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No. 3JA Classification UNCLASSIFIED Page 1 of 60

PD AAA 622 - A1

PROJECT EVALUATION SUMMARY

ENTERED 11/78

Mission or AID/W Office Name USAID/COLOMBIA 2 Project Number 514-U-075

Project Title HEALTH SECTOR LOAN

Key project dates (fiscal years) Project b Final c. Final Agreement Obligation input 4/78 Signed 2/28/75 tion 4/28/78 delivered 5. Total U.S. funding - life of project \$15,292,000

Evaluation number as listed in Eval. Schedule 7. Period covered by this evaluation From: 2/28/75 To: 10/31/77 8. Date of this Evaluation Review 10/31/77 Month/year Month/year

Action Decisions Reached at Evaluation Review, including items needing further study (Note-- This list does not constitute an action request to AID/W Use telegrams, airgrams SPARS, etc. for action). This will serve as final evaluation for Loan 075 although certain commodity purchases have not been completed at this time. Follow-up is necessary to complete this task. Note: This evaluation has also included Health Sector Loan 069 to provide longer performance period for evaluation comparisons. 10. Officer or Unit responsible for follow-up USAID/Colombia J. Suma - CDO D Denman - HNP 11. Date action to be completed 4-78 Cleared D D J. Martin P O. G. McCloskey C. D O. J. Suma

12. Signatures: Project Officer Mission or: AID/W Office Director

Signature David Denman Signature James Megellas

Typed Name: Nutrition & Population Division Chief Health. Typed Name: Director USAID/COLOMBIA

Date 12/29/77

13. SUMMARY

This constitutes the final evaluation of Health Sector Loan II, 514-U-075, although certain dollar disbursements remain outstanding and will be completed by the summer of 1978. This loan, of \$17.3 million, has attempted to extend and solidify programs and progress initiated under Health Sector Loan, 514-069, of \$10.4 million. Both loans 069 and 075 contributed toward a common goal: provision of public health services for an increasingly larger proportion of the Colombian population until such coverage is available to all Colombians. The purposes of both loans have been to assist the GOC in carrying out its health sector program by (1) assisting in the financing of dollar costs involved, and (2) assisting in local cost financing of the sector. This evaluation, therefore, attempts to appraise the continuum of activity supported by both loans.

Investments programs under the two loans included:

- (1) Expanded public health coverage through a regionalized system of health services, emphasizing delegation of medical functions, and unified direction and coordination of all public health activities, preventive and curative.
- (2) Improved rural sanitation and related services.
- (3) An intensified preventive campaign of disease control and eradication.
- (4) Augmented production of pharmaceutical and other health supplies.
- (5) Additionally, increased multisector nutrition planning capability was emphasized under Loan 075.

Substantial progress was achieved over the life of the two loans, particularly in technical areas, extension of health services (notably in maternal-child coverage), administration and information. Progress, although significant, in extending rural sanitation, training of auxiliary health workers, in regionalization and in conducting the malaria program was less than might have been achieved.

The principal complex of problems experienced during the life of Loan 075 has dealt with financial issues external to the health sector itself. GOC budgetary allocations to the sector under the present government were generally less than had been assumed during the design period, which took place under a previous government. Shortfalls and frequent delays in the allocation of agreed-upon counterpart resulted in some curtailment of project investments. The GOC practice

of placing approved but unexpended budgets in "reservas," or escrow accounts, at the end of each December, with subsequent recertification and release in late spring or summer, compounded delays in implementation and posed problems in meeting or extending TDDs. Rampant inflation and a two-ties foreign exchange conversion mechanism adopted by the GOC in the spring of 1977 (which delayed loan disbursements five months) have contributed to delays in loan implementation, as have exceedingly cumbersome GOC procurement and contracting regulations.

#### 14. EVALUATION METHODOLOGY

A logical framework developed for the first loan (069) was satisfactory for the second loan (075), though some changes were required in the input and output levels for 075. Evaluations were made for each of the years 1973 (as part of the second health sector analysis), 1974 and 1975 (as individual documents) based on an adaptation of the logical frame work. Now, rather than develop an evaluation of only CY 1976, AID elected to evaluate and review the experience of all four years of Health Loans (1973-1976). The adapted logical frame work used for the previous evaluations is used again here for the four year period but within the frame work of "Project Evaluation Summary". While there was no PP Evaluation Plan, this evaluation is similar in respect to timing, design and issues with those of previous years.

Many sources of information were available for consideration by AID in this final exercise. Of greatest assistance were:

"Informe sobre el Desarrollo de los Programas de Inversión del Sector Salud" - reports presented by GOC to USAID every quarter for every year of the loans which contain extensive data and documentation of progress in the health sector.

"Informe al Congreso de la República de Colombia" - developed annually by the Ministry of Health.

"Evaluación de las Realizaciones del Ministerio de Salud y sus Agencias Ejecutoras 1970-75." A final loan condition required the GOC to evaluate health sector progress for CY 1976, by mutual agreement this was changed to the longer time frame and this document was submitted to AID in fulfillment of this condition. 1976 data was included where available.

Multiple supplementary documents and AID-GOC discussions on specific topics.

