

## memorandum

DATE: March 12, 1981

REPLY TO  
ATTN OF: Archie C. Hogan Jr., Agr. Development Officer

SUBJECT: Narrative Summary of the Land Classification/Soil Survey  
Annual Evaluation held in Damascus March 3-5, 1981

TO: Miles Wedeman, Director, USAID/Syria

After three days of deliberations, general agreement was reached among the participants in the Evaluation as indicated on the Project Evaluation Summary (PES) Part I (AID 1330-15). In addition to the specific action issues embodied in the PES summary, other pertinent topics which surfaced during the course of the evaluation are discussed in this narrative. Since the Agenda served as the focal point for our discussions during the evaluation, the major headings contained in the Agenda, as appropriate, will likewise be focused upon herein.

#### Prelude

Following introductory remarks by the Deputy Minister of Agriculture, the AID Mission Director, the Vice President of Louis Berger and others in the office of the Deputy Minister, the evaluation moved to the Syndicate of Agricultural Engineers Bldg. for the remainder of the deliberations.

#### Activities

The major activities in which the Contract team are engaged in were discussed in general terms by Bruce Worcester the Chief of party of the contract team and by Haluk Yuksel (Soils Classifier) in more detail, since Yuksel has carried out the overwhelming majority of the field work. The other two team members Fred Bergsrud (Irrigation) and Dominique Durlin (Agronomist) could only present proposals as to what they expect to accomplish during the coming months, since they have both only recently arrived.

#### I. Soil Survey and Soil Analysis; Landsat Imagery

The objectives of the Soil Survey studies as outlined by Yuksel in his report are the following:

1. To assist the SARG to expand and accelerate its Soil Survey/Land Classification program.



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2. To establish an effective Soil Survey/Land Classification unit through:
  - (a) Specialized training for Syrian Counterparts
  - (b) Hands-on experience and training the Syrian Soils personnel in the field.
3. To prepare Soils and Land Classification Maps of the following types and scales.
  - (a) General Soils Maps of the Syrian Arab Republic at a scale of 1:500,000
  - (b) General Soils Map of the First Settlement Zone (This is an isohyet of more than 350 mm of rainfall annually) at a scale of 1:100,000
  - (c) Semi-detailed soil maps of all arable land in the first settlement zone at a scale of 1:25,000. These areas will be identified by the soil studies which will be conducted at 1:100,000
4. Introduce Remote Sensing techniques and interpretation of the satellite imagery as they apply to the General Soil Survey studies.
5. Prepare Soil maps and Soil Reports for the above Soil studies and make necessary interpretations of the Soils data for the end users showing the potential resources for future development projects.

In addition to the above Yuksel presented a step by step analysis of the Soil Survey procedures he is now utilizing and will follow as he continues with activities.

#### Critique

- A. 1:500,000 Soils Map: Although, there were no major disagreement as to the procedure which Yuksel is following, the chief of the Soils Survey Section of the Directorate of Soils, Mouhayyedine Taha, did question the excessive amount of time which Yuksel has spent up until now in carrying out his 1:500,000 Soil Studies. At the rate Yuksel is presently going he estimates ~~it~~ it will take him until June 1981 before he completes the remainder of the country (roughly 60% of the field work remains unfinished). There were some present including Mr. Taha, who felt the 1:500,000 General Map could have been completed in 3 months instead of the year which it will take. Three months appears to be an exaggeration but it is clear, and even Yuksel admits, that he could have completed the 1:500,000 in less time than he has. His argument which has some validity is that since the maps that will follow (1:100,000 and 1:25,000) will be based upon the 1:500,000 General Soils Map, that he wants to do as good of a job as possible on it which should permit him to do a better job later. Taha further stated that since the SARG is interested in detailed soil studies (micro level) that more time should have been spent on the 1:100,000 and 1:25,000 scale maps. This point was surfaced at our meeting with the Minister (more details below) by Dr. Jum'a who stated that the team had come to Syria with no intention of finishing the 1:25,000 semi-detailed maps. There is more than an element of truth in this belief. For example Shea of Louis Berger wrote to the AID Contract

Office on October 5, 1979 stating that under the time allocated for completing the project that they (the contractor) would be unable to complete the 1:25,000 semi-detailed maps. The contract office agreed to this but deemphasizing of the 1:25,000 Detailed Soils Map was not discussed as far as I can ascertain with SARG and these maps are still a major output in the Grant Agreement. Jum'a stated and the Minister reemphasized that without the 1:25,000 semi detailed maps they will have little in the way of concrete soils information to move forward with, and they both reiterated that some way must be found to complete the work at this level (or at least as was proposed by the delegation, Fitzgerald, Hogan, Shea, Meyers, Worcester, the completion of as much as possible with ample training of the Syrian counterparts so as to enable them to carry out the balance of the work remaining once the team departs.)

