

June 5, 1975

6p.

Dr. Herbert Carter
Coordinator of Interdisciplinary
Programs
Chairman, PRU, 211(d) Program

Subject: Year-end Progress Report from the Chairman of
the Management Committee

We are just approaching the first anniversary of the inception of the 211(d) Grant. As we review our stewardship of the funds provided under the grant, we should not forget the initial uncertainty that existed in the minds of some as to how we should best use those funds. There was general agreement that we should not respond to an uncoordinated group of "international" proposals generated by diverse and fragmented groups around the campus. The main source of concern was our recognition that the development of natural resources has traditionally been the domain of the private sector of our economy, and there was no real prototype for universities entering into this sector, at least none that was obvious.

On somewhat closer inspection, however, it became evident that our task was, in many ways, quite close to the role that the agriculturists have played in their many extension and other advisory duties over the years. These activities have been carried out both at home and abroad: the local activities being typified by the Extension Service with which we are all familiar; the international activities are characterized by the Brazilian and other programs that the College of Agriculture has engaged in for many years. On further inspection, the international programs in the College of Agriculture were found to be very much the kind of thing that we were striving to do in the area of natural resources development.

This is the base from which we have built, and, in view of the self-effacing comments that some tend to

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make when asked what has been done in the 211(d) Program, I feel that it is incumbent upon me to describe where we have gone from that point. First, it was recognized that we did not have an on-campus interdisciplinary response capability in the natural resources area. We did have, however, several individuals and groups that have probed, in a dedicated and conscientious way, individual aspects of the natural resources development problem. A typical example of this is the cooperative program undertaken by the College of Mines and the College of Architecture in the renovation of tailings areas south of Tucson. Certainly, activities of this type must be considered an important component of a truly complete natural resources development capability.

What we did not have, however, was a group of identified individuals who were prepared to cover the span of a development program, beginning almost immediately after the identification of the resource itself, and carrying forward the planning for the development of that resource to the establishment of a stable, mature community supplying needed goods, services, and community activities. The questions that arise as to what happens when that natural resource body is finally depleted, and the individuals who have depended upon it for their livelihood must look elsewhere or modify the thrust of their community life, are also a part of the complete program plan.

One further comment regarding the international response capability in the College of Agriculture: We feel that we had much to learn from that activity, and as a result, we rather deliberately tried to pick the brains of the individuals who had experience as members of the teams they had set up in the past. Certainly, the most important individual in this aspect of our program has been Dr. Matlock. The insight that we obtained from Dr. Day upon his return from Turkey and Kenya was also quite helpful to us. Thus, when the opportunity to investigate the land development activities in the arid and semi-arid parts of Kenya developed early this year, we resolved to take the maximum advantage of the situation. Three social scientists accompanied the agricultural team. The agricultural group under Dr. Barnes

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knew what they had to do, and certainly knew how to go about doing it. On the other hand, the social science increment of the team, consisting of a political scientist, an economic anthropologist, and a social geographer were operating in a relatively unfamiliar framework.

The group approached their problem with good humor, a feeling that they had much to learn from each other, and the expectation that the composite of their joint efforts would be greater than the sum of any individual's contribution. In discussing the results of this investigation with Dr. Barnes, it is clear that this team was a prototype of the organizations needed for the natural resource development field. Further, three faculty in the social sciences are now experienced in and much more understanding of the demands that must be met as we launch into other activities of a similar nature.

At the beginning of the program, we received many unsolicited proposals from around the campus, both for the support of individual studies here on campus, and also for the support of travel to foreign countries. The uncoordinated nature of these proposals left us with a feeling of unease and an almost certain conviction that we would be unable to measure adequately our accomplishment if this was indeed the way we proceeded. Accordingly, we discouraged that tack, and did not respond favorably to these proposals. We preferred to wait until we had a more complete understanding of what it is that we really should do.

Since then, within the Research and the Education and Training Committees of the Program, there has evolved two concepts for interdisciplinary studies whose prime objectives are to evaluate our capability to carry out natural resource-oriented program investigations in foreign countries. These program concepts have been examined in detail, and have been judged to provide a significant training ground and evaluation activity for us. The first of these involves the planning and programming the development of a natural ore body of copper in northern Sonora. There are many similar activities that have taken place on a traditional basis both here in Arizona and at Cananea, in Sonora, and there are ob-

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vious problems and difficulties associated with that kind of development. The proposal was generated largely by those individuals who had a leading role in the tailings renovation program south of Tucson.

