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UNITED STATES GOVERNMENT

Memorandum

IMPORTANT

9310141(3)
DD-AAC-586-D

: See Distribution

: TA/AGR, Curtis Farrar

: Summary Presentation by 211(d) Livestock Review Team, Room 1410 NS,
Friday, May 14, 1976, at 9:30 a.m.

Pat - Farrar
See Stock Report
Texas A&M (2/10/76)
make reference
2/10/76
DATE: May 10, 1976
CM

Roger Ernst, Director, USOM/Bangkok, headed a team to evaluate the progress and potentials of four U.S. institutions that have been recipients of A.I.D. grants made under Section 211(d) of FAA. The objective of these grants was to enhance the institutions' capabilities to address issues of animal agriculture in the developing countries, on a multidisciplinary basis, employing a systems approach. Attached is a copy of the review team's report.

A central conclusion from the review is that the Agency should organize itself for maximum effective utilization of the capacity that has been developed. To discuss this and other important conclusions from the review, Roger and his team have agreed to meet with key persons from the Regional Institutes, PFC and TID on Friday, May 14, 1976 at 9:30 a.m. in Room 1410 NS.

I would appreciate your designating appropriate persons from your program offices as well as your technical offices to participate in this meeting.

See LIVESTOCK RECORD
Texas A&M - 2/10/76

Distribution:

- AA/IA, Herman Kleine
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- Leonard H. Otto
- Donald L. Plucknett
- Philip M. Roedel



211(2) P. Linnestink

MAY 5 1976

Mr. Geiser
TAL/12
234515

May 4, 1976

The Honorable Curtis Farrar
Assistant Administrator
Agency for International Development
Washington, DC 20523

Dear Mr. Farrar:

This letter, the attached Summary of Observations and Project Design Summary constitute the report of your select committee to evaluate the progress and potentials of the four U. S. institutions which have been the recipients of AID grants made under Section 211d of the Foreign Assistance Act.

The object of these grants, bulking around \$1.9 million in the 1972-77 time frame was to enhance the institutions capacities to address issues of animal agriculture in the developing countries on a multi-disciplinary basis, employing a systems approach.

Our report has been developed to focus on key problems and options, but we have also included our observations on each of the institutions. Our suggestions for the future will need to be read, of course, in the context of other developments materially affecting them but which are beyond this committee's cognizance and competence, especially overall AID priorities and funding levels, and the course to be pursued in implementing Title XII of the Foreign Assistance Act.

The principal conclusion we have reached is that the grantees have made generally good use of the funds available and substantially done their part and their best in achieving the goals assigned. Variations in performance were noted, especially reflective of the innate strengths and sizes of the institutions, and of the level of commitment at the departmental level to international affairs generally and of the outlook of the governing bodies of the respective institutions. Also, it is not clear that the results achieved in individual disciplines, in terms of institutional development and staff growth through these grants, would not have been substantially achieved through the normal AID-country funding program route, but this is not true in regard to developing a systems interdisciplinary tool where special arrangements are needed.

We also are constrained to note that the "consortium" was a highly contrived vehicle and that the absence of a "client" and of any penalty for inaction make its continuation highly suspect in theory and in

The Honorable Curtis Farrar
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practice, in our view, and in that of at least three of the institutions. However, the systems approach remains valid and demands an institutional structure which does not appear to be within the present arrangements.

On AID's part we find the performance less acceptable. No long, or even short-range programs have been made available for the utilization of the capability being developed at these four institutions. It is recognized that no firm commitments or funding can be made beyond AID's present authorized budgeting and programming period. Nevertheless, consideration must be given to find ways and means of utilizing the capability resulting from the 211d grants on a continuing long-term basis. Definite plans for the utilization of this capability are essential to carrying out the objective of the 211d grant programs, and this concept will be equally valid when Title XII programs are implemented. Important assumptions set forth in the logical framework were not borne out nor was action taken with due timeliness, diligence, and executive vigor at the policy level to bring about multiple connections between the "consortium" and potential client governments, or interested international agencies.

