

UNITED STATES
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USAID/MOROCCO'S AGRONOMIC INSTITUTE
PROJECT IS A MAJOR FACTOR IN
MOROCCO'S DEVELOPMENT OF
IT'S AGRICULTURE POTENTIAL

Audit Report No. 3-608-83-16
April 25, 1983



Regional Inspector General for Audit
NAIROBI

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U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
RIG/A/NAIROBI

April 25, 1983

TO : Mr. Robert Chase, Director, USAID/Morocco
FROM : Ray D. Cramer, RIG/A/Nairobi 
SUBJECT: Memorandum Audit Report: USAID/Morocco's Agronomic
Institute Project Is A Major Factor In Morocco's
Development Of It's Agriculture Potential.
Audit Report No. 3-608-83-16

The Agronomic Institute Project which is being implemented by the University of Minnesota under a host country contract is under consideration for an extension to ten years, with total life of project funding of approximately \$22.3 million. This would be an increase of \$12.6 million from the original five year life of project cost of \$9.7 million.

The project and its extension are a continuation of similar agricultural projects that began in 1970 aimed at developing Morocco's only college of agriculture, the Institut Agronomique et Veterinaire, Hassan II (IAV). The purpose of the current project is to complete the institutional development of a "modern" college of agriculture appropriate to Moroccan agricultural development needs. The primary outputs of the project were planned as: trained faculty who have replaced foreign faculty members; graduate-level programs offered in the agricultural sciences; student's thesis and publications on agricultural research performed in Morocco; and strengthened linkages with research and extension organizations within the Government of Morocco (GOM). Principal items in the project budget are technical assistance (44%), participant training (45%) and commodities (11%).

The project has achieved much success in providing highly trained faculty agriculturalists at the Rabat Campus of IAV. No adverse audit findings were found in examining the achievement of this goal at the Rabat Campus.

Elsewhere, major findings for the project may be summarized by the following statements: USAID/Morocco should (a) require more detailed financial and performance reporting from the contractor, (b) not forego potential long-term development gains from continuing inputs to the Agronomic Institutes' new campus in Agadir, and (c) more closely monitor participant training expenditures such as research stipends.

Also, due to the large participant training aspect of this project, we feel it necessary to make a general comment that it appears reasonable for AID-financed participants to bear some of the direct educational costs of their training, either by up-front payments or through subsequent repayments. We do not find this a requirement for participants in any AID project, even though participants are not selected or sent to the U.S. for higher education based on financial need.

BACKGROUND

At independence in 1956, Morocco had no college of agriculture and only a handful of agricultural graduates who had gone abroad for their education. In 1964 the the Government of Morocco (GOM) announced its intent to establish a Moroccan college of agriculture. The Institut Agronomique et Veterinaire Hassan II (IAV) was established in 1968, and is the only college of agriculture in Morocco capable of awarding M.S. and Ph.D. degrees. It started with 12 students, no buildings and no equipment; but has since grown to over 2,300 students with over 200 faculty members. Its primary mission is in teaching, and its principal efforts are directed to the training of its students.

In 1981 IAV decentralized its campus by building a coordinate campus at Agadir for horticulture in the middle of a major horticultural development area. This campus was expected to serve as a training center not only for college level students, but also for technicians and farmers.

Since 1970 USAID/Morocco has provided support to IAV through a contract with the University of Minnesota. Under this activity the University of Minnesota provided resident staff, temporary duty professionals, and participant training. The initial objectives were modest. There was, for the first four years, a major emphasis on resident instruction in the second cycle or Bachelors of Science program.

In 1974 the first participant was sent to the U.S. for third cycle training. The primary purpose of third cycle (M.S.) training is to create a pool of students with proven performance at the graduate level for faculty recruitment and eventual training in the doctoral program. The basic format is to provide 12-15 months of graduate U.S. training followed by a 6th year memoire research program in Morocco. Since 1974, over 150 third cycle students have been sent to the U.S.