- B. 1:100,000 Soils Maps: Yuksel stated that he would initiate work on the 1:100,000 Soils maps as soon as he completed the 1:500,000 General Soils maps. The ADO asked whether or not it would be possible for Worcester to undertake the initial work on the 1:100,000 photo interpretations and field work while Yuksel completed the 1:500,000 in order to cut down on the time constraint. This is the same question the ADO has asked Worcester and Yuksel on several occasions before and to which each time he has received an affirmative response followed by no plan of action. During the three day evaluation it was stated at one time or another by; (1) Yuksel - that he could complete the work (2) Yuksel that he could not complete the work. (3) Shea - that without additional funds to take care of the shortfall the 1:100,000 work would not be complete (4) Shea - may be if Worcester undertook some of the initial photo interpretations and field work the team could complete the work at this level.

By the end of the evaluation it was agreed that Yuksel would continue with the 1:500,000 Soil Studies and that Worcester would initiate work on the 1:100,000. However, to add insult to injury it appears that the Director of RSI has not ordered the 1:100,000 Imagery which Worcester would need to begin immediate work on. Apparently, as one team member informed the ADO, Meyers, the RSI Director, had stated that no one had informed him of the urgency of the 1:100,000 landsat Imagery (roughly 150 Images). Meyers did state that he would supply the Imagery no later than May 1, 1981. In addition it was found out that Shea has not ordered the field equipment (Hand Augers etc.) needed to undertake the field work of the 1:100,000 level. Shea, the vice president, stated that he had not received the list while the Chief of Party stated that he had sent the list in. A duplicate list is to be sent ASAP.

C. 1:25,000 Detailed Soils Maps of 1st Settlement Zone:

The development of these maps were deemed ~~as being~~ essential to the successful completion of the project by the Director of Soils and the Minister of Agriculture. It was realized by all present that the basis for these semi-detailed maps ~~were~~ <sup>was</sup> the 1:100,000 soils maps, and thereby it was agreed to intensify efforts to complete mapping at this scale. Some alternatives were tossed about but nothing concrete was decided. For example, some (including Yuksel) proposed starting the 1:100,000 soil study with the idea of not completing it but training the Syrians to complete the series and then doing the same with the 1:25,000 scale. This was rejected by SARG (the ADO concurs). What one would have, would be only quarters or halves of each, neither one which would give you a whole, since the mapping techniques involved at the 1:25,000 is different and much more detailed than the 1:100,000. The Director of Soils told the Minister and the delegation that if the team did this "we (SARG) would be unable to finish the job".

D. SARG Support for Soils Survey:

Yuksel stated that he would need a minimum of 5 crews for seven months (35 man months) starting in June to work on the 1:100,000 field work. In addition to the Soil technicians he would need 5 laborers plus 3 truck drivers for the pickups. The Director of Soils guaranteed that he would provide the crews no later than April 1, 1981 in order that they could receive a period of training. (The Director provided Yuksel with a list of names the week of March 10 I am informed).

E. On the Job Training:

Training of Syrian counterparts on the part of the contract team has been virtually nonexistent. This was illuminated once again at the evaluation by Mr. Mouhayyedine Taha who stated that he believed the activities of the experts (Yuksel in the particular case of Soil Surveying) were restricted to too small of a group. Throughout the mapping of the 1:500,000 soils map, only one Syrian participated in the field work with Yuksel. This is totally unacceptable and the ADO has on numerous ~~x~~ occasions in the past informed both Worcester and Yuksel that they had to bring their Syrian counterparts more into the picture. In fact almost one and one-half months ago the ADO was informed that there was a problem of an unspecified nature existing at the Project/Directorate level. The ADO instructed his program specialist to visit with the Director of Soils and others at the Directorate to ascertain exactly what was the problem. The Director of Soils informed us that he was not being informed about project activities and that he didn't know what was going on. He also had comments on the working hours of the team. He further stated that at times he was asked by the Minister of Agriculture about the project and its activities and that he could not give con-

crete answers. Inferences were made that at times he deliberately stayed away from the Directorate so that he would not have to lie about things which he should have known about but did not.