Finally, unless action is taken in the next 12-18 months to create functioning links between the four institutions (and elements thereof), collectively or severally, and LDC's program needs, the capabilities now available on the campuses will inevitably attrit, or more likely, be diverted and the investment vitiated in large part. Thus we recommend prompt action to identify LDC and IFI requirements for these talents, and steps to align work assignments commensurate with the capabilities. The institutions and the consortium should be asked to provide a written description of their capacities for this purpose.

We do not propose any extension of the 211d grants, and in fact the productivity of the FY'77 expenditures will depend materially on actions to line up "real world" assignments to start in FY'77 or '78 at the latest. This brokerage operation should be scheduled for an early date and involve direct contact with LDC authorities and appropriate intermediate institutions (e.g., CIAT, ILCA) immediately after identification of project requirements by those responsible for such action. In the main these will lie in the directions of training, institution building, analysis and research, problem identification and illumination rather than operations and implementation in the area of animal agriculture. However, demonstration-size "outreach" activities could be undertaken by the several institutions in their respective areas of qualification. In downstream country projects we suggest that AID not overlook the capacities of the U. S. private sector and foundations which can neatly complement those of the 211d grantees, especially in enterprise manage-

The Honorable Curtis Farrer
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ment and profit maximization at all levels through exploitation of research results and modelling efforts. We also enclose a note on the "Role of Systems Analysis in Animal Agriculture" and recommend that AID continue to support this approach.

We appreciate the opportunity afforded us to be of service and hope this report will be of more than transitory or sole purpose usefulness. We also want to express our thanks to the many who assisted in our work, some of whom are listed in the enclosed "Note on Review Methodology."

Sincerely,

Roger Ernst, Chairman

Michael N. Galli

H. L. Wilcke

R. O. Wheeler

/plh

Enclosures

. SUMMARY OF OBSERVATIONS ON
211D GRANTS TO STRENGTHEN THE CAPABILITIES IN
RUMINANT LIVESTOCK DEVELOPMENT PROGRAMS FOR THE TROPICS

I. Our Interpretation of the Objectives of the 211D Grant:

- A. To further develop expertise in seven disciplines in four universities for work in LDCs in animal agriculture.
- B. To train additional staff and graduate personnel in the necessary disciplines.
- C. To develop biological and economic models to be useful in evaluating the ruminant industry and any changes in inputs.
- D. To test the ability of these four universities to work as a consortium.

II. Attainment of Objectives:

- A. All four universities demonstrated improvement of the level of expertise in the specific disciplines involved in that university, such as:
 - 1. Additional data had been collected, such as descriptions of diseases and parasites and some work on method of control.
 - 2. Evaluation of forages.
 - 3. Data on sociologic status.
 - 4. There is evidence of stronger commitment to LDC programs from individuals than from institutions.
 - 5. While individuals with expertise have been identified, and willingness to accept assignments has been evidenced, there is still a problem of availability of personnel on short notice or for long-term projects because of commitments to their primary responsibilities to the university.
- B.
 - 1. Graduate students, both U. S. and foreign, had accomplished thesis work on the problems involved, and degrees had been earned (M. S. and Ph.D.).
 - 2. Staff had moved to other employment and had been replaced by other staff members, thus extending the effect of participation to other institutions.

- C. 1. A biological model, though deficient in the areas of disease (and parasite) and forage inputs, has been developed and has been tested in a workshop with Guyanese participation in Guyana.
- 2. An economic model has been developed utilizing some of the inputs from the biological model and this has also been tested in the same workshop as 1.
- D. The four universities have indicated some advantages in working as a consortium and have derived benefits from this experience. However, there have been some problems which are more or less inherent in this system, such as:
 - 1. Delays in accomplishing objectives because of unexpected delays in accomplishment by individual members of the consortium, thus delaying other phases.
 - 2. Difficulties in communication or lack of communication.
 - 3. Lack of centralized authority and leadership.

III. Observations on Institutions:

A. Tuskegee:

- 1. Spirit and approach is different ("overcome").
- 2. Training capacity at practical level, humanistic.
- 3. Narrowness of administrative base and capacities.
- 4. Integrated "outreach" to rural development activities.
- 5. Finds collaboration/consortium useful.

B. Purdue:

- 1. Well organized and possessed of multiple capacities amenable to meeting requirements.
- 2. Prevailing commitment to international affairs.
- 3. Strengths in analysis, training, design of policies and programs.
- 4. Alter consortium to business arrangement.