Purpose and Scope

We conducted a limited review of progress to date under project 0160 at IAV Rabat and Agadir. The primary purposes of our review were to:

- Determine the degree of contractor performance under its contract in accordance with terms of the host country contract.
- Determine the extent of USAID/Morocco's monitorship of the project in accordance with prudent management.

We reviewed records, reports, and correspondence at USAID/Morocco; and held conversations with contractor representatives and USAID officials involved in monitoring and overseeing the project. Comments on the draft report were solicited from USAID/Morocco and S&T/IT, and incorporated into this report where appropriate.

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Contractor Financial Reports Need More Detail

During April 1982, a Project Evaluation Summary (PES) for the Agronomic Institute Project (0160), and the predecessor project (0134), was prepared covering the period from June 1976 through December 1982. The PES identified the problem of inadequate information being provided in voucher submissions by the contractor. The lack of complete documentation keeps USAID/Morocco from adequately monitoring expenditures incurred under the project. This information would allow confirmation as to whether formal work plans were being met. In addition, thorough documentation which matched up advances to work plans to expenditures, could have avoided management problems with equipment and advances for equipment that took place in establishing the Agadir branch location of IAV.

When AID's Inspector General audit team arrived in December 1982, it questioned contractor advances approved by USAID/Morocco. Report of Audit Finding (RAF) Number One pointed out that outstanding contractor advances of \$675,000 plus the equivalent of \$65,000 in Moroccan dirhams, or a total of \$740,000 in advances, had been made to the University of Minnesota.

In fact, the total non-local currency advance of \$675,000 was made in two parts -- one for monthly contractor expenses for \$375,000, to be reimbursed on an imprest basis; and one for equipment and laboratory supplies at Agadir for \$300,000 against which procurement of equipment and supplies was to be offset. The Agadir equipment

advance was made in December 1980. However, the Agadir equipment advance of \$300,000 was not drawn down on USAID/Morocco records when equipment was purchased for the Agadir branch of IAV.

At the time of our visit to Agadir only \$60,000 in laboratory equipment was shown on inventory records as having been provided to the Agadir horticultural branch, and no dollar values had been assigned to field equipment. We were told this equipment had not provided complete laboratories, so neither the laboratories nor the equipment had ever been used by students. A U.S. technician located in Agadir stated that the lack of laboratory use to date was due to a lack of funds for needed supplies and additional equipment to complete the laboratories. A 1981-82 annual progress report prepared by the lead technician at Agadir made the following statement concerning laboratory development:

"At this stage in the development of the Complexe Horticole in Agadir, the most challenging objective is the creation of functioning laboratories for research and teaching. To date, students graduate with hardly any exposure to or experience in laboratory instruction and field work. This is understandable, however, since the offering of laboratory courses requires, in most cases, unaffordable equipment, supplies and chemicals. The creation and continued support and maintenance of functioning laboratories at the Complexe should be an important and continuing objective of the project. A bigger objective will be the continued support and maintenance of these laboratories by our Moroccan colleagues after the termination of the project...

In the meantime, purchase requests have been prepared for chemicals, supplies, some equipment and laboratory furniture; actual purchasing would take place after funds become available. In light of current estimates, a minimum of \$300,000 will be needed."

As previously stated, \$300,000 in funds had been provided in the form of an advance to the University of Minnesota in December 1980. The lack of followup to ensure the funds had been expended for equipment was caused by improper monitoring on the part of USAID/Morocco -- both on-site and through its financial records.

The University of Minnesota's holding an advance of \$300,000 for such a long period of time without purchasing all necessary equipment and supplies is surprising, and raises the question of how this money was used. Presumably the University of Minnesota purchased the equipment it did buy as monthly expenditure items and kept the equipment advance as an interest free loan. If so, the advance should be recouped by USAID/Morocco and any interest earned should be returned to the U.S. Treasury.