AID personnel reviewed GOC data, particularly in the GOC 1970-75 evaluation document, made their own decisions concerning health sector progress and compared the AID conclusions with GOC conclusions. There were essentially no differences. Then AID personnel reviewed the data from the standpoint of what impact AID had in the sector's progress and also obtained the impressions of Colombians who were and are in positions to have formed some opinions of this. We believe that the Health Loans' contributions to the improvements of health in Colombia are substantial and are most objectively and subjectively documented in the input and output areas. It is in these sections of the evaluation that we have included most of our and our Colombian counterparts opinions and conclusions.

Finally, we are all very aware of the limitations of this evaluation due to its global national character for it does not show the marked variations which exist in Colombia in terms of the regional and local differences in health status and services. The excellence of certain departmental programs is not demonstrated here nor can one see the great deficiencies which exist elsewhere. AID has been supportive of the regional and local efforts through these Health Sector Loans and we are aware that the MOH has and is continually evaluating the regional and local efforts for the purpose of developing equitable programs.

Agencies participating in the evaluation include AID, National Planning Office, Ministry of Health and attached institutions. Individuals contributing to the evaluation included many Colombians. Special note should be made of the contribution of Dr. Himbad Gartner, Chief of the MOH Planning Office, Dr. Luis Carlos Gomez, Director of the MOH Unit of Information, Dr. Jaime Gomez of the Planning National Health Unit. AID Personnel include David Denman, Project Manager, Alvaro Monroy, Health and Population Advisor, Thomas Hyslop MD Health Advisor, Jerry Martin Controller and Acting Deputy Mission Director, George McCloskey, Evaluation Officer, Jim Suma, Loan Officer and Steve Ryner, Loan Officer.

15. DOCUMENTS TO BE REVISED - None

16. EXTERNAL FACTORS WHICH HAVE PROJECT IMPACT

A. Inflation - During the period of the loans, Colombia had progressively increasing inflation from about 12% in 1973 to 40% in 1975 partially related to the increasing numbers of dollars entering the country outside of government control through contraband activities and the "Coffee Bonanza" in 1975-76. The Government cut government spending in 1974 to combat inflation, thus cutting funds counterpart to the loan. As a result, fewer AID funds could be disbursed. AID

then relaxed the 1974 counterpart ratios to provide more funds for projects. In 1977, as a further effort to control inflation, the GOC introduced foreign exchange certificates requiring the purchase and holding of peso certificates one month (later three months) if the individual wishes to receive full peso value. AID contended that the programmatic funds of loans and grants were exempt from this under the 1962 Bilateral Agreement. Disbursements were held up several months before the GOC and AID developed an acceptable disbursement mechanism.

In Implementation Letter 18, AID again relaxed disbursement ratios for final 075 disbursements. Since AID is phasing out it was felt that the leverage provided by the loan ratios, which AID could use to improve programmatic and financial components of the loan, had served its purpose and that the health system could and would use the remaining funds effectively.

E. Change of Government and of Health Ministers - Colombia held elections April, 1974 and the Government and Health Minister changed August of 1974. In-between the election and actual Government change many members of the outgoing Government found new positions and many other employees had their minds on alternative positions. With the new Government, new people entered important policy making positions and had to learn how to do their new jobs. Both of these events caused a marked slowing of many important health programs and decisions, as well as, a very slow start of the second loan. It is fair to say, however, that the health directions supported by the initiating Government were also generally supported by the incoming Government.

While the second loan was in effect there was a second change of Health Ministers and certain persons in the Ministry. This resulted in strengthening of certain influential positions in the Ministry of importance to the programs supported by AID and probably was helpful in assuring that an excellent evaluation document was prepared by the MOH. Again, AID supported program directions were not noticeably changed as a result of change of Ministers.

C. Change in Method of Certification of GOC Counterpart - Several AID projects had difficulty moving disbursed funds through the GOC financial mechanism to the implementing agencies resulting in unacceptable "dead" time in GOC intermediate accounts. This problem was lessened only because members of the health project staff spent considerable effort to assure that the funds moved as they should. Late 1974 - early 1975, new procedures, which overcame this problem, were agreed to by the GOC after extensive discussions with the AID Controller. This gave the health program staff additional time for other non-financial project monitoring.

D. High Coffee Prices - Due to the cold weather in Brazil and civil wars in Africe in 1975, the amount of coffee available to the international market was decreased; therefore, Colombia coffee prices rose to record highs. A large proportion of the huge resultant dollar flow to Colombia was and is being directed by the Coffee Grower's Federation to assist in rural health improvements through contracts with MOH and various states. This does not show up in the central Government budget and expenditures but is being spent according to the Ministry of Health norms. We therefore, believe that AID's influence in refining and improving MOH's programs has been a factor in non-governmental health expenditures.

A. 1 Narrative Summary

Sector Goal - To improve the level of health in the Colombian population, by providing public health services to an increasing number of that portion of the population not served by private medicine and the special group health systems.

A. 2 Objectively Verifiable Indicators

1. Increase life expectancy at birth by 5 years by 1980.
  
2. Mortality and Morbidity caused by "reducible" illnesses will disappear from the top ten causes of death and hospital admissions in 10 years.
  
