CLASSIFICATION

PROJECT EVALUATION SUMMARY (PES) – PART I

PD-AAN-995
Report Symbol U-447

1. PROJECT TITLE	2. PROJECT NUMBER	3. MISSION/AID/W OFFICE
Artificial Insemination Expansion	698-0410.20	USAID/Somalia

4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 1

☒ REGULAR EVALUATION ☐ SPECIAL EVALUATION

5. KEY PROJECT IMPLEMENTATION DATES	6. ESTIMATED PROJECT FUNDING	7. PERIOD COVERED BY EVALUATION
A. First PRO-AG or Equivalent FY 79	A. Total $	From (month/yr.) 7/79
B. Final Obligation Expected FY 83	B. U.S. $ 440,000	To (month/yr.) 12/82
C. Final Input Delivery FY 83		Date of Evaluation Review 12/15/82

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
1. Extend the PACD for six months.	Kenneth Randolph	1/15/83
2. Extend the personal services contract of the Artificial Insemination advisor for six months.	Kenneth Randolph	1/15/83
C. That the USAID consider the providing of a U.S. contract technician on either a full time basis for two years, or on a programmed consultancy basis visits to the country.	Kenneth Randolph	6/30/83
D. That USAID contact World Wide SIRES, Inc., P.O. Box 149, Hanford, CA. 93232, to determine if this private firm would be interested in undertaking the support of the project and the recruiting of an A.I. technician.	Kenneth Randolph	3/31/83
E. That if USAID continues support to an A.I. program, the assistance be only in the realm of technical and management training of A.I. technicians at the headquarters and subcenters.	Kenneth Randolph	6/30/83

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

- ☐ Project Paper
- ☐ Financial Plan
- ☐ Logical Framework
- ☐ Project Agreement
- ☐ Implementation Plan e.g., CPI Network
- ☐ PIO/T
- ☐ PIO/C
- ☐ PIO/P
- ☒ Other (Specify) PACD
- ☒ Other (Specify) P.S. Contract

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

- A. ☒ Continue Project Without Change
- B. ☐ Change Project Design and/or ☐ Change Implementation Plan
- C. ☐ Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

Kenneth Randolph, USAID/Somalia, Project Manager
Calvin Martin, REDSO/E, Livestock Specialist

12. Mission/AID/W Office Director Approval

Signature: Jim Kelly
Typed Name: Jim Kelly
Date: 5/9/83

AID 1330-15 (3-78)

PROJECT EVALUATION SUMMARY PART II

SUMMARY

13. Summarize the current project situation, mentioning progress in relation to design, prospects of achieving the purpose and goal, major problems encountered, and etc.

Discussion:

The Artificial Insemination Expansion Project was approved in June 1979, and designed as an Accelerated Impact Program with a life of fifteen months. During the implementation of the project, it was amended four times for the purposes of adding $100,000 and extending the PACD to January 31, 1983.

Progress of the project in relation to the design has been rather meager because the major input (liquid nitrogen cryogenerator) was not installed in the A.I. Center until June 1982. This nitrogen generating plant was to be installed by November 1979, so that frozen semen would be available for training the A.I. inseminators in February 1980, per the Implementation Plan in the Project Paper.

Consequently, the purpose of the project "to change the insemination program from fresh to frozen semen" was delayed drastically. It is only in the last sixty days that frozen semen was made available to private dairymen for breeding dairy cattle.

The in-service training program conducted by the A.I. Center for inseminators has been well planned and executed. Training has been provided to 24 A.I. technicians now working at the A.I. Center, four subcenters and two government dairy farms. It appears this training component of the project has progressed on a sound basis.

The project goal was overly optimistic and the project designers could have benefitted immensely from experienced professionals trained in A.I. technology when preparing the Project Paper.

14. Evaluation Methodology. What was the reason for the evaluation, e.g., clarify project design, measure progress, verify program/project hypotheses, improve implementation, assess a pilot phase, prepare budget, etc.? Where appropriate, refer to the Evaluation Plan in the Project Paper. Describe the methods

used for this evaluation, including the study design, scope, cost, techniques of data collection, analysis data sources. Identify agencies and key individuals (host, other donor, public, AID) participating and contributing.