As a result of these talks the ADO informed both Worcester and Yuksel that they should seek ways in which to better involve the Syrians. On one occasion he suggested to Worcester that he should hold periodic meetings with the Director of Soils and brief him on the USDA Taxonomy and how they were applying this system to their current studies. In addition the ADO offered the services of the program specialist for an hour or two during these sessions so that the Director of Soils would not have to be briefed about the system in front of his own staff. The reaction of the team members were mixed. On one occasion Worcester informed the ADO that it would take five years to make the Director understand and that he taught students the Soil Taxonomy over two full semesters and that they only had a rudimentary understanding of it after completion of the course. On another occasion he stated he has going to initiate a monthly meeting with the Director of Soils.

Unfortunately ~~though~~, only limited training was offered to counterparts and no briefing was given to the Director of Soils prior to the evaluation; and as a result, ~~which you witnessed the first day~~, the Director of Soils verbally attacked each team member in turn. It is my firm belief and I believe most of the team members agree, that if an effort had been made to better inform the Syrians, especially the Director, that the tone of his criticisms would have been different.

In order to put training back into its proper place the members of the evaluation agreed that the Land Classification/Soil Survey team should initiate seminars and training programs for all of the personnel of the Directorate of Soils. The first of these internal seminars will run March 21 through April 2 followed by a period of field work April 4 - April 23. It will be conducted by Yuksel for the personnel who are to be assigned to the 1:100,000 Soil Surveys. He has also developed a work schedule which will carry him through June 2nd. During the week of March 10 a two hour briefing was given by Yuksel to the Director of Soils. Paradoxically, the first time that the Director of Soils had seen the complete imagery and how it was being utilized by the team was at the evaluation.

F. Soils Laboratory and Soil Analysis:

During his brief description of how the soils laboratory was supporting the activities of the project, Mr. Taha Delamey, Chief of the Soils Laboratory indicated that he had worked with the project in providing the required analyses of the Soil Samples. He also indicated that no

one had informed him previously that the samples presented by the project should be handled on a priority basis, and that henceforth he would see that the samples were analysed without delay. In closing, he also indicated that he had devoted considerable time in assisting Dr. Dahnke in compiling the list laboratory supplies and equipment which the project was going to provide, but that with the exception of three very small packages, nothing has arrived. Gerald Shea of Louis Berger indicated that the supplies and equipment had been ordered and should arrive shortly (no time specified).

The Director of Soils and the Chief of the Soils laboratory informed Shea that the Syrian Government was also rejecting the nomination of Dr. Otto C. Spaargaren because they felt he did not have enough laboratory experience. They requested that they be provided with a Soil Chemist. Shea stated he would comply with this request and felt he could find someone with this training fairly easily especially for the short duration required. At one point the question was raised about the inability of a Soil Chemist in most cases ~~not being able~~ to conduct analyses on the physical properties of Soil. Responding to this Dr. Jum'a introduced a new addition to the Directorate Dr. Abdul Rahman Ghaibeh, who he stated had a Ph.D. in Soil Physics. Dr. Ghaibeh, who returned only twenty days ago from Post Doctoral Study at the University of Kentucky stated that not only could he run all of the physical analyses required but that he could also install and operate all of the proposed equipment. In addition to his training as a Soil Physist, Ghaibeh has received training in Basic and Fortran Computer Language.

## II. Irrigation

Fred Bergsrud (Irrigation Specialist) presented a synopsis of what he proposed to undertake during the remainder of his Syrian tour. Once again it was apparent that his Syrian Counterparts especially the Chief of the Irrigation Section, Dr. George Somy, was not aware of exactly what Fred was going to present. In a later critique of Bergsrud's proposal, Somy pointed out that Fred should have carried out field studies and not base his findings solely upon theoretical data. He indicated that SARG needed realistic and applied data as a basis for the design of irrigation schemes and that the ideas Fred was putting forth were different to carry out both at the Directorate and project level. Somy further stated that he had asked Fred to work with Yuksel to obtain and define <sup>the</sup> water capacity levels the various soils encountered. In addition he had suggested that Fred execute some experiments in Dier Ezzor.