3. Government health expenditures will increase monotonically as a percent of GNP.

A. 3 Achievements	A. 4 Comments
<p>1. 1969-73 Males 58.3 yrs. Female 63.3</p> <p>1957-58 Males 55 Females 59</p> <p>2. "Reducible" illness as cause of top 10 causes of death: 1965-Gastroenteritis was most common cause of death, Respiratory TB 10th most common cause of death; 1970-Gastroenteritis was still most common (no other of top 10 was considered reducible); 1975-Gastroenteritis still in first place but had decreased as percent of total deaths from 9.4% in 1970 to 7.6% in 1975.</p> <p>"Reducible" illness as cause of top 10 causes of morbidity (hospital discharges) - only gastroenteritis is presently in top 10. Gastroenteritis rank order: 1965-3rd, 1970-3rd, 1975-4th. As a percent of total hospital discharges - 1965 - 9.4%; 1975-5.1%.</p> <p>3. It has not been possible to obtain reasonable figures for Government health expenditures as a percent of GNP. The Government health budget as a percent of GNP shows considerable variation by years but generally has remained the same over the period 1970-1976. (See Appendix A.)</p>	<p>1. While there is a definite increase in life expectancy at birth, the increase in life expectancy of 5 years between 1970 and 1980 is unlikely. In retrospect the change desired in this indicator was too much.</p> <p>2. "Reducible" illness includes many parasites and infection diseases (see Health Sector Analysis 1972 pg. 10). Data here is supplied by MOH and from 1965 health surveys but suffers from under-reporting. Substantial efforts are being expended to improve routine data collection and a National Health Survey is underway. Review of "reducible illness data by age groups shows much reducible illness still exists in the top ten causes in the younger age groups; however general trends and trends by age groups are encouraging. This indicator would be more useful if stated for 1-4 and 4-15 year age groups. AID emphasis in vaccination, water and sanitation has been supportive.</p> <p>3. Because the GOC can make payments for up to 3 years after the budgeted year, the true GOC health expenditures for 1974, 1975 and 1976 are not known.</p> <p>Appendix A of this document expands on the Colombian health financial situation and the implication of the AID contribution.</p>

A.1 Narrative Summary

A. 2 Objectively Verifiable Indicators

4. Medical consultations per population served per year in Public Health Facilities will increase from .3 in 1972 to 2.0 in 1980.

5. The population growth rate will decline from 2.9% in 1973 to 2.0% in 1980.

A. 3 Achievements

A. 4 Comments

4. Year	Consultations/Pop Served
1970	.47
1971	.47
1972	.49
1973	.48
1974	.51
1975	.51
1976	.52

5. Population growth rate

Year	%
1964	3.4
1973	2.5
1977	2.0
Births/1000 pop 1964	43.7
1973	34.0
1977	29.0
General mortality 1964	10.0
1973	9.0
1977	9.0

4. The 1972 consultation/population figure in A. 2 is low compared with the presently reported figures for unknown reasons. However, there is a trend of increasing consultation/population but the increase is insufficient to reach 2.0' in 1980.

As noted in previous years, the decrease in population growth rate is remarkable. It is estimated that 50% of this drop is due to active family planning programs and it is likely that the population growth rate will be less than 2%/y in 1980. The MOH MCH program has provided about half of the family planning services available in Colombia. This program was assisted by this loan and UNFPA funds.

Comment

The four years time frame of the loans, we believe is too short to show significant changes in the goal indicators as a result of the loans. However, we believe the projects supported and progress achieved, as noted in the purpose and output sections, do contribute to goal improvements as shown by goal indicators. Health projects between GOC, England and Holland as well as AID's loan with INSFOPAL, also contribute to goal achievements.

B. 1 Narrative Summary

B. 2 Objectively Verifiable Indicators

Sector Purpose:

1. Creation of a regionalized integrated health delivery system in Colombia, including:

- Provision of infrastructure to support the system.

- Development of intra and inter-sectorial mechanisms of coordination.

- Efforts to lower costs of system by cost effectiveness analysis.\*

End of Project Status: (CY 77 unless otherwise stated).

1.a. Integration and regionalization of all major health services established according to plan.

\*See l. t.

B. 3 Achievements	B. 4 Comments
<p>1. a While no time phase plan for the implementation of regionalization and integration of health services was developed, these concepts have been gradually and partially implemented through:</p> <ol style="list-style-type: none"><li>(1) Central government and MOH endorsement of the concepts;</li><li>(2) Development of graded levels of care with progressive inclusion of government facilities into the scheme;</li><li>(3) The 1975 legal establishment of 87 regions in the country for the provision of graded health services;</li><li>(4) The defining and development of the rural health delivery component Modelo Anual de Cobertura-1 (MAC-1). Of the 200 planned for implementation in 1976, 166 were functional at the end of the year. 1800 are to be installed by 1981 which will provide services for the 35% of the population without adequate health service access;</li><li>(5) The MOH elaboration of manuals of norms for service delivery at the state and regional level;</li><li>(6) Transport improvement through the MOH's acquisition of more vehicles; and</li><li>(7) Reassigning of tasks among health workers according to needs of service level - including delegation</li></ol>	<p>1. a See output section B for a description of the Colombian conception of regionalization and integration. These are key concepts which shape and affect nearly every facet of health services delivery in Colombia. The Colombians have stated that their development and implementation is a 'process', implying they are continually evolving and not amenable to a quantified time linked plan. AID personnel felt that many components of the concepts could be identified and treated in a quantifiable, timed fashion, and designed program conditions to assist the process. The components and concepts have become clearer, and much progress has occurred especially related to rural service delivery. On the other hand the inclusion of all hospitals into regionalization has been slow (see purpose indicator 2h); legal decree for regions required extensive time (see purpose indicator 1f), resistance to integration on the part of non-MOH health services such as the Social Security health system, and slow acceptance of new tasks required by regionalization (purpose indicator 1g) all slowed the process.</p> <p>AID trips have documented progress at the lower service levels. While not completed as written this indicator has been extremely valuable for encouraging progress in the important area of service delivery.</p>