Discussion:

The evaluation of the Artificial Insemination Expansion Project (AI), 698-0410, was undertaken to measure progress and meet the requirements of the Project Paper, that an evaluation be conducted before the completion of the activity. Methods utilized to conduct this evaluation included a review of the project documentation in the files of USAID, discusions with the project manager of the Mission, U.S. contractor and the Government of Somalia Democratic Republic (GSDR) officials, A.I. field staff at the Afgoi Center and field visits to Afgoi, Bulalow and Lana-Dona villages and Mogadishu subcenters. Quarterly reports were used in the process of making analysis and data reviews.

15. External Factors. Identify and discuss major changes in project setting, including socio-economic conditions and host government priorities, which have an impact on the project. Examine continuing validity of assumptions.

Discussion:

The major external factor that affected the project implementation was the tardiness incurred in obtaining parts and technical services in setting up the liquid nitrogen cryogenerator. The fact is, the liquid nitrogen cryogenerator was not fully operational until May/June 1982, while the Project Paper implementation plan stated the nitrogen plant would be in full operation by November 1979. Also, the U.S. contractor arrived in-country during August, 1980; the project implementation plan called for the contractor to arrive in January, 1980. The delays experienced in getting the liquid nitrogen plant in operation and the late arrival of the U.S. contractor have resulted in the USAID/Mission preparing four amendments to extend the PACD. These amendments were necessary to extend the life of the project and revise the duties and responsibilities of the U.S. contractor to meet the delays caused by the lateness in putting into operation the liquid nitrogen plant. It is the judgement of the evaluators that the government made available the required technical staff to operate the A.I. facility.

16. Inputs. Are there any problems with commodities, technical services, training or other inputs as to quality, quantity,

timeliness, etc? Any changes needed in the type or amount of inputs to produce outputs?

Discussion:

The commodities procured under the project arrived in an acceptable time frame. As an example, the three vehicles were ordered prior to the arrival of the U.S. contractor and laboratory equipment, chemicals, and field A.I. service equipment have been imported in adequate quantities on a timely basis to meet project needs. Of course, the extension of the Project Assistance Completion Date (PACD) from the original date of September 1980, to January 1983, has been beneficial in meeting the timeliness requirements of project supplied commodities. While the U.S. contractor's arrival in-country was delayed seven months, it appears this delay did not retard the project activities as much as the lack of getting the liquid nitrogen plant into operation. It was reported that the general supply of field and laboratory commodities purchased with project funds is probably sufficient to keep the A.I. program operational for another two to three years at current implementation levels.

The USAID/Somalia Quarterly Financial Report, as of September 30, 1982, for the A.I. project, reports the fiscal situation as follows:

Life of Project Funding	$440,000
Amount Obligated	$440,000

Item	Earmarked	Disbursed	Unliquidated
Technical Services	$187,990	$112,081	$ 75,909
Commodities	207,682	163,155	44,527
Participants and Other	6,187	3,965	2,222
TOTAL	$401,859	$279,201	$122,658

In addition to the above accounting there is a balance (as of September 30, 1982) of $38,141 as unearmarked funds and a decommitted amount of $20,432; thus, a total of $58,573 will remain in the A.I. project at the time of Project Assistance Completion Date of January 31, 1983.

It was reported that the GSDR is providing budget support to the project for recurrent costs of about 600,000 SoSh. per year.

17. Outputs. Measure actual progress against projected output targets in current project design or implementation plan. Use tabular format if desired. Comment on significant management experiences. If outputs are not on target, discuss causes (e.g., problems with inputs, implementation assumptions). Are any changes needed in the outputs to achieve purpose?

Discussion:

The Project Paper listed two outputs in the logical framework, which will be commented on in this report.

1. Technically Sound A.I. Program Utilizing Frozen Semen

The Project Paper called for the establishment of twelve A.I. subcenters, each with one inseminator in the environs of the city of Mogadishu, each center servicing about 1,000 cows, and four subcenters with a technician in the areas of Gowhar, Goirioley, Genale and a center near Afgoi. These subcenters were intended to meet the needs of private dairymen in adjacent areas. A few government farms in the vicinity of the subcenters were also to be provided A.I. services.