Dr. Somy submitted a list of equipment for inclusion in the list compiled by Dahnke for the Directorate. This equipment will be ordered with the rest of the equipment and supplies. He has recently submitted a secondary list but has been told the project does not have funds to make additional purchases. He nevertheless continued to make this an issue with the irrigation engineer each time he has a chance. The lack of support for his request has and probably will continue to be an area of conflict, but this is something we'll have to live with.

In addition to the points raised above, Somy felt that the job description of Bergsrud was too general and <sup>for</sup> irrigation purposes he stated that he needed maps of much smaller scales. Yuksel, agreed but indicated the project would not work at these scales. Since it appeared that Dr. Somy would continue with his long monologue, Dr. Jum'a finally stated that Fred was not here to do the work of ~~the~~ Dr. Somy, especially those tasks that had no direct relationship to the soil survey. However, it was felt that when and where possible the Irrigation Specialist should assist Dr. Somy and the Irrigation Section in developing the basic data and information which it needed to fulfill its obligations. As an effort to assist Fred, Dr. Somy stated that he had already assigned one counterpart to work with Bergsrud and would shortly assign him a second one.

### III. Land Use Mapping

In addition to the soil maps, the project will produce present land use maps at the 1:500,000 and 1:100,000 scale. There is listed in the contract and other documents a present land use map at the scale of 1:250,000 but all concerned project participants have decided to eliminate a map at this scale. First, the 1:100,000 scale map is one with far more details than the 1:250,000 and if a 1:250,000 is every required it is a simple task to go from 1:100,000 to 1:250,000 or any other scale in between. Secondly, the reproduction of a map of this scale means that only the Agronomist would be working ~~trying~~ to develop a map of this magnitude. Thirdly, there would be <sup>no</sup> soil information at this scale since the soil maps would be different, and fourthly, SARG will be getting far more in the way of a map at 1:100,000 than 1:250,000. Dr. Jum'a and all of the participants were in agreement on this issue.

Dominique Durlin, the Agronomist, who only arrived the later part of February will <sup>be</sup> responsible for carrying out the land use mapping activities. Durlin plans to establish six land use categories which closely follow the existing categories of the SARG Statistical Abstract. He plans to start field work soon and stated he would need one blazer and possibly another field vehicle. At present he hasn't been assigned a vehicle and the Chief of Party promises me that he will do so each time he's asked "when are you going to". Several months back the CP assigned one of the blazers to their chief counterpart whom he claims was doing a lot of administrative work for the project and thereby needed a vehicle in order to get from place to place. This issue has been discussed with Worcester, Shea, Meyers and Yuksel (who is currently taking Durlin around).

It was discussed again on March 13 with Worcester. I have the feeling that he's sort of afraid to ask for the return of the vehicle. The utilization of the vehicle has also created a problem among the other counterparts who informed Jum'a and others that they didn't see why he (this counterpart) had access to a vehicle and they did not.

#### Critique

The Directorate of Soils has recently created a Land Use Section headed by Dr. Ilyas Jabbour who stated during the meeting that he had not been informed of the evaluation until the morning of the second day when he was to appear on the program. Supposedly he had been out of town. The other comments he made were that he was a Dr. not Mr. and that he was Chief of the Section not Director as it appeared on the Agenda. It's stated however that he was willing to work with Durlin in developing the land use maps called for.

#### IV. Commodities

The project has purchased a total of eight vehicles which include 4 blazers (4x4), one sedan and three trucks. The Blazers and Sedan were purchased through the duty free zone and are being utilized. The three trucks on which will be mounted the power probes have been purchased and shipped around December 12, 1980. Unfortunately, though, someone at Louis Berger consigned the vehicles to the Ministry of Transportation instead of the Ministry of Agriculture or the Directorate of Soils. A search is now underway to locate the three trucks. The CP has personally talked with one of the Deputies in the Ministry of Transportation, giving all of the particulars and has been guaranteed their cooperation if and when the trucks arrive or are located if they are already in country.

The Landsat Imagery (Tapes) according to Victor Meyers has all been purchased. He has not however purchased the processed prints needed for the 1:100,000 Soils Survey. This he promised to do without delay and to deliver by May 1, 1981.

