

931-1156

UNITED STATES GOVERNMENT

## memorandum

DATE: 15 February 1978

REPLY TO  
ATTN OF: DS/AGR, Leon F. HesserSUBJECT: Small Activity: International Soil Classification Workshop  
in Southeast Asia (Utilization/FY78 \$65,000)

TO: DS/PO, Mr. Robert Simpson

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PD-AAO-870  
ISN 38776

The purpose of this memorandum is to request approval of \$65,000 during FY78 in support of the subject Workshop.

## A. INTRODUCTION:

To accelerate the wise development of LDC land resources for agriculture and other uses requires detailed knowledge of soils and their potentials. Unfortunately individual LDCs have neither sufficient qualified personnel nor financial resources to acquire this knowledge on their own soils. Compounding this problem is the fact that until recently there has been no common soil classification system used internationally. Different countries have been using numerous and different soil classification systems, thereby preventing the exchange of soil research information (usually acquired at high expense) from one country to another even though their soils may be the same or very similar. A common and universal soil classification system has been much needed to serve as an international language for information exchange and technology transfer between countries, especially the LDCs.

In 1975 the Soil Conservation Service (USDA/SCS) published "Soil Taxonomy" after twenty-five (25) years of research and preparation. "Soil Taxonomy" is a system of soil classification including a condensed statement of existing knowledge about different soil types and their potentials. It is an organized system of information which must be consistently updated as more is learned about different soil types, especially those in the tropical areas typical of most LDCs. Although "Soil Taxonomy" was developed primarily for soils in the United States it has been disseminated worldwide and is now used in many LDCs in the tropics in lieu of, or parallel to, indigenous soil classification systems. More and more LDC scientists are talking to each other in the language of the USDA/SCS "Soil Taxonomy" system. It is gradually becoming the internationally accepted reference system in which the same soils receive the same names everywhere. Nevertheless much work remains to be done both to refine and improve the system as applied to soils of the tropics and to increase the international knowledge base on the problems and potentials of these soils.

One of the key objectives of DS/AGR's "Soil Management" cluster (#0401) is to find short cuts to speed up the LDC agricultural development process for increased food production on soils now in use for crops as well as on currently unused soils although they are potentially arable. Towards this



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objective IS/AGR has two major research projects on agro-technology transference, based on Soil Taxonomy, and which involve coordinated crop/soil experiments in Asia, Africa and Latin America. These research projects are reinforced by five "Tropical Soils" 211(d) grants in which "Soil Taxonomy" is a key element and major point of reference. All seven of these projects have provided a crucial impetus towards the spreading awareness, knowledge and utilization of Soil Taxonomy worldwide.

In June 1977, a two-week International Soil Classification Workshop was organized in Brazil by the University of Puerto Rico under "Tropical Soils" 211(d) grant #931-0128.11. Twenty-four of the world's foremost soil scientists met in Rio de Janeiro and then conducted field trips throughout the country in order to examine the applicability of, and to change and refine, "Soil Taxonomy" classifications in context of tropical soils of Latin America. This workshop was considered extremely successful and productive, and as a Malaysian workshop participant explained it, "...achieved much more progress in ten days than the exchange of letters over the years." (See attached Memo Gill to Belcher dated 8/29/77 plus excerpts from the comments of participants at the Brazil Workshop.) It was the consensus of the Brazil Workshop that to hold similar workshops in other major geographic regions of the world would also be very productive in terms of the Soil Taxonomy system and beneficial towards the goal of wise and accelerated development of LDC land resources. In a similar vein, a three man Evaluation Panel which reviewed the five "Tropical Soils" 211(d) grants in September 1977 found the Brazil Workshop "very successful" and also recommended that "sympathetic consideration be given for an additional \$60,000 for a (similar) conference in Southeast Asia."

The University of Puerto Rico has submitted a proposal to AID (attached) to organize, in cooperation with six other co-sponsors, an International Soil Classification Workshop in Southeast Asia. The funds requested by Puerto Rico total \$65,000 and would primarily be used to pay for travel and per diem expenses (\$49,200) of twenty-five of the world's foremost soil scientists who would be the key participants at the workshop.

B. PURPOSE:

The purposes of the workshop are to increase the overall effectiveness of worldwide research activities on tropical soils and to maximize the utilization and application of the results of this research.

C. OBJECTIVES:

The following objectives are designed to accomplish the purposes of the workshop:

- 1) The use of Soil Taxonomy as the uniform system of soil classification in Southeast Asia in order to facilitate agro-technology transfers to and within that region.
- 2) Identification of problems of Soil Taxonomy with regard to soils of Southeast Asia (e.g. volcanic ash soils and podzols) and to discuss remedial action.
- 3) Examination of changes in the definition of Alfisols and Ustisols with low activity clays. (Soils belonging to these taxa are extensive in Southeast Asia and are widely used for subsistence farming.)
- 4) Interaction of soil scientists from Southeast Asia with outstanding colleagues from other countries.

D. WORK PLAN:

The following is a general workshop format, although complete details have not been established.

