

1. PROJECT TITLE Development and Testing of a Specialized Acoustic Tagging System. 191E/000 <i>(Small Activities Fund)</i>		2. PROJECT NUMBER 931-1157	3. MISSION/AID/W OFFICE
5. KEY PROJECT IMPLEMENTATION DATES		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) <u>80-42</u> 6/10/80	
A. First PRO-AG or Equivalent FY <u>79</u>	B. Final Obligation Expected FY <u>80</u>	C. Final Input Delivery FY <u>80</u>	7. PERIOD COVERED BY EVALUATION From (month/yr.) <u>2/1/79</u> To (month/yr.) <u>1/31/80</u> Date of Evaluation Review <u>4/30/80</u>
6. ESTIMATED PROJECT FUNDING		8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR	
A. Total \$ <u>19.5</u>		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. U.S. \$ <u>19.5</u>		B. NAME OF OFFICER RESPONSIBLE FOR ACTION	

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
Confirm completion of field testing of tagging system using live fish.	K. Osborn	8/31/80
Distribution of final report on project.	K. Osborn	8/30/80

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS	10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT
<input type="checkbox"/> Project Paper <input type="checkbox"/> Financial Plan <input type="checkbox"/> Logical Framework <input type="checkbox"/> Project Agreement <input type="checkbox"/> Implementation Plan e.g., CPI Network <input type="checkbox"/> PIO/T <input type="checkbox"/> PIO/C <input type="checkbox"/> PIO/P <input type="checkbox"/> Other (Specify) _____ <input type="checkbox"/> Other (Specify) _____	A. <input type="checkbox"/> Continue Project Without Change B. <input type="checkbox"/> Change Project Design and/or <input type="checkbox"/> Change Implementation Plan C. <input checked="" type="checkbox"/> Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)	12. Mission/AID/W Office Director Approval
RAN Richard Neal DS/AGR - project manager CB C. A. Breitenbach DS/AGR/F AS Stephen Enzberg DS/AGR	Signature <i>Keith Byergo</i> Typed Name Keith Byergo, DS/AGR Date 6/10/80

PROJECT EVALUATION SUMMARY - PART II

Summary:

All aspects of the project except field testing of the tag on live fish have been completed on schedule. Research on acoustic emission and receiving systems has been successful and has resulted in a new system capable of screening out the unique noise of the shallow tropical coastal marine environment. The effective range of the new acoustic tag is 850 yards and this range is suitable for studies of the reproductive habits of tropical marine fish such as milkfish. Field testing of the tag on 20 to 25 large milkfish and mullet will take place this summer in Hawaii. The final report will be submitted in September following completion of the field testing on live fish.

Technical aspects of the electronics involved will be presented in several publications presently being prepared for both scientific and technical journals. Pending completion of the field trials and submission of the final report the project is judged as highly successful.

Evaluation Methodology:

This was a terminal evaluation of a small research activity. Only the project manager participated in the evaluation.

External Factors:

Not pertinent at this time.

Inputs:

Not pertinent at this time.

Outputs:

The survey of ambient noise levels was completed as planned. Optimum operating frequencies were selected and a prototype tag-detection system has been built and tested using specified frequencies. By screening similar frequencies the range has been extended to 850 yards. Tags have been constructed. Field tagging and tracking on large fish has not been completed because summer is the best season for such trials. This work will be completed this summer and necessary modifications and improvements will subsequently be made as called for in the contract. Publication of results is being delayed pending field trials.

Purpose:

Purpose of this work is to develop a research tool for use in studying the breeding habits of marine fishes of economic importance to aquaculturists in the LDCs. This purpose has been achieved. Field trials and publication will insure applicability and availability of this new tool.

Goal:

The goal of this work is to increase fish production and consumption in the LDCs. Progress toward goal achievement has been satisfactory; however, goal will not be fully attained for several years.

Beneficiaries:

Direct beneficiaries will be scientists using the tagging system to understand movements and breeding requirements of marine fishes. Indirect beneficiaries will be those using research results, the fish farmers and consumers of fish cultured. In the long run research findings will contribute to increased production and availability of fish and animal protein in developing countries. Increased production will employ additional people.

Unplanned Effects:

Not pertinent at this time.

Lessons Learned:

Not pertinent at this time.

Special Comments or Remarks:

This small research activity was completed with a small amount of money and is considered to be a successful and worthwhile project.