At the time of this evaluation, the A.I. program has a sound program using frozen semen at subcenters in Bulalow and Lama-Dona, two subcenters in Mogadishu, the Banadir Dairy Project in Mogadishu, and the 21st of October Dairy Farm in Afgoi. It is estimated that about 10 to 20,000 milk cows are available for servicing in the four subcenters. However, it appears through interviews with A.I. inseminators that each subcenter actually inseminates only about four to six cows per week. This relatively low number of cows being inseminated per week out of a potentially high number of available female animals, is probably due to several factors. The first factor is that actual A.I. inseminations using frozen semen were commenced at the subcenters during September/October 1982. A second factor is the dubious nature of the dairymen regarding the expected benefits of an A.I. program. Dairymen are expected to participate in a new production technology which has only recently been explained to them, as there are no visible results for the farmers to readily observe. The dairymen are unable to view the intended results obtained by their neighbors; the only results of previous insemination activities are found on government

operated farms. Furthermore, the intended results of crossbreeding, or the use of superior genetic semen of indigenous bulls, will require a period of three to four years, starting from the time a cow is serviced. It will take a minimum of three years from the time the offspring is dropped until the crossbred progeny is producing milk. Hence, in our judgement, the output indicator of 10,000 cows inseminated with frozen semen per year was an extremely optimistic goal, given the level of A.I. knowledge in the country at the time the project was initiated. Also, there is a lack of livestock production research data in Somalia on the results that might be attained from crossbreeding programs being promoted by the A.I. program.

The Banadir and 21st of October dairies have milch cow population of about 1,000 to 1,500 female animals.

The frozen semen being used in this project has been donated by FAO, e.g. 2500 doses of Friesian and 200 doses of Jersey semen.

2. Improved Animal Husbandry and Dairy Production Practices

The Project Paper was somewhat unclear as to what improved animal husbandry and dairy production practices were to be attacked by the implementation of the project. Furthermore, the output indicator to verify this objective was that 1,000 livestock producers were to receive instruction in improved practices. Through discussions with the GSDR, A.I. officers and the U.S. contractor, it was stated that the project has conducted a number of in-service type training sessions for A.I. inseminators and dairy producers. To date, the project has trained 24 technicians, which includes seven laboratory technicians, four inseminators for the four established subcenters, nine inseminators for the government farms, and the remaining technicians for new subcenters to be established in the near future. In addition to the technical type training for inseminators, the project officers have conducted numerous training meetings for dairy producers, where information was presented on the detecting of heat cycles, care and techniques required in executing A.I. practices and advantages of a crossbreeding program. Livestock producers have raised questions on the possibility of additional feed requirements for crossbreed animals; hence, the project officers addressed this question at these meetings. The project officers conducted a number of training sessions on the proper methods of keeping records on the breeding herd as to milk production, breeding cycle, length of lactation, calving dates and growth rates of calves. Record keeping on the growth rate of bulls has also been initiated.

In summary, it must be stated the project did not achieve the outputs as projected in the Project Paper. However, the project has made some sound progress which has laid a foundation which might eventually lead to achieving the desired goals.

18. Purpose. Quote approved project purpose. Cite progress toward each End of Project Status (EOPS) condition. When can achievement be expected? Is the set of EOPS conditions still considered a good description of what will exist when the purpose is achieved? Discuss the causes of any shortfalls in terms of the causal linkage between outputs and purpose or external factors.

Discussion:

The stated purpose is to "improve the strain of milking cattle by assisting the Ministry of Livestock, Foresty and Range (MLFR) to change over their present artificial insemination system from fresh liquid semen to frozen semen". The end of project status envisioned in the paper was a properly functioning program utilizing frozen semen, and involvement of private livestock owners in the project activities. At the time of this evaluation, the rudiments of an A.I. program using frozen semen is in evidence at the four subcenters and two government farms cooperating in the program. Private livestock owners have begun, however slowly, to breed their cows using A.I. frozen semen. The magnitude of the program is small and a question has to be raised as to the stability of the program. Since the frozen semen program has only been operating about three months, it is impossible to state whether or not the program will continue at an effective level once the U.S. contractor is removed from the scene. In all candidness, it is doubtful that the project breeding and record keeping would continue to operate effectively if the expatriate technical assistance is terminated in January of 1983.