Conclusion and Recommendations

The University of Minnesota obtained a \$300,000 advance in December 1980 to purchase laboratory equipment and supplies for the Agadir branch of IAV. Only \$60,000 of this advance was shown on inventory records as properly used; and neither USAID/Morocco nor the University of Minnesota had properly monitored the funds or the progress at the project site. Therefore, laboratory equipment worth \$60,000 (which could not be used without additional supplies and equipment) and newly constructed laboratory classrooms (financed by the GOM) have never been used for the research and teaching purposes intended. In addition, the University of Minnesota may have gained interest from the deposit of a \$300,000 cash advance into an interest bearing account.

Recommendation No. 1

USAID/Morocco, in coordination with the GOM, review the University of Minnesota's use of a \$300,000 cash advance for laboratory equipment to (a) determine (1) how much and what kind of equipment has been procured, (2) what remaining equipment and supplies need to be promptly ordered, and (3) excess cash advances held since June 1980; and (b) collect any outstanding excess cash advance held, and require the return to the U.S. Treasury of any interest earned on the cash advances.

Recommendation No. 2

USAID/Morocco, in coordination with the GOM, (a) require more detailed financial reporting from the University of Minnesota, and (b) develop guidelines to coordinate and monitor the more detailed reporting of the financial expenditures to the project's performance progress.

In response to our draft report, USAID/Morocco stated:

"Recommendation No. 1

Information on AID-financed equipment that has been ordered and received is available at the University of Minnesota and in records at Agadir. We will request this information from the GOM's Ministry of Agriculture and assess any further equipment needs simultaneously.

The entire advance of \$300,000 for equipment was recouped in early 1983. We will make a determination whether any excess cash was held by the University of Minnesota in an interest-bearing account. If interest was earned we will request that this interest be returned to the U.S. Treasury.

Recommendation No. 2

We will work with the GOM and the University of Minnesota to develop a more detailed financial and performance reporting format that will allow us to match project financial expenditures to project progress in a more effective manner."

Agadir Branch Campus Needs Further Assistance

Three U.S. technicians have been on-site at Agadir during the last two years to help the new branch of IAV develop its horticulture program. It was evident that these technicians provided a major U.S. presence. Returned participants stressed the importance and need for USAID assistance at Agadir. The yet-to-be dedicated Agadir branch has extensive facilities for laboratory, classroom, and field research work. The enthusiasm of returned participants from the U.S. for the facility indicates potential success for this new horticulture research facility. These same returned participants (including the Branch Director) stressed the importance and need for USAID at Agadir during the next few years.

The demand for horticulture research in Morocco was discussed with a U.S. technician who stated that there was not even one Moroccan PhD horticulturist, although horticulture accounts for 47 percent of the total agricultural value of the country and 35 percent of its total agricultural output. Therefore, the need for soil scientists and other horticulture specialists is critical.

The original Project Paper included \$500,000 for startup equipment. As previously noted, \$300,000 was actually advanced to the University of Minnesota and none of this amount was drawn down by the University of Minnesota. The Project Paper described the need for \$500,000 in equipment at Adagir as follows:

"The purpose of this commodity assistance is to permit the use of the impressive new facility and to ensure that resident staff assigned to Agadir can effectively be utilized in the teaching program there. Clearly, resident faculty with buildings and students and no equipment cannot do an adequate job. Resident staff furnished under the project will not be assigned to Agadir until the Agadir campus is adequately operational. On the other hand, it is not desirable to allow further delay for the lack of basic equipment described above."

Two years after this paragraph was written in the Project Paper, the laboratories still could not be used because of a lack of equipment and supplies.

A draft Project Paper Amendment, prepared in December 1982, proposes that the overall life of project be extended to 10 years. This will more than double the life of project funding to \$22 million. However, only a short reference is made to Agadir; and the expressed intent from the following quoted excerpt, and in discussions with USAID/Morocco officials, is to not extend further technical assistance to Agadir. The following excerpt, from the proposed Project Paper Amendment, appears to indicate that USAID/Morocco was not aware that equipment for the Agadir Branch had not been procured in sufficient quantities to put the laboratories into actual use.