B. 1 Narrative Summary

B. 2 Objectively Verifiable Indicators

1. b. Increased delegation of functions to auxiliary, technical and paramedical personnel.

1. c. Intensified outreach services.

1. d. Intensified patient referral.

1. e. Increased T.A., supervision and evaluation from higher to lower levels.

B. 3 Achievements	B. 4 Comments								
<p>1. b The development and initial implementation of the MAC-1 system solidified the concept of delegation of function. In addition there has been a greater percentage increase in the number of lesser trained individuals than in the number of professionals.</p>	<p>1. b It seems to us that this idea has become an integral component of MOH plans as 'restructure of tasks.' There are many areas of Colombia where health professionals are hesitant to agree to this idea but we also are aware of the gradual acceptance by professionals in other areas.</p>								
<p>1. c The introduction of MAC-1 (Modelo Anual de Cobertura local level) has increased outreach services and the MOH states this level of care and outreach has priority over MAC-2 and MAC-3 level of services (regional and university hospitals). From 1970 to 1976 the percent increase in auxiliary personnel has been much greater than for professional personnel. See Appendix B. The number of functioning ICBF nurseries has nearly doubled in the past 2 years.</p>	<p>1. c Since the introduction of the MAC concept the Minister of Health and many members of the Ministry of Health have changed but the desire to extend services has remained firm and implementation is continuing. The present Minister has placed some additional emphasis on extension of services in the cities but apparently not at the expense of the rural areas. ICBF activity has been the result of receiving a large funding increase through Law 27. (A 2% payroll tax providing funds only for ICBF nurseries for working mothers).</p>								
<p>1. d Referral plans have been made. In 1975, the following percents of total public facility consultations were referred:</p>	<p>1. d This is the first year that referral rates have been determined so it is not possible to tell whether there has been intensification. In comparison with MOH theoretically determined percent referral, these are quite low.</p>								
<table><thead><tr><th></th><th><u>%</u></th></tr></thead><tbody><tr><td>From centers &amp; posts</td><td>3.9</td></tr><tr><td>From local hospitals</td><td>3.2</td></tr><tr><td>From regional hospitals</td><td>1.3</td></tr></tbody></table>		<u>%</u>	From centers & posts	3.9	From local hospitals	3.2	From regional hospitals	1.3	
	<u>%</u>								
From centers & posts	3.9								
From local hospitals	3.2								
From regional hospitals	1.3								
<p>1. e The National Plan of Supervision has been implemented. Teams from the MOH composed of a doctor, nurse, dentist, engineer or veterinarian, administrator and statistician visited the State health departments in all States during this year. Norms have been developed by the MOH for</p>	<p>1. e This plan appears to be the most concrete step taken by the Ministry to assure the implementation of a system of supervision. Regional supervision of lower levels is spotty. Several State health departments have carried out supervisory programs in the past.</p>								

B. 2 Narrative Summary

B. 2 Objectively Verifiable Indicators

1. f. Health planning and administration done on a regional basis for the majority of the major health regions of the country.

1. g. More rational location, use, and staffing of health institution within each region.

1. h. Quality and quantity of professionals and auxiliary personnel and their efficiency increased through planned training and placement programs, improved curricula and incentives in relation to regionalized plan.

B. 3 Achievements

B. 4 Comments

supervision at lower levels. Technical assistance from one unit or level to another is on an "as requested by someone I know" basis. There is no formal request system nor is there a formal evaluation system.

1.f The development of the 87 health service regions as part of regionalization includes the idea that health planning and administration are to be done in the region for the region. This has not been achieved.

1.g The development of the MAC system has improved the location and use of the peripheral health workers. The hospitals continue to use the standard staffing patterns. Dr. David Eaton, University of Texas, has been working with the MOH to develop a better method of locating facilities.

1.h An increase in quantity of health workers has been a priority in terms of resource development in Colombia. AID has assisted in the development of a manual for curriculum and course design for health. No incentive programs exist.

1.f. Our field visits confirm that the State health departments are aware that this is to be done. However, whether it is done depends on whether a public health physician is available to help the region to do so. There are difficulties locating sufficient persons of this type for each region. The GOC felt that the regions had to first be carefully defined and established by law. This was not completed until 1975. Presently efforts are underway to provide trained personnel in each region to do the planning and administration. This was a reasonable indicator but implementation has progressed slower than planned.