C. Texas A&M:

1. Narrow conception of intent and involvement by veterinarians and some higher administration levels.
2. Well versed capability in veterinary medicine but not in relation to the consortium.
3. Limited acceptability of foreign students.
4. Consortium acceptable but not favored.
5. Strong interest and abilities by animal scientists in the systems approach.

D. Florida:

1. Strong overseas record of action in tropics.
2. High quality and capacity, in forage/animal nutrition analysis on specific species, but weak in a systems sense.
3. Good integration of graduate students from LDCs.
4. Weak participation in consortium; do not continue as at present.

E. AID:

1. Poor skills in articulating goals.
2. Neglected to develop and provide a strategic framework for relating animal agriculture to agricultural, rural, and national development.
3. Clumsy, inattentive, and tardy in opening paths for relationships with LDCs.

IV. Comments on Consortium:

- A. Concept was attractive but in practice self-limiting and poorly implemented, e.g., no formal executive body empowered to make decisions and monitor performance.
- B. Results in terms of institutional development were not especially stronger than would have been the case through country program funding.
- C. Consortium training results in spin-offs of graduate students and scientists who multiply the expertise in other areas.

- D. Loose arrangements were not unsuitable to clientless situation but quantification of goals was weak (e.g., x graduate students trained; y LDC'ers trained; z monographs produced; n problems identified; p solutions proposed).
- E. Costs per time unit were in line with typical profile, but developmental results were lower on a cost-benefit basis.
- F. Weak interchange capacity and remoteness of "other" disciplines makes collaboration sporadic and interruptible.
- G. 211D funds should have (and could still) fund a full-time university based AALGU project director.

V. Comments on Goals:

- A. Formulation was general. Lack of specific, well-defined goals results in excessive concentration on details which may or may not be necessary to the solution of problems at the desired level.
- B. Goals were not tied to pervasive aims of Foreign Assistance Act:
 - 1. Income distribution and growth for poor.
 - 2. Employment generation and opportunity for poor. Thus, consortium efforts not so aimed.
- C. Critical issues which were not included in the objectives:
 - 1. Mixed farming with crops and animals.
 - 2. Animal power as small farmer vulnerability.
 - 3. Human nutritional benefits and cost availabilities.
 - 4. Differentiation between animals kept for no useful purpose and those intended to provide power, income, or employment.
- D. The verifiable indicators were off track--especially as aimed at consortium-LDC relationships.
- E. Absence of a strategic setting, at least by area if not by country within which to design livestock development activities (toward which consortium talent development work would have been aimed), reduced effort effectiveness and potential output to chance.

- F. The details of the systems concept and all of the interactions were not understood before actions were initiated, nor were actions laced back into the system matrix with sufficient emphasis on the importance of the time element to attainment of goals within the grant period.

VI. Comments on Assumptions:

A. Goal level assumptions:

1. There is only limited evidence that either AID or LDCs properly regard animal production as a key to providing nutritional needs for undernourished segments of society. This may be an ethically interesting idea, but mostly livestock development is approached from an export earnings standpoint or as an overall GDP growth element. Income growth/elasticities correlate generally with increasing expenditures on protein/meat-fowl/fish products but the income growth comes first; and in most typical export oriented schemes incremental income does not flow back to the herder-owner proportionately.
2. Yes, application of modern practices can result in herd productivity, but not demonstrably in income growth or employment generation for the poor majority. These grants were established before coherent policies were developed for generating livestock production strategies.

B. Assumptions relating to purpose:

1. These are highly questionable and sources are not cited. In the abstract, they are in the "should" category, perhaps if the consortium has a product to "sell" that appeals; thus, the clients will act in accordance with the assumptions. These assumptions are biased and based on a rationality not in keeping with reality. Institutional development would need to assume only (mainly) low capital availabilities and inputs for livestock development--e.g., use of land not otherwise committed.

C. Assumptions regarding outputs:

1. These assumptions are repetitious, platitudinous, and the comments under B above apply, except for nos. 3 and 4. Three cannot be assumed; in large part to do so would be tautology--assume what one wants; in fact, the grants are to see if the four institutions can adapt to primitive situations. As for number four, the picture is very mixed, and in the present case, AID has done poorly in effecting introductions.