"1. Agadir Start Up. The 1980 PP authorized \$300,000 in commodities for the purchase of start up equipment for Agadir. These funds have been disbursed and equipment is installed at Agadir. Although minor commodities will be provided to Agadir to ensure effective use of existing equipment and facilities, direct commodity support will be phased out in FY 85 at the same time as the resident staff."

We found the above proposal to close out assistance to Agadir in contradiction with the USAID/Morocco's own April 1982 evaluation which contained the following comment:

"It has been necessary to retain U.S. personnel in plant pathology and horticulture because the GOM has founded a School of Horticulture in Agadir. This decision was made in part to decentralize the Institute, but also because horticultural crops (citrus, olives, etc.) are an extremely important part of Morocco's agricultural economy and are a source of scarce foreign exchange. Much of horticultural crop production in Morocco occurs in Agadir Province.

However, while most departments have on the average 3 - 6 returned faculty participants who can replace the research and advisory functions of the U.S. staff, there is only one returned faculty participant in plant breeding....It appears that the contractor is not actively encouraging interest in plant breeding and not attempting to recruit potential faculty participants in the field. In view of the severe lack of trained plant breeders in the country and the importance of this field in the development of Moroccan agriculture, this situation should not be permitted to continue."

The reason we found in the files for discontinuance of assistance at Agadir was that it did not fit with USAID/Morocco's "rainfed agriculture strategy". However, since the Agadir branch has become an important part of IAV's agriculture program in which USAID/Morocco assistance has and is playing a major role, we question if the cited reason for discontinuance was appropriate.

At Agadir, a new physical plant and campus already financed by the GOM lends itself to high technology inputs from USAID that provide a large return for agricultural research in Morocco. The opportunity for relatively small dollar values of aid to contribute substantially and quickly with high technology transfers makes inputs at Agadir directly in line with the AID Administrator's stated policy and philosophy on development assistance.

Conclusion

During our visit to Agadir we were impressed by the U.S. technical assistance provided to the facility and by its future potential. Considering the need for horticulture research in Morocco, we can appreciate USAID/Morocco's original commitment to the Agadir Branch. It appears that a proposal to withdraw future support should be more carefully considered based on comments made in the April 1982 PES, and the apparent importance of this new research facility to horticulture and agriculture throughout Morocco.

Our draft report contained a recommendation for USAID/Morocco to evaluate more thoroughly the long term implications of withdrawing support from the Complexe Horticole in Agadir, while maintaining a large \$22 million program at the more established Rabat main campus of IAV.

In response to our draft report USAID/Morocco stated:

"We are in agreement with the auditor's views on the potential for Agadir and we are in the process of assessing our assistance to the Agadir Branch of IAV. Based on AID funding limitations and our evaluation of the need for continued assistance beyond 1985 we will program appropriate levels of assistance."

Based on the assurances for further consideration of this matter, we have deleted the recommendation from our final report.

AID's Policy On Participant Financing Needs Review

The host country contract with the University of Minnesota provides for substantial AID financed participant training. Included in this training are travel, living and educational costs at the best U.S. universities. There is no requirement for the participants to

financially contribute toward these costs -- either at the time of attending college or through subsequent repayments after graduation from college. This is in accordance with current AID policy.

In many, if not most, developing countries, only the children of wealthy parents are able to achieve the level of a U.S. high school education. Thus, in many instances under the AID program, the U.S. taxpayers are financing the education of dependents of wealthy foreign national citizens without any payment on the part of the participant or his family.

In conjunction with some host government support (usually one-way air fare and possibly continuation of the participants host country salary), the U.S. AID program is underwriting all costs of participant higher education programs. This is a more generous program than any known domestic U.S. citizen based educational program, and does not appear to be equitable to many U.S. taxpayers who must bear the full cost of their own, or their dependent's, education through work and/or loans.