1.g. Dr. Eaton and group completed in country work quite successfully and the general approach was accepted by the Colombians. The final report is due early 1978.

1.h. Training has increased. Planned placement of trained personnel is greatest for the lower skilled and, with the exception of rural internship, almost non existant for professionals. This indicator should be written in more measurable terms.

B. 1 Narrative Summary

B. 2 Objectively Verifiable Indicators

1. i. A stronger single mechanisms for channeling funds, planning, designing and supervising implementation of National Hospital Plan.

1. j. State health offices (21) with trained hospital auxiliary personnel preparing statistical tabulations.

1. k. Implementation of strategy to strengthen capability of MOH Planning Office.

1. l. - Hospital Fund reorganized and strengthened according to basic recommendations of PAHO.

1. m. Vehicles distributed according to health delivery system requirements.

B. 3 Achievements

B. 4 Comments

1. i. All major reorganization is complete. Through AID contracts, assistance was provided in construction management.

1. j. This exists.

1. k. The MOH planning office has been strengthened through a large increase in appropriate personnel. PAHO has and is providing technical assistance in this area. Personnel capability has also improved.

1. l. This has been done.

1. m. AID vehicles from 069 were appropriately allocated. Plans for allocation of vehicles from 075 exist. Approximately 50% of 075 vehicles will directly support the MAC-1 system.

1. i. Unquestionably FNH hospital construction management has been improved. ✓

1. j. Extensive training of personnel in statistics has been completed at all levels and all State health departments have a trained statistician. Many new data collection forms have been designed, others updated. A scheme for aggregation of data at various levels has been implemented. The improvements of data collection have been considerable. This indicator and associated topics should be included with Purpose 3 "Functioning Health Sector Information System". ✓

1. k. The planning office is becoming adequate and is much more capable of carrying out a planning function now than in 1972. See Outputs A "Improved Planning, Administration and Evaluation Systems." ✓

1. l. The hospital fund is much improved. This indicator should be joined with that of 1. i. ✓

1. m. Present information indicates that 15% of the 069 ambulances are not equipped. AID has notified GOC that, according to our previous agreement, vehicles from 075 destined to support the MAC may not go to the departments which have not complied with the equipment requirement.

*Over*

B. 1 Narrative Summary

B. 2 Objectively Verifiable Indicators

1. n. Staffing of medical institutions in accordance with levels of medical attention.

✓ 1. o. Increased use of health facilities availability/use ratio.

✓ 1. p. % of deaths certified by physician increased.

1. q. Regional hospital key organization in providing in-service training and supervision to attached hospitals, health posts and centers in each region.

✓ 1. r. Health posts manned by auxiliary nurses with scheduled doctor visits.

B. 3 Achievements	B. 4 Comments
<p>l. n. The MAC-1 development is assuring this at the lower levels of services. Hospitals retain the standard staffing pattern.</p>	<p>l. n. Changes required in hospital staffing related to regionalization requirements have not been completely determined. The completion of this reasonable indicator requires more time than was originally anticipated.</p>
<p>l. o. No specific indices have been developed for this; however out patient consultations/ population did increase between 1970 and 1976 and hospital patient days and discharges increased along with a decrease in the number of available beds and average patient stay.</p>	<p>l. o. Health facilities usage has increased over the years and some efficiencies are being realized in bed use. In the process the National Hospital plan norm of beds/population has been discarded for a strategy of improving or rationalizing bed use. This indicator should be made clearer.</p>
<p>l. p. In 1972, 60% of the deaths were recorded by the civil registration system and of these recorded deaths only 68% were certified by an MD.</p>	<p>l. p. The Division of Information, MOH has to do a special study to update this indicator. There are plans to do so.</p>
<p>l. q. The 1975 decree which established health regions also enforced the idea of the regional hospital being the key unit related to these items. This has not been completed.</p>	<p>l. q. In our visits we have seen some regions with regional hospitals which have accepted these responsibilities; however, many have not. We believe there is a long way to go before this is realized. We estimate that only 15% of the regional hospitals are fulfilling this indicator. The belief that this could be implemented by 1977 was overly ambitious.</p>
<p>l. r. Norms have been developed in the MOH and generally accepted by the states We estimate that at least 85% of the health posts fulfill this indicator.</p>	<p>l. r. There has been improvement in this over the last four years. Many of the health posts which do not have an auxiliary nurse are staffed by a nurse ayudante. This person has learned her job through on-the-job training. We should have worked to quantitate this progress.</p>

B. 1 Narrative Summary

B.2 Objectively Verifiable Indicators

2. Emphasis on certain identified priority health problems.

1. s. Ministries of Agriculture, Education and Health jointly providing coordinated services of rural primary education, agriculture extension and credit, community development and health in several selected rural concentrations.

1. t. Reduce cost for patient care in accordance with findings of special studies and pilot programs by 1980.

2. a. Disappearance of reducible causes of death from list of top ten causes of death within 10 years.

2. b. Reducing morbidity and mortality rates among mothers, and children under 15 yrs.