D. Assumptions regarding inputs:

1. These are highly vulnerable. Some institutions have manpower, others have not; some can recruit, some not (salary levels). Interest in a systems approach will depend on the client enforcing that as the criterion for action--otherwise departmental and disciplinary compulsions will rule in the main.
2. Contacts with the LDCs are weak and sporadic; AID has not provided the "support system" or facilitated "essential contacts" in a resultful way.

VII. Comments on Relationships:

A. Among four grantees:

1. All four participants recognized the beneficial effects of the cooperative effort.
2. Occasional, sporadic, leisurely, unimpeded--i.e., no time pressures, money flows irrespective.
3. Some habits of collaboration but fairly superficial, transitory, and surely not institutionalized; but they might endure on the basis of professionalism and the desire to acquire more knowledge of the technique of modeling.
4. Interest is present in developing relations.

B. Between four grantees and international agencies:

1. Not much in evidence beyond pre-existing professional interest areas, or as developed from Guyana operations (IBRD link, CARICOM) or through other "normal" contacts with CIAT, IBRD, FAO, et al.

C. Between four grantees and AID (and consortium and AID):

1. Amicable but not much energized.
2. Labored procedurally.
3. Regional bureaus excluded except on accidental, historical, or individual basis.

- D. Relationships between four grantees (consortium) and LDCs:
1. Limited, not expanding in consortium context.
 2. No system evident for setting up or exploiting capacities.
 3. No effort made to disseminate information on "new" strengths to LDC planners.
 4. AID should take leadership role in identifying areas where consortium talent should be utilized.

VIII. Observations on Modalities and Options:

- A. Continue consortium as is:
1. Apparently the members do not favor this, nor is it warranted operationally, especially if no further 211D grant increments are to be made available.
- B. Continue consortium but convert to a legal entity:
1. The usefulness of this option is questionable, and its political feasibility is questionable--in terms of the interests of the four universities.
- C. Open up the consortium to varied partnerships (not necessarily limited to universities) according to need, operating with a small secretariat. This prospect warrants consideration within the context of Title XII funding.
- D. Mix country program/project funds with research/ID grants (ratio of 5 to 1?):
1. This has much appeal especially as a way to "solve" the slots question for the universities. There is a parallel to USDA funding of personnel on campuses.
- E. Ignore consortium and "offer" requirements on a "bid" basis, assuming consortium members can bid more effectively than others due to 211D infusions, individually and collectively.

IX. Observations on LDC Needs and Prospects:

- A. Early actions need to be taken:
1. Greater effort is needed to utilize the talents of universities in the definition of the place of animal agriculture and livestock in the development sequence and strategies of areas and countries (Title XII LGUs should be involved).

2. Extracting of country livestock development concepts from AID five-year Development Assistance Program submissions for interaction with the consortium.
 3. Review of FY'78 ('79) country budget proposals to pinpoint early needs.
 4. Alignment of U. S. LGU (consortium) talents with these needs.
- B. LDC needs will likely cluster:
1. Assistance in design and planning of livestock development programs.
 2. Training technical specialists in livestock/animal operations.
 3. Adaptive research and demonstrational undertakings.
- C. Actual expected areas of interest will be both limited and demanding--limited in number as a function of funding priority at the field level and demanding in terms of imagination and effort by U. S. institutions in responding to those demanded.

X. Recommendations:

Given the need and importance for the utilization of the capability of universities participating in this 211D program, the Agency should, with TAB leadership, maximize effective utilization of this capacity. This leadership would seek to initiate the following action:

- A. Mount a continuing effort to inform regional bureaus, field missions, other donor agencies of the universities' capability to design, plan, implement animal agriculture development programs.
- B. Determine mechanisms and formulas for universities to maintain staff for field collaboration and prompt servicing of field mission requests.
- C. Establish contract guidelines that assure adequate consideration of the 211D institutions in the participation of contracts planned in animal agriculture.
- D. Take appropriate steps to make effective utilization of the universities' capacity to review, plan, design, and implement animal agriculture programs during the pre-project phase.
- E. TAB take appropriate actions to direct the FY'77 (final year) of the grants toward proximate needs in LDC.
- F. That consideration be given only to the extension of the grants to permit judicious use of the original grant funds.

