

PROJECT ASSISTANCE COMPLETION REPORT
July, 1993

BACKGROUND DATA:

A. Project Title: Malaria Control Project

B. Project Number: 518-0049

C. Loan Number: 518-U-062

D. PACD - Original Loan: 02/28/90 - \$6,500,000
 Grant: 01/30/90 - \$3,000,000
 - Revised Loan/Grant: 12/31/91 - 0 -
 - Revised Loan/Grant: 02/29/92 - 0 -
 Total \$9,500,000

E. Implementing Agencies:

National Malaria Eradication Service (SNEM)
 United Schools of America (USA)
 Centers for Disease Control (CDC)
 Vector Biology Control Project (VBC)

F. Goal:

To reduce morbidity and mortality caused by vector-borne diseases, principally malaria, in Ecuador.

G. Purpose:

To bring the malaria epidemic under control nationwide at a level where it is no longer a public health problem and to develop institutional capabilities to maintain that level of control. The project would also reduce to a minimum indigenous p. falciparum malaria, and investigate the extent of and to design control activities aimed at other vector-borne diseases.

ACTOR
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PROJECT STATUS:

A. Financial Summary:

Grant	\$ 3,000,000
Loan	\$ 6,500,000
Host Country	\$11,500,000
Other Donors	\$ 720,000
Total	\$21,720,000

The total amount disbursed during the life of the project was as follows: Grant funds, \$2,559,029.61, and Loan funds \$5,274,181.21. The Controller's office proceeded to deobligate unused funds in the amount of \$1,551,094.12.

By the end of the project the total GOE contribution was reported as US\$9,060,000, equivalent to 82.60% of US\$11,500,000. These figures were based on reports presented by SNEM. However, on February, 1992, the Controller's Office conducted an evaluation of the total counterpart contribution and they determined that the SNEM did not have any system to control the counterpart contribution. There weren't any records to review the real levels of counterpart contribution. The Controller's team interviewed the Executive Director, the Financial-Administrative Director, and the General Accountant to obtain an explanation about the reported counterpart contribution, but these three officials could not explain the origin of the amounts reported.

B. Summary of Agreements:

1. On July 24, 1985 a five-year contract was awarded to United Schools of America in the amount of US\$2,201,000. The purpose of this contract was to: (1) hire a senior malaria advisor to serve as principal AID technical advisor to SNEM over the life of the project; (2) hire technical consultants for activities in operational research, and in-country training of SNEM staff; and (3) schedule long and short-term training for SNEM's senior and mid-range operational, technical and managerial personnel.

This contract had four amendments to increment funds and the total amount committed was \$1,395,006, which was completely expended by the end of the contract.

2. On June 16, 1986 a PASA with CDC was signed in the amount of \$200,000 for the period May 1/86 through September 30/89 to provide SNEM with technical assistance in six basic areas: (1) Entomologic Investigations, (2) Surveillance Systems for Malaria Infections, (3) Malaria Therapy Policy, (4) Urban Mosquito Control Studies, (5) Studies of Other Vector-Borne Infections, and (6) a Workshop on Operational Research.

This contract had two amendments to increment funds. The total amount committed and expended was \$180,755.66.

3. On January 16, 1987, the Mission purchased, through a buy-in to the VBC Project under contract to Medical Services Consultants, Inc., the amount of \$78,465 to provide technical assistance in developing a Computerized Malaria Information System and Incrimination of Malaria Vector(s) in Ecuador.

During the life of the project four additional PIO/Ts were issued requesting AID/W to incorporate new activities to the VBC Project. The total amount committed for all VBC activities was \$224,722.00 which was totally expended.

4. After completion of the contract with United Schools of America on February 28, 1990 and due to the project extension through December 31, 1991, AID negotiated a direct personal services contract for the Technical and Administrative Advisor, Eng. Felipe Arellano, for the period March 8/90 through December 31, 1992. The total estimated contract cost was \$238,000. This contract had two amendments. The first one to add \$23,000 to cover the total cost of the contract, and the second one to: (1) extend the period of services through January 31, 1992; (2) modify the scope of work; and (3) redistribute the budget. The total amount expended was \$209,631.99.

C. Progress Toward Achievement of Project Purpose:

The purpose of this project was to bring the malaria epidemic under control nationwide to a level where it is no longer a public health problem and to develop institutional capabilities to maintain that level of control. The project would also reduce to a minimum indigenous p. falciparum malaria, and investigate the extent of and to design control activities aimed at other vector-borne diseases.

The project had five principal components under which assistance was provided:

1. Program Management
2. Operational Research
3. Training

4. Evaluation
5. Commodity Support

1. Project Management: Specific funds were assigned to provide long and short term technical assistance to strengthen the SNEM malaria control operation in the areas of program management, epidemiology, surveillance, drug sensitivity, insecticide resistance and evaluation.