Laboratory equipment and supplies were due to have been ordered sometime ago by Louis Berger but it was apparent during the evaluation that such was not the case. At least the ordering was not complete or as in the case of some of the field equipment as discussed earlier, the list has not even been forwarded from Damascus.

### Critique

- A. Vehicles: Under the provisions of the Grant Agreement eight of the nine vehicles programmed have been either ordered or delivered. Since there appeared to be a shortage of funds and as the ninth vehicle was a sedan, it was the opinion of the evaluation participants to delay the purchase of this vehicle until the second evaluation. The savings from this purchase could possibly be used elsewhere in the project. At the same time, by the second evaluation, if the project has been fairly successful without this vehicle, it would be difficult to justify its purchase at that late date.
- B. Photo Interpretation Equipment: Attached to the Project Agreement is an annex of illustrative equipment to be ordered. Illustrative lists should be thought of as just that. However there are those who feel each and every item listed should be purchased. It was agreed among all concerned parties that with the exception of five (5) stereoscopes, no other items under the heading "photo interpretation equipment" will be ordered until the second evaluation.

### V. Participant Training

Under the auspices of the project 18 participants will be trained in various disciplines allied with the activities of the project. Of the total number, ~~a total of~~ 10 have completed their training, seven more are currently enrolled and due to complete training in May 1981. The eighteenth trainee (computer) has not been selected at this time.

The original participant training program was designed to provide the Syrian participants with training in their respective disciplines and a limited amount of training in Remote Sensing.

It was suggested that the views of a returned participant be presented during the review. The team suggested that <sup>be done by</sup> this/Inam Daya, one of the participants working closely with them. At the appointed hour however, the Directorate brought three additional returned participants who presented their views along with Inam.

Comments

First Participant (Ms Hana Al Deri) stated that the first two months of the training program were a review of basic subjects which they already knew, plus a lot of the subject matter was unrelated to subsequent courses. Remote Sensing was not (according to Ms. Deri) emphasized until the very last two weeks of the program. Overall their group felt that the training at Brookings was not suitable for the job they are to perform in Syria.

Second Participant (Mr. Said Shek Al Shabab) felt that the main shortcoming of the training program was that all of the trainees, ~~ir~~ regardless of their backgrounds, were given the same lectures. He felt the lecturers were well qualified but often when they asked questions they were not given answers but were told there was a shortage of time and they could not go into much detail. Also he would like to have had more field trips. The only one they had was a short one to Arizona.

He also emphasized that they were all interested in Remote Sensing techniques but that they received training in the use of the equipment needed for Imagery interpretation only one day prior to their departure for Syria.

Third Participant (Mr. Adib Jabar) stated that the first three months were too general and believed that they should have had more specialized groups. He further stated that even the two weeks they were given in the Remote Sensing workshop, was only theoretical in nature. Felt they needed more practical training.

Fourth Participant (Mr. Inam Al Daya) Reiterated that the first two months were not needed or could have been shortened for more specialized training. The last two months of practical field training was too short.

Victor Meyers of RSI stated that the training program was designed based upon the recommendations RSI had received. He hadn't realized that the participants were dissatisfied with the program but hopes that the second group who are now in the U.S. will benefit from the observations made by the first group.

Note: The second group of seven participants who arrived in South Dakota in October 1980 requested in December 1980 that their training program be modified to include additional training in Remote Sensing. Mission received request December 28 which was discussed with Director of Soils and team members and forwarded approval to AID/W on January 7, 1981. Each participant will now receive from 1½ to 2 months of training in Remote Sensing versus 2 weeks as originally programmed.

## VI. Budget Review

A budget review was held Wednesday evening to discuss funding constraints and future project implementation. Attending this review was Victor Meyers Director of RSI, Gerald Shea, Vice President Louis Berger, Bruce Worcester Contract Team Chief of Party, Dick Warin USAID Controller, Archie Hogan Agricultural Development Officer and Worth Fitzgerald Agr. Project Officer, NE/Tech.

The Contractor came to Syria (as well as <sup>to</sup> the budget review) with the idea that AID would provide additional funds from some source to compensate for the shortfall between the Contract Amount of \$2,486,854 and the project Authorized Amount of \$2,200,000. While in Syria Shea of Louis Berger modified his projection to arrive at a figure of \$2,354,849 which he claimed was the minimum reduction, consistent with implementing the project as planned, that was called for.