We will proceed with this project forthwith. We expect to field a team of six or seven individuals drawn from a wide range of disciplines, ranging from geology to architecture and anthropology, to investigate what the long-term implications of development of that resource would be and how it could be carried out in a way that provides the most rational environment to the individuals in the vicinity. A prime objective of this study is to evaluate our ability to do the resource development planning. It will be the responsibility of the Management Committee to take an active part in this evaluation. This project, based as it is on a natural evolution from the agricultural activity described earlier, is considered the most likely way for us to approach the natural resources development program.

The second study is a somewhat more difficult one to describe. In the vicinity of Durango, Mexico, a large area has been set aside by the Mexican Government as a combination wilderness and low population zone preserve. The planning of how to implement this objective is just beginning, as part of the Man in the Biosphere Program. This activity represents the other end of the natural resource development scale from the mining concept described earlier, for here we are concerned with the stewardship of natural resources in a way which provides the availability of a continuing rather wild, or at least remote, land zone, and yet allows for the harvesting of the fruits of that area in a careful, consistent fashion. Indeed, it almost seems to be the "land of many uses" concept that our U.S. Forest Service has developed over the years, only involving a much broader range of what these many uses might constitute. Here we are a little uncertain as to the proper approach.

The caution that has been criticized as
Committee has recommended
in this

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ieneced member of the faculty look into what would be required and what the expectations from a program of investigation in this area should be.

Both of these activities represent a serious attempt to discharge the responsibility of the Management Committee under the terms of the grant in a way that will allow us: (1) to develop tools whose capabilities and limitations we understand and appreciate; and (2) to investigate the natural resource development capabilities in arid and semi-arid areas of less developed countries in a rational and consistent way. Our criteria for success in this pursuit must be defined with care. We are still working in a rather imprecise area, and must remember that the definition of success depends upon the point of view of the individual who is doing the defining.

There have been several other significant activities in the 211(d) Program this past year. We continue to resist the pressures to disperse our resources among uncoordinated efforts. We are now beginning the investigation of possible linkage countries or areas in Latin America. Finally, the 211(d) Program has been the vehicle by which a respected and competent group of faculty have brought to the attention of the Administration of the University, both at the level of the Deans and the level of the senior executives, the need for precision in the definition of the role of international activities in the faculty reward structure at the University of Arizona. Specifically, proposed criteria for evaluation of international activities as a component in the Promotion and Tenure decision have been written and forwarded to the Executive Vice-President for his consideration. Recognition that international activities are almost of necessity interdisciplinary is basic to this recommendation. Certainly, those activities that relate to resource development are.

In conclusion, then, we have focused our attention on a careful and considered evaluation of the practices in which we must become most proficient in order to meet our responsibilities under the grant. We have directed our activities within the community of the University to a definition of those most important reward considerations that must be always kept in mind if one is to make

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such activities attractive to, and indeed consistent with, the long-term aspirations of our better faculty. This AID Program is one that does and will continue to require a high degree of motivation and innovation. Thus it is one that will not only call upon the experience of the sage old hands around campus, but it will also require the innovation, the dedication, and indeed, the impatience of our younger, more spirited faculty. To lead these individuals down the road into AID activities (a course which certainly must appeal to their more altruistic feelings), without providing a basis for these activities to be recognized in the University community, would be a most serious personal disservice to them.

I hope and trust that our activities in this area can be carried forward in a way which will distill from our diverse concerns a newer and more complete understanding of the role and the challenge of a great university.

Robert L. Seale
Chairman
Management Committee

PD-AAC-606

9310159 (5)

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AID 1350-1X (7-71) PIO/T	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES	1. Cooperating Country WORLDWIDE 3149159	T. Page 1 of Pages
		2. PIO/T No. 931-11-120-159 73-	3. <input checked="" type="checkbox"/> Original or Amendment No. _____ 8p.
		4. Project/Activity No. and Title Integrated Natural Resources Planning and Management of arid and semi-arid Lands. University of Arizona	