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Texas A&M	est 2675	931-11-130-143
Univ. of Florida	est 3524	931-11-130-144
Purdue Univ.	est 3673	931-11-130-142
Indiana Inst.	est 2676	931-11-130-141

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: 72 to FY 77
From FY: 72
Total U.S. Funding: \$1,293,000
Date Prepared: 1/1/77 (four contract)

Project Title & Number: Livestock Production, Nutrition and Systems Analysis

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS				
<p>Program or Sector Goal: The broader objective to which this project contributes: The objective of these grants are to create, and strengthen competence of US Universities to deal with livestock development in LDC's. The consortium grants will develop in depth response capability by providing expertise in a wide range of disciplines required by LDC's.</p>	<p>Measures of Goal Achievement: Establishment of the Guyana Livestock Computer Model provides a system approach to livestock development in LDC's. Contacts between each of the Consortium institutions and a number of LDCs provided materials for program designs for livestock development under tropical conditions. Formal contacts for continuing information flow from LDC's.</p>	<ol style="list-style-type: none"> 1. Published reports by consortium members describing development in model construction, training seminars, published scientific and technical papers related to the project in foreign and domestic journals. Expression of interest on the part of USAIDs and foreign governments in Consortium services. 2. Numbers of LDC professionals contacting Consortium institutions or related TA/AGR research projects 	<p>Assumptions for achieving goal targets: AID and LDCs regard improved animal agricultural production a vital part of supplying essential food nutrient requirements to a vast undernourished segment of society. Application of modern husbandry, nutrition, and health practices should result in a substantial increase in herd productivity.</p>				
<p>Project Purpose: To develop a total systems approach to livestock development in the tropics to avoid piecemeal approaches which do not permit livestock herds or flocks to achieve their potential productivity. To identify specific constraints to productive livestock development a design advisory programs to overcome them on multi-disciplinary approach.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status. Availability of the Guyana Livestock Model. Collection and collation of data inputs from other LDCs that will be developed as replications of the Guyana Model with modifications dictated by differing conditions. Improved analytical capability of participating LDC professionals and technicians.</p>	<ol style="list-style-type: none"> 3. The number of pertinent analytical procedures completed by LDCs and the number of LDC professionals and technicians involved in activities which are direct outgrowth of the project. 4. Inputs into existing TA/AGR/CIAT research projects in disease control, nutrition, and beef production programs. 	<p>Assumptions for achieving purpose: USAIDs, LDCs and Regional Bureaus recognize a need for national livestock development programs to 1) increase availability of high quality protein; 2) utilize land resources suitable only for animal agriculture production and; 3) eliminating waste in the transport and marketing of livestock from growing areas to consuming areas.</p>				
<p>Outputs: Collaboration established between professionals of LDCs and Consortium in 1) analyzing problems related to livestock production 2) collection and collation of data on nutrient analysis of feeds and forage, health conditions in the tropics, 3) determining communication facilities and processes for information dissemination and 4) defining marketing problems. A computerized model of the Guyana Livestock Industry has been developed as a reference for studies in other LDC's.</p>	<p>Magnitude of Outputs: Increases in the availability of data from a wide range of LDCs in four regions of the tropics for a systems approach to livestock development. Training of professional and technical cadres capable of implementing a systems approach to livestock development.</p>	<p>programs.</p>	<p>Assumptions for achieving outputs: Regions Bureaus and USAIDs will recognize; 1) the need for improved protein nutrition; 2) the vast potential for high quality protein production from land resources not suitable for crop production; 3) innate capacity of US institutions to adapt technology to primitive situations 4) the capacity for AID and LDC governments to mobilize technology for productive enterprise.</p>				
<p>Inputs: LDC and U.S. professional support and participation for numerous meetings, shortcourse, training seminars on livestock development. Management and professional inputs by TA/AGR livestock unit.</p>	<p>Implementation Target (Type and Quantity)</p> <table border="1"> <tr> <td><u>Budget Year</u></td> <td><u>\$000 Amount</u></td> </tr> <tr> <td>FY 1972 - 77</td> <td>\$1,895</td> </tr> </table> <p>For four University 211(d) projects, each extending over five years.</p>	<u>Budget Year</u>	<u>\$000 Amount</u>	FY 1972 - 77	\$1,895		<p>Assumptions for providing inputs: Involved institutions have 1) the established manpower (or it can be recruited) 2) the academic and research interest to pursue a systems approach to livestock production; 3) the essential contacts with LDC institutions to make the systems approach function. That AID/W through TA/AGR will maintain a support system that can respond to the requirements of USAIDs, Regional Bureaus or LDC governments.</p>
<u>Budget Year</u>	<u>\$000 Amount</u>						
FY 1972 - 77	\$1,895						