During the life of the project a senior malaria advisor, who was based at SNEM headquarters in Guayaquil, was hired. The first long term advisor was in country from October/86 through July/87. After this date he resigned due to inadequate support from his contractor (United Schools of America). In late September/87, a new advisor was appointed and he stayed until January 31/92. His initial contract was under United Schools of America. However, during the project extension he was under a direct PSC contract with USAID/Ecuador. The change in long-term advisors interrupted and delayed some key aspects of the project (management, logistics and funding).

Short-term technical assistance and laboratory support was provided through specific contracts with the Centers for Disease Control and The Vector Biology Control Project. The most important areas covered were: information systems; assessment of the *Aedes-aegypti* infestation; evaluation of vector control methods; a pilot study on integration of malaria control to the general health services in Manabi province; analysis, evaluation and training to improve spraying; logistics and supervision of field activities; administrative and logistics training; dengue control operations; and review of the Aedes/Dengue control program to improve program planning and to retrain national staff.

One of MOH's immediate actions, as part of the strengthening of SNEM's organization, was the constitution of a technical committee which took place in September, 1988. The committee was chaired by the Subsecretary of Health, Zone II and its members were SNEM's section chiefs, the USAID malaria advisor and the PAHO advisor.

One of the main problems of program management was the series of labor problems which delayed programmed activities. SNEM personnel were on strike for long periods almost every year of the project.

2. Operational Research: Activities in a wide variety of fields were carried out under this component. Some of them included computerization of the information systems, work on stratified malaria control methodology, study of the sensitivity of P. falciparum to drugs, vector incrimination studies, urban mosquito control, insecticide resistance, virology and serology course on dengue, hemorrhagic dengue, isolation of the virus and cell cultures of mosquitos, among others.

According to the surveillance data received from SNEM, the malaria situation in Ecuador during the life of the project was as follows:

Year	# of cases	parasite incidence	percentage of <u>P. falciparum</u>
1984	79,194	14.6	
1985	68,989	12.7	17.3
1986	51,430	9.2	23.3
1987	67,428	11.8	42
1988	68,000	9.1	25.3
1989	23,244 ¹	3.8	28.3
1990	71,670	11.5	30.5
1991	59,400	9.2	23.3

3. Training: Training activities were carried out in epidemiological techniques and field operation methodologies. In-country training was given in control, diagnosis, prevention, and treatment of malaria to rural physicians, auxiliary nurses, and laboratory technicians from the MOH. VBC provided specific training to SNEM auxiliary evaluators and sprayers from all zones. Two observational visits took place in February, 1990. One participant did not return to Ecuador and stayed in USA. Appropriate non-returnee procedures were followed to initiate a search for and/or deportation of the participant.

4. Evaluation: An evaluation of the project was carried out by the Vector Biology and Control Project under Contract to Medical Service Consultants, Inc., covering the period March 15, 1985 through April 30, 1987.

The evaluation covered: (1) Administration; (2) Surveillance; (3) Operational Research; (4) Training

¹In 1989 complete epidemiological data were not available due to continuous strikes of SNEM personnel.

and (5) Health Education/Community Participation.

The VBC Evaluation Report praised the efficiency of the SNEM Directorate. It also noted considerable progress in operational research activities, i.e. computerization of the information systems, further work on stratified malaria control methodology, study of the sensitivity of p. falciparum to drugs, vector incrimination studies, urban mosquito control, insecticide resistance studies, etc. In surveillance, much has been achieved in the integration of SNEM's control activities with and into the General Health Services. In training, the VBC evaluation also notes steady progress, with the training of General Health Service physicians, nurses and others deemed especially noteworthy.

The major recommendations of the evaluation included:

1. Review the USA contractor performance (Responsibility: USAID).
2. Encourage the GOE to purchase DDT (Responsibility: SNEM).
3. Initiate operationally-oriented, epidemiological activities in Esmeraldas Province and add professional staff in the province (Responsibility: SNEM).
4. Accelerate the decentralization of malaria services within general health services (Responsibility: MOH).
5. Appoint a SNEM research coordinator (Responsibility: SNEM).
6. Implement as soon as possible additional recommended research topics such as efficacy of malaria surveillance using clinical indicators being applied by the voluntary collaborators; alternative therapeutic schemes for treatment of p. Vivax infections; and evaluation of the alternative drugs amodiaquine and fansidar, in areas of documented chloroquine resistance (Responsibility: SNEM, MOH).
7. Prepare a training plan for voluntary collaborators and auxiliary evaluators (Responsibility: SNEM).
8. Develop a general plan of education for both rural and urban areas (Responsibility: SNEM, MOH).