B. 3 Achievements

B. 4 Comments

1. s. Both the Integrated Rural Development Program (DRI) and the National Nutrition and Food Program (PAN) require coordination among these groups.

1. s. It is our impression that coordination among local level members of these Ministries and areas is still less than optimum.

1. t. An AID-GOC project started in 1972 for determining health status change related to various interventions and their cost was discontinued in 1975. AID provided funds through AID ProAgs and Technical Assistance through AID offices. PRIMOPS is providing much useful information in this area. The National Health Survey will collect some micro economic data.

1. t. The AID-GOC '1972' project discontinuation was the result of multiple factors including a very complex design, young somewhat inexperienced colombian project workers, insufficient Washington Technical Assistance back up and indifferent colombian administrative support. There are useful projects and data gathering efforts in this area. Whether their results will be useful in reducing patient costs remains to be seen.

2. a. See goal indicator number 2.

2. a. See goal indicator number 2. This indicator duplication is unnecessary.

2. b. Maternal mortality did not change between 1970-1975. There is no comparable data for determining any change in rates for children.

2. b. Previous data indicated infant mortality rate was 67/1000 live births. MOH now has presented the figure 77-83/1000 for 1973. The latter is more accurate as it was based on the 1973 census data and previous censuses did not collect data to calculate this figure. The previous rates were based on data from hospitals or from local surveys. Maternal mortality rate is based on hospital data. Underreporting affects both, and is being addressed by the MOH unit of information.

B. 1 Narrative Summary

B. 2 Objectively Verifiable Indicators

2. c. No. of children under 1, covered by GOC Maternal/Child care program increased from 67% in 1974 to 71% in 1977; coverage of children 1-4 years increased from 20% in 1974 to 37% in 1977.

2. d. Progressive expansion of malaria, yellow fever and yaws control. Yaws surveillance to begin in 1976.

2. e. Reduce mortality from measles, whooping cough, and tetanus to 1.0, 1.0 and 0.5, respectively per 100,000 inhabitants.

2. f. Reduce morbidity from diphtheria and poliomyelitis to rates of 1.0 and 0.1, respectively, per 100,000 inhabitants.

B. 3 Achievements	B. 4 Comments																								
<p>2. c.</p> <table border="0"> <thead> <tr> <th></th> <th><u>1970</u></th> <th><u>1975</u></th> </tr> </thead> <tbody> <tr> <td>Children under 1</td> <td>75%</td> <td>85%</td> </tr> <tr> <td>Children 1-4</td> <td>22.8%</td> <td>24.4%</td> </tr> </tbody> </table>		<u>1970</u>	<u>1975</u>	Children under 1	75%	85%	Children 1-4	22.8%	24.4%	<p>2. c. There has been either a change in data or methodology as the current data indicates higher under-one coverage than previously thought. The important fact is the improvement in trend.</p>															
	<u>1970</u>	<u>1975</u>																							
Children under 1	75%	85%																							
Children 1-4	22.8%	24.4%																							
<p>2. d. Malaria spray coverage has decreased, positive blood samples have increased. The yellow fever program has expanded partially in response to a 1975 epidemic. The yaws program continues to decrease the disease. Cases 1970-1997, 1976-220.</p>	<p>2. d. The GOC claim lower Malaria spray coverage due to rapidly rising costs, more vector resistance and population resistance. See Output "Health Protection". It appears they at best are holding their own. There has been a malaria increase in many Latin American countries in 1975-76. The yaws program continues to be successful even though the surveillance stage was not reached in 1976.</p>																								
<p>2. e. f. Mortality/1000,000 -</p> <table border="0"> <thead> <tr> <th></th> <th><u>1969</u></th> <th><u>1975</u></th> </tr> </thead> <tbody> <tr> <td>Measles</td> <td>13.3</td> <td>7.7</td> </tr> <tr> <td>Whooping cough</td> <td>6.3</td> <td>4.9</td> </tr> <tr> <td>Tetanus</td> <td>5.3</td> <td>3.0</td> </tr> </tbody> </table>		<u>1969</u>	<u>1975</u>	Measles	13.3	7.7	Whooping cough	6.3	4.9	Tetanus	5.3	3.0	<p>2. e. f. Though there is underreporting the trends are encouraging. The measles vaccination campaign has been very effective though coverage has been low. 1970 was a low year for whooping cough-generally the rates run 74-65 in the period 1971-1976. Both Polio and Diphtheria have made significant decreases.</p>												
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B. 1 Narrative Summary

B. 2 Objectively Verifiable Indicators

2.g. Reduce grade III protein-calorie malnutrition in children under five years of age by 85 per cent and grade II by 30 per cent by 1980.

2.h. All public hospitals will be incorporated into the regionalized system by 1976.

2.i. Comadronas (empirical midwives) will be operating in the system under pilot programs by 1975.

2.j. Improved planning and administration procedures, trained admin. personnel and equipment in use by 1974.

2.k. Reduce water borne diseases by provision of water systems to 100% of the people in rural communities (50-2, 500 people); provision of sewage system to 40% of the people in rural communities by 1979.