THE ROLE OF SYSTEMS ANALYSIS IN ANIMAL AGRICULTURE

The following is presented for the purpose of expressing a viewpoint on the role of systems analysis in solving research and development problems associated with animal agriculture. Although it is intended to relate to the 211d consortium effort, it does not address the issue of institutional building nor should it be considered as representing a view that differs substantially from the general team report. It is intended to provide a perspective of a professional agricultural economist view from the vantage point of being directly involved for nearly 20 years in problems, both nationally and internationally, of animal agricultural production and development.

One must consider the dilemma faced in attempting to weld together the knowledge by many of the top scientists in the fields of plant science, animal science and the economic fields. In the first instance, these scientists have by tradition been well versed in the goal to decompose complex situations into smaller components in order to understand them. In other words, sharpen the focus, narrow the problem, specialize to the n-the degree and keep hammering away until every basic issue is resolved. This leads to professional animal scientist journal articles like "Fine Structural Localization of Adenosine Tri-Phosphatase in the Epithelium of the Rabbit Oviduct." The success of the approach in advancing knowledge is well known and appreciated. However, knowledge about individual components has generally been insufficient to attack the broader questions and issues necessary to advance animal agriculture in a more general development sense. This is certainly not claimed to be unique to animal agriculture problems.

To those of us who have for several years attempted to nudge the various disciplines toward a more integrated cross-discipline view of animal agriculture problems, the "systems analysis" approach is viewed as absolutely essential if major gains are to be made over the next ten to twenty years. The fact that the U. S. Meat Animal Research Station at Clay Center, Nebraska, and the new International Livestock Research Center in Ethiopia are using this tool in developing their research strategies and problem identification speaks to the contemporary view by leading scholars and institutions that the approach has merit.

Although the "systems analysis" approach in animal science was emerging prior to the 211d grants, there is evidence that would suggest that these funds have been instrumental in broad advances in this area. If one screens through the professional journals, experiment station publications, etc., and is aware of those who have been involved or influenced by some of the consortium scientists, it would be difficult to argue against the fact that the 211d funds have had a noticeable and important impact.

The need to specify the interrelationships between the various disciplines in order to design realistic development programs for the small holder is only one of several types of problems where

systems analysis can be effective. Granted, the consortium concentrated on beef cattle and generally ignored issues such as the potential for the small ruminant, the relative importance of livestock in mixed crop agriculture, the risk and uncertainty aspects of animals to the producer, etc.; these types of activities can be added, analyzed, and potentials evaluated if the effort continues. The opportunity to capitalize on the effort to date and expand the effort is a more meaningful framework for development investment level decision making remains open but would require additional efforts and investment.

The importance of public agencies to recognize how science is moving, to assist in the advancement of technology and in fact be a part of using the most contemporary methods, as is the case in supporting the systems approach, in problem solution, speaks highly of the US/AID grant.

Texas A&M (April 26 & 27)

J. C. Calhoun, Vice President for Academic Affairs
H. O. Kunkel, Dean, College of Agriculture
G. C. Shelton, Dean, College of Veterinary Medicine
Paul Creech, Director of International Programs
W. S. Pope, Assoc. Dean of Agriculture
T. C. Cartwright, Animal Science Department
F. D. Maurer, Director, Institute of Tropical Veterinary Medicine
G. S. Trevino, Director, Institute of Tropical Veterinary Medicine
T. M. Craig, Institute of Tropical Veterinary Medicine

University of Florida (April 29 & 30)

K. R. Tefertiller, Vice President for Agricultural Affairs
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