endowment to operate remaining facilities.
- Communicate to the state legislature that agricultural research operations cannot be maintained without additional legislative and private support. This includes equine research.
- Make a decision on the future of the dairy unit.

Cost Savings

- Discontinue 40-hour week. There seems to be no advantage over the 37.5-hour week in terms of productivity.
- Consider flexible work alternatives including 9-month appointments, salaried farm crew, and flex-time to accommodate the seasonality of agricultural production.
- Recommend a review of all MO positions to determine pay equity. It is not clear whether this would best be done by University HR or internally by someone with knowledge of farm operations.
- Evaluate the necessity of having 6,500 acres of farms dedicated to agricultural research at seven separate locations and consider income opportunities ranging from commodity production to lease or sale of assets or excess property to generate endowment income.
- Reduce the number of times that fallow land is mowed. Five to seven times per year was reported and seems excessive. Consider alternative cover crops that do not require frequent mowing.
- Except for equipment to handle routine maintenance and repairs, consider getting out of the excavation business.
- Consider consolidating management operations at ARC and North Farm.
- Evaluate the economics of pausing or redirecting operations at Eden Shale and Quicksand. This might include leasing land/buildings. The regional political implications of this may exceed the cost savings that might be generated.
- Consider eliminating species focused research that is not adding significant knowledge to KY producers relative to their costs and contributions to the mission of the College. (i.e. sheep, swine, and perhaps dairy).
- Optimize farming operations (crop and livestock). Research, teaching, and extension are the top priorities, but optimizing farming operations should be considered to make optimal use of land, equipment and personnel resources and generate revenue. Carefully evaluate the amount of land used for crop production and to produce feed for and grazing for livestock. Are livestock numbers adequate, excessive, or deficient for conducting the R/T/E missions?

- Evaluate the economics of contract work throughout the system. Might it be economical to contract tasks such as grass mowing, waste hauling, excavation, construction, feed purchases, etc.?
- If feedstuffs were to be purchased rather than produced on the farms, consider the use of professional commodity purchasing and risk management resources.
- Move carefully with recharge/per diem policies. Departments/researchers may be the most logical source to add revenue to MO, but it may only be moving money from one pocket to another. If a recharge policy is fully implemented, it should be accommodated in the development of unit budgets. A recharge policy will create incentives for departments to prioritize research operations.
- Review the economics of establishing a mobile maintenance vehicle where routine maintenance can be done on-farm instead of having to bring vehicles and equipment to a central facility.
- Develop and implement a policy on the use of on-farm housing for employees.
- Closely evaluate expenditures for part-time labor, cell phone usage, and equipment leasing.
- Determine if University farms participate in federal or state commodity or cost-share programs when eligible.
- A utility/energy audit of all facilities is needed. The scope may include all energy and environmental resources. Recommend this be done by non-MO staff.

Attachment

Initial committee charge from Dean Smith

August 13, 2008

MEMORANDUM

TO: Steve Isaacs, Chair
John Obrycki Chris Shotwell
Mike Judge John Trott

FROM: Scott Smith

COPY: College Administrative Group

RE: Management and Operations Review Committee

Thank you for agreeing to serve on a committee to review the College of Agriculture's Management and Operations department. M&O has long provided essential services for College research, instruction and extension. Budget shortfalls have been a regular occurrence in recent years. Now, this review is made urgent by the escalation of these deficits beyond the College's ability to cover them. These budget constraints now threaten the sustainability of critical facilities off-campus. My charge to your committee is to review the budget, management, organization and operations of M&O with the objective of recommending measures or processes to reduce this unit's budget deficit.

Management and Operations is a large department with a complex budget and staffing patterns and a diverse scope of work. I do not expect your review to be comprehensive or intensive for all aspects of M&O. I recommend that you give the greatest attention to those issues most clearly and directly relevant to the budget crisis in M&O. For example, I expect that much of your effort should be directed towards the operation of off-campus farm facilities and the Experiment Station research mission they support, less so sectors like the motor pool that are contributing little, if any, to budget shortfalls. The following list of questions is offered to help determine the scope of your review, I do not request specific responses to each of them from the Committee:

Mission and services

- Is the mission of M&O understood by employees, departments, and College administration?
- Is M&O managed as a service unit? Does it consistently support the overall College mission?
- How is M&O perceived by College users and administrators? Is M&O seen to be efficient, service-oriented, and timely?
- Who are the users and in general are work and resource priorities established that reflect user needs?
- Do users receive clear communication about scope of services available, how work priorities are established, and scheduling work?
- If M&O continues to move further towards a service-for-fee model, what are possible impacts on the College mission?
- Are off-campus College facilities generally maintained well, considering the resource base available?

- Is the College a good steward of its lands and physical assets?
- Are human safety and health, environmental quality and animal welfare appropriately considered on the College's off-campus research locations?
- How can the Experiment Station optimize the use of the farm for academic functions while the other missions of Management Operations (motor pool, campus operations, extension) function optimally?
- Should the name of M&O be changed to reflect a service orientation, or should the functions be modified for more effective services?

Organization and structure

- For research farm operations, how does our organizational structure compare to our benchmarks and peers?
- Is the organization and structure of M&O appropriate and effective?
- Are reporting relationships to the College and academic leadership clear? Is communication of priorities and service needs clear and effective?
- Are work priorities clearly established and effectively communicated to staff? Are work priorities regularly and effectively analyzed?
- Within M&O, are staff effectively supervised and directed?
- Do the various sectors (e.g., Design/Engineering/Construction, shops, farm operations, motor pool) communicate and collaborate optimally?
- Is communication between the Director of M&O and unit supervisors effective?

Financial and budget issues

- Is it clearly understood by all M&O staff who is responsible for approving financial allocations, and reviewing and approving expenditures?
- How often is budget status reviewed and by whom?
- Are unit or location supervisors well informed of budget constraints and are they expected to share the responsibility for meeting budget goals?
- Is budget organization and account structure appropriate for effective management? Does account structure allow accurate assignment of real costs to operational units (e.g., by farm, location, etc.)?
- Do income producing operations (particularly crop production and sales) support or compete with the mission of M&O? Are the costs and returns of such operations accounted for in an accurate and meaningful way?
- Should more sectors of M&O (e.g. ADEC, farm shops) adopt the motor pool model and become recharge centers?
- As has recently been done with animal feed and vehicle maintenance labor costs, are there clear examples of costs that would most appropriately be transferred from M&O to users?
- Are there services or operations now provided by M&O that should be reviewed for possible elimination or out-sourcing?
- What are the most appropriate targets for reduction of expenditures by M&O?

My office will be contacting you soon to schedule a first meeting. Thanks again for your participation.