B. 3 Achievements	B. 4 Comments
<p>2. g. Surveys late 1960's indicated about two thirds of the children in low socio-economic groups are affected by malnutrition and conservatively one-third of the deaths of children under five were the result of malnutrition. No surveys have been done since then.</p>	<p>2. g. The Food and Nutrition Plan supported through Health Sector Loan 075 and a separate nutrition loan is well underway in the three departments. The World Bank is supporting extension into additional departments. The completion of the health survey will provide new information on the nutrition status of the population.</p>
<p>2. h. Many hospitals in Colombia are owned by communities and private groups such as the Church while others belong to non health organizations such as the military and social security, and have independent governing bodies. In many cases these groups believe the inclusion of the hospital into the regionalized system will limit their autonomy and to some degree this is true. The situation is fluid - it is not possible to quantify the present situation. This has not been achieved.</p>	<p>2. h. The Ministry has been active in trying to develop a 'single system of health' which requires incorporation of existing resources such as the hospitals. Several Ministers of Health have made special efforts to include church owned hospitals and continuing discussions are being held with the social security. Experience has shown that a 1976 deadline for this indicator was unrealistic.</p>
<p>2. i. Comadronas are part of the PRIMOPS project.</p>	<p>2. i. MOH has provided some training to upgrade the traditional midwife skills and has trained some midwives as promotoras.</p>
<p>2. j. This has occurred.</p>	<p>2. j. The MOH planning office has improved since 1972. The personnel in the office have increased significantly as have their capabilities. See outputs A.</p>
<p>2. k. Enteritis and diarrhea - a main category of water borne diseases remains the first cause of morbidity and mortality in the young age groups; however there is some indication of a decreasing importance.</p>	<p>2. k. The goals will not be reached but the increase in coverage is evident. The indicator requirement was too ambitious. (See Inputs - financial comments).</p>



B. 3 Achievements

B. 4 Comments

Percent population coverage in rural communities of 50-2500 people

	<u>1970</u>	<u>1976</u>
Water	20.5	46.4
Sewage	9.0	13.8

3. This was not accomplished. In the past four years

(1) All State Health Departments have acquired trained statisticians.

(2) Most hospitals have received either a trained statistician or a clerk trained in data handling.

(3) Most of the equipment ordered for data handling has been received.

(4) Improved forms for data collection have been designed and are being used nationally.

(5) There has been an improvement in relations between MOH and DANE.

(6) A master sampling system has been designed and used.

4. Achievements include

(1) A national nutrition plan was developed and is being supported by World Bank and AID Loans.

(2) A Multisector Committee was formed for approval of pilot intervention projects and training.

(3) A DNP Evaluation Unit was established and an evaluation committee formed to coordinate

3. Much has been accomplished here. There are plans for automating the data and for the development of statistical profiles for use by State Health Departments. The notable progress in this area is in great part to Dr. Luis Carlos Gomez, head of the MOH information unit. In the initial AID analysis and loan condition AID grossly overestimated the time required to develop a good information system and recognized this in the earlier evaluations.

4. This Loan purpose has been accomplished. The concept of Multi-sector Nutrition planning is being accepted by an increasing number of individuals in the Colombian Agencies.

*(over)*

## 19. OUTPUTS AND INPUTS

### Outputs

The 7 Categories of outputs listed here are aggregations of several hundred items reported on by the MOH. These categories were used in previous annual evaluations and we feel they still are appropriate groupings for general comment over the longer time frame. Specific items as programmed and executed may be reviewed in "Informe sobre el Desarrollo de los Programas de Inversión del Sector Salud" for 1973, 1974, 1975 and 1976.

#### A. Improved Planning, Administration and Information System (Ministry of Health)

Progress: Without question we feel that these areas have improved during the period of the loans. The MOH planning office has increased in personnel within an expanded organization scheme and the office coordination with other branches of the MOH has improved. The section of the quarterly reports required by AID which refers to Planning, Administration and Information has improved considerably, from the reporting of activity in terms of funds spent to a clear description of activities undertaken. The MOH has developed many good documents detailing norms and models which must be used by departments, hospitals and other facilities within the health system. In no year did all executed activities reach programmed levels for reasons that (1) funding was less than was budgeted and that (2) priorities changed among scheduled projects, requiring personnel shifts within the planning office. This also may reflect some over ambitious programming on the part of MOH. The progress made in improving the health information system is outlined in the purpose section - 3 "Functioning Health Sector Information System." It is our impression that the advances made in these areas are in great part due to Colombian initiatives with the valuable technical assistance of short and long term technicians of PAHO.

Comment: The first health sector analysis documented the weakness of the MOH planning office and the need for an improved health data collection and compilation system; conditions were formulated within loan 069 for their improvement. AID's greater understanding of the functioning of the MOH plus the second health sector analysis resulted in a predisbursement condition in the second loan for improvement of the health administrative system. AID supported these efforts through disbursements to the MOH from both loans. It is our impression that the AID conditions plus funding provided encouragement and support to the MOH-PAHO efforts to plan and implement improvements in these areas at the central level. We believe that the MOH evaluation document of 1970-75 presented to AID in fulfillment of a loan condition (the first time MOH has made such an evaluation) is

further evidence of AID-encouraged progress. The document authors state that it has been sufficiently useful that they will continue to produce it annually. The same has been said for the quarterly report, though we have yet to see any following the loan implementation period. The improvements seen centrally are presently being extended to the peripheral facilities and units through dissemination of these new documents, seminars with personnel of the facilities in their use, implementation of centrally designed health forms, and training of key individuals throughout the country. Though our visits to outlying facilities have, in four years, shown some improvements in these areas, generally administration is not strong, and formal planning rudimentary. If AID were to continue in Colombia, the further improvement in administration at the regional and local levels, based on MOH norms, would be an area to support further.