A second evaluation of the project took place from September 18 through October 6, 1989. A team of consultants from VBC was in charge of this evaluation. The purpose of this evaluation was to prepare a report

to assist USAID/Ecuador to determine whether an extension of the project was warranted. As a result of the evaluation a two-year project extension was recommended to allow the Subsecretary/SNEM to gradually introduce changes to its structure and philosophy of the malaria project by (1) redefining SNEM's role and responsibilities, (2) developing a new functional organization, (3) increasing GOE financing, and (4) carrying out a variety of specific operational and technical measures. The changes recommended in the evaluation were incorporated into the GOE's annual and five-year malaria control plan.

As a result of the evaluation, on February 22, 1990, a project extension was approved and the new project agreement completion date of December 31, 1991 was established. AID's approval was subject to six stipulations which were included in the project implementation letter extending the project. In addition to the evaluations, an audit of the project was carried out by the "Contraloria General del Estado" covering the period March 11/86 through November 27, 1989. This audit was performed as a result of a report dated August 31, 1990 prepared by a Public Accountant and submitted to the Director of SNEM. (See Attachment No. 1). On October 17, 1990, USAID received a copy of this report indicating that commodities were missing from SNEM's warehouse. These commodities included: 61,320 kilos of malathion power 50%, 173 Hudson sprayers pumps, 4 microscopes, 14 outboard motors, 2 calculators, 4 typewriters, 1 generator, 1 motorcycle and 1 Smith watch, in the amount of \$280,000. The equivalent amount in sucres was S/.244,888,694.33. USAID/Ecuador notified RIG/Honduras and the "Contraloria General del Estado". GOE and USAID received a final report on October 18, 1991 from the Controller General of Ecuador. The report only stated conclusions identifying individuals responsible of the Mission commodities, but there were no recommendations directed to solve the unusual situation. Project funds were frozen until all Controller General recommendations had been enacted. There was a partial lift of the suspension made by Mission Management to procure anti-malarial drugs in August, 1991.

5. Commodity support: An essential component of this project was the provision of anti-malarial drugs and insecticides and the logistical support necessary for their delivery. During the life of the project, USAID/Ecuador purchased insecticides, spray equipment with spare parts, laboratory equipment and supplies,

aerosol generators, anti-malarial drugs, field safety equipment, outboard boats, miscellaneous office equipment, including computers. Logistical support was provided in the form of various types of transport (pick-up trucks, 4-wheel drive vehicles, van-cargo, and motorcycles).

The Government of Ecuador (GOE), through the SNEM, was responsible for the purchase of DDT to be used throughout of the country, where there was no resistance to DDT. The GOE accomplished its commitment only partially and the project suffered continuous delays in spraying operations. The shortage of DDT was a permanent problem.

Following is a complete summary of the most important project accomplishments:

<u>Target</u>	<u>Achievements at the PACD</u>
House spraying with residual insecticides targeted and stratified to provide coverage where and when needed so that total insecticide spraying is reduced. LOP target is 2,000,000 of houses sprayed.	A total of 1,266,000 houses were sprayed, equivalent to 63% of the original target.
Functioning, effective and continuous epidemiological, parasitological, and entomological surveillance system. LOP target for entomological tests is 338, and for laboratories 70.	A total of 265 entomological tests were performed, equivalent to 78% of the target. In addition, at the EOP there were 67 laboratories, equivalent to 95% of the target.
Effective presumptive, prophylactic, and radical drug treatment systems in place and responsive to surveillance data. LOP target for prophylactic treatments is 2,200,000 and 2,400,000 for mass medication.	A total of 2,033,000 presumptive prophylactic treatments were performed, equivalent to 92% of the target. In mass medication, it was accomplished a total of 864, equivalent to 36% of the original target.

D. Conclusions:

1. United Schools of America failed to meet performance expectations and was continuously

behind in the payments to their consultant team. As a result, there were a variety of administrative difficulties affecting the project, i.e. the resignation of the first long-term advisor that interrupted and delayed some key aspects of the project.

2. Short-term technical assistance and laboratory supply was satisfactorily provided through the Centers for Disease Control and The Vector Biology Control Project.
3. As part of the strengthening of SNEM's organization, a technical committee was constituted in September, 1988. This committee was chaired by the Subsecretary of Health, Zone II.
4. A variety of research projects were implemented. Specific operational research activities were accomplished. However, due to continuous workers' strikes the process had numerous delays.
5. Originally, local and international training activities were arranged through the contractor United Schools of America. Afterwards, AID was responsible for the whole process. During the life of the project one participant did not return to Ecuador and stayed in USA.

E. Post-Project AID monitoring responsibilities:

1. Liquidate long-term advisor's contract and request that all internal procedures and reports be completed before his departure. This process was completed in March, 1992.
2. Follow-up the release from customs process of the last shipment of anti-malarial drugs. Last documents were received in November, 1992.
3. In May, 1992, upon request from the SNEM's Director, a team from the USAID Controller's Office worked five days in Guayaquil to assist in the preparation of the documents to liquidate all pending advances. A report was prepared explaining in detail the situation of all the amounts requested for reimbursement.
4. In June, 1992, USAID technical and controller's staff met with SNEM's Director to discuss the project close-out process (pending advance,

disallowances, last shipment of antimalarial drugs, inventories, reports).