AID could stretch its limited available funding if it required some financial input from the prime beneficiary of the program -- the participant. This could be accomplished by requiring an up front payment of a certain percentage of expected costs, or through subsequent required repayments after the participant graduated and returned to work in his country. There are undoubtedly numerous ways the amounts collected could be subsequently used; e.g., the amounts collected could either be used to directly reduce U.S. inputs for the specific participant, or could be deposited in a trust fund for educating future participant's from the participants country.

Conclusion

AID financed participants, frequently dependents of the more wealthy citizens of a host country, receive a free college education (at times through the M.S. or Ph.D. level), without being required to provide any financial input toward the cost of their education.

Our draft audit report contained a recommendation for S&T/IT to review AID's participant training policy to determine whether student beneficiaries should disclose financial need and be required to contribute to their training costs through upfront payment and/or loans -- to bring development assistance more in balance with U.S. domestic policy.

In response to our draft report, S&T/IT stated:

"AID participant training is an integral part of U.S. economic development effort. A high percentage of all participants are trained for a particular development effort in the host country.

This is not an individual scholarship program. Most participants work for the host government before training and return to work for it after training. The funding used for the training is most often part of a bilateral assistance package to a particular host government.

The host government contributes to the participant training program in most cases by paying international air fare and paying all or part of the individual's salary during training.

Criteria for selecting participants are mutually determined by AID Mission and host country government. Believe it would be inappropriate to impose a needs requirement on the selection process.

A needs test would be extremely hard to administer. Since selection is made by the host government, AID would have little or no way of knowing the individual's financial condition. Our experience with thousands of participants over 30 years from some of the poorest countries in the world has been that full payment is the only way that most individuals could consider coming for training.

Of 326,000 foreign students in the U.S. in 1982, 67 percent were supported by personal and family funds, while less than 3 percent were sponsored by U.S. government.

Because U.S. government uses wide range of funding mechanisms and variety of arrangements to support American students both in and outside of U.S., we believe that AID's participant training program is fully consonant with domestic educational policies."

Based on S&T/IT's response, it is apparently necessary to clarify/amplify our comments. First, it is important to note that currently participant training programs can cost over \$20,000 per year per participant. We did not intend to imply that only the "most needy" should become AID financed participants -- only that once selected, an AID financed participant should be required to finance part of his/her educational costs. The level of individual financing could vary based on the "needs" of the individual. Such a method would remove the present gift concept, and replace it with an earned concept.

As such a revision would obviously require a change in AID current policies, and would require consideration and action at the highest levels of AID management, RIG/A/Nairobi is not making a formal recommendation on this matter. Rather, we are referring the circumstances to the IG's Office of Policy, Plans and Programs (IG/PPP) for consideration and referral to higher levels of AID management, if deemed appropriate.

Research Stipends Need Tighter Guidelines and Closer Monitoring

The University of Minnesota contract provides that each student be allowed to expend \$10,000 toward research. To date these moneys have been used in a variety of ways as allowed by the following paragraph in the host country contract:

"(6) The student and the U.S. advisor shall establish a budget for the conduct of this research. The contractor shall provide and be reimbursed for research costs not to exceed \$10,000 (total) for each doctoral student who returns to Morocco to do research. These funds may be used for any purpose that advances the research (equipment, travel-in country and internationally for the student and his advisor, computer time, secretaries, etc.)."

Neither the GOM nor USAID/Morocco had established specific guidelines for use of the stipend, or adequately monitored students' actual expenditures. The use of these funds requires closer monitoring with tight guidelines and approval procedures in advance of expenditures.

Conclusion and Recommendation

Contract provisions for \$10,000 in research stipends require guidelines of what the stipend should be used for, and a budget review before they are expended.

Recommendation No. 3

USAID/Morocco, in coordination with the GOM, (a) establish tight guidelines for use of research stipends, (b) establish procedures for the contractor to use in reviewing and approving the general program for each participant prior to expenditure of funds, and (c) require a final accountability for the funds expended by each student.

In response to our draft report, USAID/Morocco stated:

"USAID/Morocco in coordination with the GOM and the University of Minnesota will establish guidelines and procedures for the contractor to follow in monitoring the expenditure of participant stipend research funds."

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