- 1) The workshop will be held during September 1978 for approximately fourteen (14) days. It will start in Kuala Lumpur, Malaysia with a three (3) day conference followed by a three (3) day field trip to soil sites in the Malaysian countryside. Workshop participants will then fly to Bangkok, Thailand for a three (3) day field trip to soil sites. The workshop will close in Thailand with a 2-day wrap-up conference.
- 2) The total of twenty-five (25) workshop participants will receive travel/per diem expenses for attendance at the conference from AID funds under this small activity. These AID funded participants will include internationally recognized experts in the classification of tropical soils and soil scientists from Southeast Asia countries. Other workshop participants, although not receiving travel/per diem funds from this activity, will include local LDC scientists and interested officials, soil scientists working on AID funded research projects with the Universities of Hawaii, and Puerto Rico; and on the 211(d) Tropical Soils grants with the Universities of Hawaii, Puerto Rico, Cornell, North Carolina State and Prairie View A & M. (See attached list of participants at the Brazilian Workshop for example of probable participants at the Southeast Asia Workshop.)

- 3) The three day opening conference in Malaysia will involve general discussion of: (a) Soil Taxonomy in context of Southeast Asia soils; (b) soil samples already submitted from Southeast Asia to the University of Hawaii and USDA/SCS for analyses; and (c) technical, mineralogical, physical, chemical and analytical data resulting from these analyses. The Ministry of Agriculture, Malaysia will provide facilities and general support and local arrangements for the three day opening conference.
- 4) The three 3-day field trips in Malaysia and Thailand will involve on-the-spot profile studies of different soils with on-site discussions of various technical matters pertaining to these soils. The host countries will make all necessary arrangements for these field trips although local transportation (primarily by bus) will be funded under this AID small activity.
- 5) The final two-day wrap-up conference will involve discussions of previous data and information on the soils under study and will result in recommendations for improvement, modification and change in "Soil Taxonomy" in context of Southeast Asia soils and for its local utilization.
- 6) Proceedings (approximately 250 pages in length) of the workshop will be developed and will include: (a) data and information covered by the workshop (and pre-workshop soil analyses); and (b) discussions, conclusions and recommendations of the workshop. The proceeding will be published (300 copies approx.) and distributed to workshop participants and appropriate scientists and institutions.

#### E. ORGANIZATION:

The workshop will be jointly sponsored by AID, the Ministry of Agriculture of Malaysia, the Land Development Department of Thailand, the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) in the Philippines, and the Universities of Hawaii, Puerto Rico and Cornell. Each of the other sponsors will provide, free of charge, facilities, in-country pre-workshop preparations, and administrative/organizational support and soil testing/analyses of soils as appropriate. The University of Puerto Rico will administer the AID funds provided under this project for major expenses (see attached budget).

Dr. Fred Beinroth, Grant Director at the University of Puerto Rico, will serve as the Workshop's Chairman.

F. PUBLICATIONS:

The proceeding will be published in 300 copies and will include relevant data, discussions and recommendations of the workshop. Copies will be provided to all symposium participants. In addition, the proceedings will be available to other interested scientists, technicians, libraries, and other institutions in LDCs and non-LDCs alike.

G. PROVISION FOR EVALUATING WORKSHOP EFFECTIVENESS:

A representative of the USDA/SCS will attend and evaluate the workshop. In addition, a representative of the Consortium for Soils of the Tropics (COST) will be requested to attend and evaluate the workshop for program context, organization and applicability to problems in the LDCs.

H. AID MANPOWER REQUIREMENTS:

No AID manpower is required for the project. It is anticipated that the Workshop will be of interest to AID technical personnel in DS/AGR, the Regional Bureaus and Missions.

I. PES UTILIZATION STRATEGY:

The PES will specify plans and recommendations for distribution and utilization of new information generated at the Workshop. This will be in addition to distribution of the Workshop's Proceedings.

Approved: /s/ John Gunning

Disapproved: \_\_\_\_\_

Date: 2/24/78

Clearances:

DS/AGR/SWM:TSGill	<u>/s/</u>	Date <u>2/15/78</u>
DS/AGR/SWM:DPeterson	<u>/s/</u>	Date <u>2/16/78</u>
DS/AGR:MMozynski	<u>/s/</u>	Date <u>2/16/78</u>
ASIA/DR:GRholfs	<u>/s/</u>	Date <u>2/21/78</u>
DS/PO:CKassebaum	<u>/s/</u>	Date <u>2/22/78</u>
DS/DIU:DRhoads	<u>/s/</u>	Date <u>2/21/78</u>
DS/PO:JGunning	<u>/s/</u>	Date <u>2/24/78</u>

AID Funds  
PROPOSED BUDGET

for

International Soil Classification Workshop in Southeast Asia  
(Small Activity-Utilization FY78)

Pre-workshop travel (organization, soil sampling)	\$ 2,800
Travel and per diem for 25 invitees	49,200
Bus transportation (Malaysia, Thailand)	5,000
Publication of proceedings and preparation of slide set	5,000
Materials, supplies and services	<u>3,000</u>
TOTAL	\$65,000