19. Goal/Subgoal. Quote approved goal, and subgoal, where relevant, to which the project contributes. Describe status by citing evidence available to date from specified indicators, and by mentioning the progress of other contributory projects. To what extent can progress toward goal/subgoal be attributed to purpose achievement, to other projects, to other casual factors? If progress is less than satisfactory, explore the reasons, e.g., purpose inadequate for hypothesised impact, new external factors affect purpose subgoal/goal linkage.

Discussion:

The goal as stated in the Project Paper is "to improve the economic return of the livestock producers who are marketing milk in Mogadishu". The life of the project was originally set as fifteen months with a goal to improve economic returns from A.I. inseminated cows whose progemy would require three years to come into milk production. The designers of the project must have been asphyxiated with grandeur.

20. Beneficiaries. Identify the direct and indirect beneficiaries of this project in terms of criteria in Sec. 102(d) of the FAA (e.g., a. increase small-farm, labor-intensive agricultural productivity; b. reduce infant mortality; c. control population growth; d. promote greater equality in income; e. reduce rates of unemployment and underemployment). Summarize data on the nature of benefits and identify the number of those benefitting, even if some aspects were reported in preceding questions on output, purpose, or subgoal/goal. For AID/W projects, assess likelihood that results of project will be used in LDC's.

Discussion:

The direct beneficiaries of this project will be the small dairymen whose cows are now being serviced by A.I. using the frozen semen. Hopefully, the female offspring resulting from the A.I. frozen semen service will have the genetic background to produce more milk than their dams. It will take another four years to determine the results of the genetic improvement.

21. Unplanned Effects. Has the project had any unexpected results or impact, such as changes in social structure, environment, health, technical or economic situtation? Are these effects advantageous or not? Do they require any change in project design or execution?

Discussion:

No comments are being offered on the unplanned effects.

22. Lessons Learned. What advice can you give a colleague about development strategy, e.g., how to tackle a similar development problem or to manage a similar project in another country? What can be suggested for follow-on in this country? Similarly, do you have any suggestions about evaluation methodology?

Discussion:

The major lesson to be learned from this project is that a greater effort needs to be undertaken in designing activities where a sophisticated technology will be transferred to dairy producers.

A. This project was based on an input of a foreign firm to provide a functioning liquid nitrogen cryogenerator. Until the liquid nitrogen unit was fully functional, the AID input of a U.S. contract technician could not undertake the duties and responsibilities of training A.I. technicians in using frozen semen, establish A.I. sub-centers or conduct dairymen educational meetings for demonstrations. Hence, the coordination required to make the various inputs available in a timely manner was of paramount importance to the success of the project. It is evident at the time of this evaluation, that the project designers were not very careful in planning when inputs should arrive in-country and foreseeing the time it takes to put the liquid nitrogen plant in operation well in advance of the U.S. contract technician's arrival.

B. The second lesson is the extreme optimism of the project designers in the stated goals and outputs. There is no evidnece at this time that the stated outputs for the project could be reached in another two years of operation. The project design lacks professional input.

23. Special Comments or Remarks. Include any significant policy or program management implications. Also list titles of attachments and number of pages.

Discussion:

Under the special comment section of this evaluation, the report will deal with recommendations:

A. That USAID prepare a fifth amendment extending the PACD to July 31, 1983, with the remaining funds ($58,573) to be obligated for technical assistance.

B. That USAID not extend this particular project beyond July, 1983. It is evident the project could benefit from further technical assistance, but USAID should be cautious in developing another small project.

C. That the USAID consider the providing of a U.S. contract technician or either a full time basis for two years, or a programmed consultancy basis where the technician would make periodic visits to the country.

D. That USAID contact World Wide SIRES, Inc., P.O.Box 149, Hanford, CA. 93232, to determine if this private firm would be interested in undertaking the support of the project and the recruiting of an A.I. technician.

E. That if USAID continues support to an A.I. program, the assistance be only in the realm of technical and management training of A.I. technicians at the headquarters and subcenters.