5. In July, 1992, a meeting was held with the Malaria Committee to discuss (1) the liquidation of the project, and (2) the level of authority that Felipe Arellano had to make commitments. At the end of the meeting the committee arrived to nine conclusions which were implemented. (See Attachment No. 2).
6. Different letters were addressed to the SNEM's Director regarding close-out procedures and liquidation of accounts.
7. On July 31, 1992, the Controller's Office issued the Bill for Collection No. 12-518-19711 in the amount of S/.326,646,626.00, equivalent to US\$281,362.57, which was submitted to the Ministry of Finance. Copies were also sent to the Ministry of Health and SNEM. The amount of the current pending advance is US\$273,175.54.
8. On August 18, 1992, a project implementation letter (PIL) was signed informing the MOH that a deobligation of approximately US\$1,069,000.00 of unspent grant and loan funds and/or any additional unspent funds would take place.
9. At the request of the Ministry of Finance (MOF), on August 28, 1992, there was a meeting at USAID with the participation of the SNEM's Director, MOF representatives, and technical and controller's officials from USAID. The purpose of the meeting was to request that USAID find a way to reduce or cancel the Bill for Collection. A long exchange about this issue took place. It was mentioned that there were some expenditures which would be allowed if the justifications were produced; that in the worst case scenario funding from another USAID project would be reduced accordingly; and that USAID could set up a payment system so that the MOF would not have to cover the entire amount of the bill in one lump sum but rather in installments.
10. In September, 1992, a voucher in the amount of S/.183,493,623.56 was submitted by the SNEM. From this amount, only S/.9,586,893.18 was recognized as allowable expenses and applied to the recovery advance. No further expenditure justifications have been received.

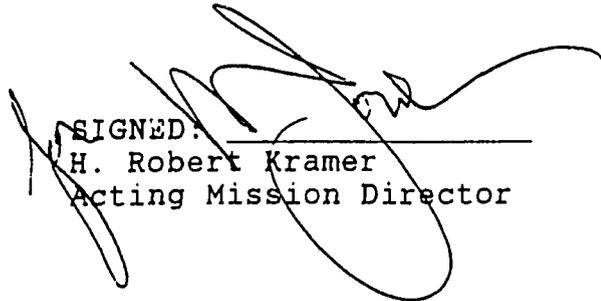
11. The Controller's Office prepared follow-up letters regarding the Bill for Collection. No answer has been received nor action taken within the MOF. The last follow up letter was sent on July 15, 1993 requesting payment by not later than July 30, 1993.
12. Latest information about the legal status of the 1990 missing commodities was requested. Copies of some documents were provided by Eng. Julio Yopez, SNEM's Director, and the legal process has not been completed.
13. Official transfer of all project commodities has to be programmed and completed.

F. Data Collection and Evaluations:

No further data collection and evaluation of project areas is considered necessary. However, the Controller's office informed our division that a RIG Audit of Felipe Arellano's contract will be performed starting on February 17, 1993.

III. Summary of Lessons Learned and Post-Project Recommendations:

1. Implement a continued control of counterpart funds.
2. Structure an adequate warehouse control system.
3. Technical assistance and advisors should follow a clear process of selection. Advisors must have clear directions as to their responsibilities and authorities. Counterparts must be fully aware the advisor's scope.
4. Project extension (cost or no-cost extension) should be analyzed in depth when counterpart administration have been proven to be weak.
5. Closer monitoring and supervision by AID staff in regard to all components of projects. A formal strategy will have to be developed when projects function in areas other than Quito.
6. USAID projects should be managed by technically qualified personnel.
7. A sector assessment must be carried out before any other initiative in Malaria is contemplated. Especially important will be an institutional analysis that looks at SNEM, its role within the MOH, its strengthen and weaknesses, and the political commitment to carrying out fundamental institutional changes.
8. Conditions precedent (CP's) must be fully met.


SIGNED: _____
H. Robert Kramer
Acting Mission Director

DATE: 7/22/93


Drafted by: P. Rodriguez

Clearances:

GDO/HFPD: KYamashita draft date 6/16/93
A/GDO: ELeddy draft date 6/16/93
PPD: MRivadeneira draft date 7/12/93
A/PPD: PMaldonado draft date 7/12/93
A/RCO: HGranja draft date 7/13/93
AO/CONT: NPineda draft date 7/23/93
AD/DIR: PLapera draft date 7/23/93
(WPfile: MALARIA\049PACR - 12.31.92/2.16.93/2.25.93/3.9.93/3.12.93/6.17.93)