DISTRIBUTION	5. Appropriation Symbol 72-11X1023		6.A. Allotment Symbol and Charge 402-31-099-00-34-41		6.B. Funds Allotted to: <input checked="" type="checkbox"/> A.I.D./W <input type="checkbox"/> Mission	
	7. Obligation Status <input checked="" type="checkbox"/> Administrative Reservation <input type="checkbox"/> Implementing Document				8. Funding Period (Mo., Day, Yr.) From 5-31-74 to 5-30-79	
	9.A. Services to Start (Mo., Day, Yr.) Between May 20, 1974 and _____				9.B. Completion date of Services (Mo., Day, Yr.) May 30, 1979	
	10.A. Type of Action <input type="checkbox"/> A.I.D. Contract <input type="checkbox"/> Cooperating Country Contract <input type="checkbox"/> Participating Agency Service Agreement <input checked="" type="checkbox"/> Other 211(d) Grant					
	10.B. Authorized Agent AID/W					
	Estimated Financing		(1)	(2)	(3)	(4)
	\$1.00=		Previous Total	Increase	Decrease	Total to Date
	11. Maximum A.I.D. Financing	A. Dollars	--	\$1,045,000		\$1,045,000
		B. U.S.-Owned Local Currency				
	12. Cooperating Country Contributions	A. Counterpart				
B. Other						

FUNDS RECEIVED BY
[Signature]
 5/21/74
 POSTED

13. Mission References	14. Instructions to Authorized Agent This Institutional Grant made under Section 211(d) of the Foreign Assistance Act of 1966 as amended is designed to strengthen and expand the University of Arizona capabilities in multiple use management of natural resources; - land, water, wildlife, forest, minerals and energy assessments and mitigation of secondary environmental effects associated with natural resource development. Specific details are described in the attached proposal.
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15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.	
A. The specifications in the scope of work are technically adequate	B. Funds for the services requested are available
C. The scope of work lies within the purview of the initiating and approved Agency Programs TA/OST Bill Long <i>[Signature]</i> 5/21/74	D. <i>[Signature]</i> 5/21/74 HCL/5/21/74 Miloslav Rechcigl
E. TA/OST Henry <i>[Signature]</i> 5/21/74	F. <i>[Signature]</i>

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to	17. For the Agency for International Development <i>[Signature]</i> J. K. McDermott	18. Date of Signature
Signature and date:	Signature:	
Title:	Title: Director TA/RIG	

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D. C. 20523

*file
211(d)
v. Craig*

OFFICE OF
THE ADMINISTRATOR

MAY 31 1974

Dr. John P. Schaefer, President
University of Arizona
Tucson, Arizona 85721

Dear Dr. Schaefer:

I am pleased to inform you that pursuant to the authority contained in Section 211(d) of the Foreign Assistance Act of 1961, as amended, Grant No. AID/ta-G-1111 in the amount of \$1,045,000 is hereby made to the University of Arizona. These grant funds are provided to support the activities which are described in your Final Proposal dated May 1974, for the implementation of your program entitled Integrated Natural Resources Planning and Management of Arid and Semi-Arid Lands. This Grant is made to the University of Arizona on condition that your institution shall administer the funds provided under this Grant in accordance with the terms and conditions set forth in your Final Proposal (including Budget Summary) and the Standard Provisions which have been agreed to by your institution and which are attached hereto and made a part hereof. To the extent of any inconsistency between the Proposal and the Standard Provisions, and any other provisions which are made a part of this Grant, by reference or otherwise, the Standard Provisions shall control.

The funds provided by this grant are obligated as of the date of this letter, and shall apply to costs incurred in furtherance of the above mentioned program for a period of five years from the aforementioned date.

ACTION MEMORANDUM FOR THE ADMINISTRATOR

5/30/74

THRU: EXSEC

FROM: AA/TA, Joel Bernstein ()

Problem: The need to approve an Institutional Grant under Section 211(d) of the Foreign Assistance Act of 1966, as amended, in the amount of \$1,045,000 to the University of Arizona, Tucson, Arizona, to strengthen and develop their response capability in the area of multiple-use planning and management of natural resources in arid and semi-arid regions of developing countries.

Discussion: The proposed grant, as approved by the Research and Institutional Grants Council (RIGC) on April 18, 1974, will finance a five-year program to strengthen and expand the university's capabilities in: multiple-use management of natural resources - land, water, wildlife, forest, minerals and energy; assessment and mitigation of secondary environmental effects associated with natural resource development projects; and application of new technologies to problems of resource surveys, assessment and monitoring. Through the creation of the comprehensive program delineated above, the University of Arizona envisions the following products: (1) a centralized information system for natural resource management; (2) an improved education and training capacity; (3) increased knowledge of principles and techniques for assessing and addressing resource management problems and alternative remedial actions; (4) a competent and available advisory capacity; and (5) a network of worldwide institutional linkages. The University has long demonstrated its commitment to problems related to natural resources and arid lands. This grant will serve as a vehicle to increase the depth and breadth of their involvement.