The ADO reiterated that the project and contractor had to operate within the \$2,200,000 limit since there were no additional funds available. He further illustrated that with the reduction of personnel time - i.e.,: 3 months versus 6 months for the Soils Laboratory expert, 9 months versus 12 months for the Range Management, 3 months only in Syria for the computer specialist and the reduction in training time for both the Range Management (9 month versus 12) and computer trainee (7 months versus 9 months), that the project should have enough funds to carry through completion. The ADO further stated that the participant training program costs appeared to be very high. Victor Meyers stated that the \$2,000/ month per participant was what they are charging other groups, and had been approved. The ADO then presented a flow chart which indicated that even if you allowed for 16 part time instructors, participant per diem, their domestic and international travel, shipping of books at the completion of the training course and miscellaneous training costs, that through the end of FY 1981, total participant costs should not exceed \$75,686 in addition to the amount already expended from October 1980-January 1981.

Also it was indicated that there appeared to be an excessive amount of funds in the Other Direct Costs line item which showed that out of a budgeted Amount of \$254,663 only \$34,679 had been expended and most of the major items in this category had already been purchased (i.e. landsat tapes).

After further deliberations, Shea produced a new budget sheet which indicated that the contractor would be only \$3,511.00 over the \$2,200,000 amount and that with the reductions indicated they probably could stay with the budgeted amount.

From all indications, it appears that the so called dire shortage of funds, does not really exist and that by prudent utilization of existing funds the contractor can complete the job called for. However, the ADO believes that the contractor will continue to use the mythical shortfall as an excuse for not completing portions of the project whenever it can. For example, even after Shea had more or less agreed during the budget session that it appeared they could function within the \$2,200,000, at the meeting with the Minister he kept alluding that it might be difficult to complete the 1:100,000 Soils Maps because of the constraints on funds.

- VII. Meeting with Minister of Agriculture March 5, 1981 Accompanied by the Director of Soils, a group from the evaluation meeting consisting of Hogan, Fitzgerald, Meyers, Shea and Worcester met for more than one and one half hours with the Minister and his two deputy ministers to discuss the most outstanding issues raised during the evaluation.

The major point was completion of the 1:25,000 semi detailed maps of the first settlement zone. Jum'a had apparently briefed the minister the night before so even the minister as well as his deputies stated at this session that these maps were essential for the successful completion of the project, and that an all out effort should be undertaken by AID to see that they were produced. In their words efforts should be intensified!!

It was indicated to the Minister that the contractor Louis Berger had indicated that it might be impossible to complete all of the mapping at this scale but that the 1:25,000 semi detailed map were still an output of the Grant Agreement, and that we might possibly end up with something less than the full area mapped while at the same time leaving the capability within the Syrian government to complete the mapping. Even completion of the 1:100,000 soils maps was questioned by Shea. Jum'a stated that if the contractor did not complete the 1:25,000 scale that the Syrians would be unable to complete the task. Shea stated that there was a shortfall in funds available and he didn't see how both the 1:100,000 and 1:25,000 maps could be completed within both the constraint on funds and time (Yuksel's departure, June 82).

Fitzgerald explained the shortfall between the contract amount and the project authorized amount. The ADO indicated there were no additional funds that could be utilized in financing the project. The Minister and Deputy Minister Saud indicated that contact should be made with AID to see about transferring other AID project funds to this project. However, he emphasized that the contractor in the meantime should intensify its efforts to complete the job they had on hand. Deputy Minister Saud indicated that even though this was a grant project, AID should see to it that the outputs are achieved.

It was indicated to the Minister that the project would delay purchasing the ninth vehicle at least until the second evaluation. At which time a determination would be made. The Minister was in Agreement to this. Later it was revealed that the Director of Soils was the one who had kept the vehicle issue going.

At this point in our discussion it was indicated that there were ten basic things that the project would complete if successfully carried out under existing constraints.

Project Will Complete

1. 1:500,000 Soils Maps
2. 1:500,000 Land Use Map
3. 1:100,000 Soils Map 1st Settlement Zone
4. 1:100,000 Land Use Maps 1st Settlement Zone
5. Initiate and train in 1:25,000 Semi-detailed Maps
6. Provide equipment for updating Soils Laboratory
7. Complete Guidelines for Irrigation
8. Range Maps
9. Program of Land Classification and Soil Survey
10. Training of 18 Syrians