An existing AID 211(d) grant, to the Department of Watershed Management, University of Arizona, concentrates on watershed management, and will provide support to this new grant through institutional arrangements made at the University of Arizona which will assure coordination between the two programs.

The concern for improved management of arid-lands and the availability of natural resources is global. There is also increased awareness of the problems associated with preservation of the environment during the development process. This grant can help provide the techniques and personnel required to meet these growing problems.

THE RESEARCH AND INSTITUTIONAL GRANTS COUNCIL

Minutes of the Seventy-Eighth Meeting

April 18, 1974

RIGC Members and Alternates Present

AA/TA, Erven J. Long
SER/ENGR, John H. Rixse, Jr.
O/LAB/PED, Burnie Merson
ASIA/TECH, O. L. Mimms
AFR/DS, Princeton Lyman

SA/PPB, James Cudney
PPC/DPR, Arthur Handly
SER/CM/COD, Robert J. O'Brien
TA/RIG, J. K. McDermott

Others Present

AA/TA, Raymond Kitchell
ENGR/OPNS, Jasiah W. Royce
TA/RIG, Miloslav Rechcigl, Jr.
TA/RIG, Willis Schaefer
TA/OST, Henry Arnold

TA/OST, Bill Long
SA/TD, Thomas Eliot
SA/CCD, Alan Jacobs
LA/DR, James Hawes
SER/IT, W. E. Vogelsang

Dr. Erv Long, Chairman opened the meeting with a request for approval of the minutes for the RIGC meeting of March 21, 1974; these were unanimously approved on the motion of John Rixse. Minutes for the RIGC meetings of March 8, March 7, and February 28 which had been circulated but not voted upon will be placed on the agenda of the next RIGC meeting with copies circulated for adequate review prior to voting.

The RIGC reviewed the following 211(d) grant proposal:

Integrated Natural Resources Planning and Management,
University of Arizona, Grant Project Officer: Bill Long, TA/OST

Project Review Report - RIGC 4/18/74

Project: 211(d) Grant Title: Integrated Natural Resources Planning
and Management

Grantee: University of Arizona

Grant Project Officer: Bill T. Long, TA/OST

Discussion Highlights:

Bill Long reviewed the background in planning this grant from the 1971 Airlie House Conference on Natural Resources Planning which had suggested the grant approach. The Inter Bureau Committee on Science and Technology had examined alternative concepts of a consortium or ad hoc approaches as requirements emerge. The growing and sustained institutional capability possible within the grant approach is inherently attractive. The University of Arizona was selected from among a larger number of universities considered on the basis of its emphasis on management, experience with semi arid lands, and information dissemination capabilities. The focus of this grant is on multiple use planning among resources. The three areas of work emphasis include regional policy alternatives, new techniques for inventoring and monitoring, and the assessment of undesirable secondary effects.

James Cudney raised the question: If the work proposed had been initiated 8 years earlier, would there be a difference concerning the Sahel? Henry Arnold pointed out that while this would not prevent drought conditions, the capability for the systematic examination of trends would have put us in a better condition to choose among strategy alternatives. Now there are inadequate resources available to call upon. Princeton Lyman contrasted programmatic responses with systematic responses in that we simply do not know about alternate strategic tradeoff values for programming. We assume that a more systematic rationale is desirable.

Burnie Merson asked whether this grant would examine the training of the ultimate users. How do we reach the people directly involved? Bill Long indicated that the intent in asking the grantee to look at socio-economic implications included this concept, although there was no prejudging of possible outcomes. Merson then asked whether the development of knowledge under grant funded activities could be maintained as individuals changed jobs. Princeton Lyman asked how we measure the capacity of Arizona to know where all of the capability is located? Bill Long cited their recent performance in the information reference area in terms of producing a valuable print-out of references on the matter of "dry-land encroachment." Erv Long pointed out that it is important to get Arizona to see themselves as a center for information on all resources, not just those resources created or residing within the University.

Arthur Handly asked whether organizations other than universities had been considered in the selection of a grantee. Bill Long said no, that universities were organized to build ongoing institutional capabilities, whereas other contractors tended to get out of an area after completion of a job. Ray Kitchell pointed out that the law limits 211(d) grants to universities. Erv Long outlined the pattern of first looking to universities for the development of basic techniques with later contractual relationships possible with any organization which has developed the analytic capability for application of basic techniques.

Princeton Lyman, referencing his recent participation in a field review of a soils 211(d) grant, discussed the difficulty of measuring the increase capability of an institution unless they had been told to develop a baseline status of knowledge against which to measure improvements. Roy Mimms urged that each grant require the definition of baseline information at the beginning of grant funded activities. Bill Long pointed out that this is stated as a first task on page 24 of the Project Statement, and that an 18 month review is planned to assess objectives and activities.

William Vogelsang inquired if grant activities are required to be additive to the current program of the grantee. Erv Long stated that we do require new activities developing out of the existing capabilities as a growing process. Grant money should not be used for replacement funding. However, this is enforceable only in the spirit of joint activity planning.

There was extensive discussion on the need to limit the scope of resource management activities. Bill Long stated that the principal emphasis was on arid land ecosystems, but that flexibility was desirable with reference to related applications. Art Handly urged a focus to avoid scatter of effort. The funds are too small for a total effort. Erv Long referenced the Harvard system which involved a too macro-orientation with resulting inadequate technical detail for application. Art Handly suggested the addition to the title and scope of the words "of Arid Soils." Henry Arnold stated that this had been considered but resisted as an unnecessary restriction. Whether Arizona could cope with the larger scope depended on their experience, and the feedback at the time of the 18 month review would provide a better basis for guidance. John Rixse stated that there might well be a requirement for more than one institution working in this broad area to cover the heavy rain category. Erv Long urged that we be realistic on specifying a manageable scope of activities.

Jim Hawes questioned whether there was possible overlap between this proposed grant and other research programs in the water and land management field.

John Rixse moved approval of the proposal with the amendment of restriction to "arid lands," Roy Mimms seconded, and the vote was to approve with one dissenting vote (James Hawes).

Art Handly congratulated Bill Long on a well written Project Statement.

UNITED STATES GOVERNMENT

Memorandum

D. Rice

TO : See Distribution Below

DATE: April 11, 1974

FROM : TA/RIG, Delbert T. Myren *DTM*

SUBJECT: Joint Meeting of the Research and Institutional Grants Council (RIGC) and General Technical Service Committee, Thursday, April 18, 1974, Room 2884, New State, 2:00 p.m.

The subject meeting has been scheduled to review the following 211(d) grant proposal:

Integrated Natural Resources Planning and Management - University of Arizona

Grant Liaison Officer: Bill L. Long, TA/OST.

Also attached are the RIGC minutes of March 21 for your review and approval.

Attachment: a/s

DISTRIBUTION:

ASIA/DP/PL, Richard Birnberg
ARA/LA/DR, Charles J. Stockman
AFR/DS, Princeton Lyman
SA/PPB, James Gudney
IFC/DPR, F. B. Kimball
CG/TA, A. R. Richstein
SER/CM/GOD, Robert J. O'Brien
SER/ENGR, John H. Rixse
SER/IT, Philip Sperling
OLAB/PED, Burnie Merson
AA/TA, Erven J. Long
ASIA/TECH, James J. Dalton
APA/LA/DP, Glenn Patterson
AFR/DS, John Blumgart
USAID/Thailand, David Steinberg
PHA/PVC, Stephen Bergen
ASIA/TECH, R. Ballantyne
ASIA/DP, A. Shakow
SA/TD, D. Goodwin
LA/DP, L. Harrison
AFR/DP, Robert Huesmann

SA/PPB, Anthony Ormasa
PPC/DPB, Arthur Handly
PHA/POP/R, Duff Gillespie
SER/IT, William J. Elsen
AA/TA, Joel Bernstein
AA/TA, Curtis Farrar
AA/TA, Samuel Butterfield
AA/TA, Raymond Kitchell
AA/TA, Theodore Brown
TAB Office Directors
PPC/PDA, Robert Muscat
TA/RIG Staff
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ADVEA, Robert G. Johnson
SA/RD, J. Daniel Loubert
TA/OST, Bill L. Long
PPC/PRB, S. Biddle
PPC/PDA, Robert Muscat
SER/IT, W. Vogelsang
C/FFP, Peter Strong
PHA/PRS, Mary Fowler