\* B. Broader Personal Health Coverage by Selected Program  
(Ministry of Health, Colombian Family Welfare Institute,  
National Planning Department)

Progress: The programs supported in this category include extension of services through regionalization (including MAC) and integration, maternal-child health (MCH), mental health, tuberculosis, nutrition and vaccination programs.

The concept of regionalization in Colombia has evolved to include (1) three levels of care (a) sophisticated highly specialized care given at the hospitals associated with medical schools (b) regional hospitals which have the basic four specialities - surgery, pediatrics, medicine and obstetrics - gynecology, as well as general medical care and some speciality care (c) local level care including local small general hospitals, health centers (physician staffed out patient units) and health posts staffed by auxiliary nurses with associated promotoras (locally selected and trained visitors); (2) Definition of geographic areas; with population of 2-300,000 persons where health services are planned, implemented and evaluated by a selected regional hospital of the area; (3) Appropriate systems of patient referral, supervision, supply and community participation; and (4) Appropriate determination of tasks to be done by individuals at each level (delegation of function - reassignment of tasks) and appropriate staffing for each level.

The concept of integration includes (1) The coordination and unification, where appropriate, of the various government, social security, private, etc., health services; and (2) The planning and implementation of personal health services of the regionalized system jointly with various vertical personal and environmental services such as rural sanitation programs and malaria and vaccination campaigns.

Within the first loan, AID sought to use program conditions to strengthen regionalization components - i. e. , to study incentives which would assure staffing according to the regionalization scheme, to study the use of traditional midwives within the local health system and to improve supervision, patient referral and community participation. The incentive study made some suggestions but they were not influential in changing MOH programs. Generally staffing is still a problem, but the government has taken a stronger position in personnel placement. Though pilot studies were done relating to comadronas (traditional midwives) and trial teaching programs were tried in MOH it was not until 1977 that both Servicio Nacional de Aprendizaje "SENA" and MOH planned additional courses for upgrading midwife skills. Supervision was recognized as an important component and some small studies were done; however, it was not until 1976 that the MOH actually implemented a National Plan of Supervision. In terms of patient referral, much paper conceptualization has occurred but practical systems are still rudimentary. Community participation emphasis resulted in the establishment of an Office of Community Participation in the MOH in 1975; some experimental studies were and still are being undertaken. By late 1974 there still was no time phase plan for regionalization implementation, so a condition was negotiated in the new loan to develop such plan. MOH resisted making the plan by insisting that regionalization is a process; however, at that time MOH with UNICEF Technical Assistance developed a very good rural service delivery plan (MAC-1) with costs, timed implementation and means of evaluation, which was accepted as fulfilling the condition. Since then MAC-1 has been 8% implemented (vs planned 10%). AID has supported this by reprogramming dollars from originally planned support for a health telecommunication system to vehicles in support of MAC-1. The MOH continued to work on and refine components of regionalization emphasized by AID in the first loan.

The main integration problem being attacked by MOH is how to better coordinate and unify the Public health system with that of Social Security. Early attempts resulted in a doctor's strike and the discharge of the Minister of Labor Working groups of the Ministry of Health and Social Security are now discussing the situation.

The maternal and child care area has been an area of special interest to AID (Appendix C). This office of MOH had good planning and forward looking programming before the loans began. Country wide coverage has improved as evidenced by the increase in the number of municipios with MCH units from 286 in 1969 to 816 in 1973 to 916 in 1976 (out of 942 in country). The coverage of under 1 year olds for whom the MOH feels responsible, has increased dramatically by their calculation (Purpose indicator 2 c). The MCH unit has generally been strong in personnel and they have been assisted by full time PAHO and UNFPA advisors. AID has assisted their efforts with Loan peso funding untied to GOC counterpart.

Through the last 7 years the MCH expenditure as a % of total health expenditure has steadily increased. The MCH unit in 1968 initiated the use of Promotoras for MCH service delivery. This worker was incorporated into the MAC delivery system during 1975-6 as was the MCH service component so that the MCH unit's involvement in direct service delivery has begun to decrease.

Vaccination coverage has increased (see purpose indicators 2e and f). Better planning has resulted in a greater execution of programmed shots; however, the absolute number of shots per year given during the loan periods has decreased. Though it is our feeling that certain efficiencies have been realized, the figures are underreported.

The young Mental Health program and the tuberculosis program reported activities in generally non-helpful terms, though in 1976 some improvement was made especially related to the Mental Health program.

Loan 075 funds directly supported the successful PRIMOPS (Programa de Investigación en Modelos de Prestación de Servicios de Salud) project for the purpose of developing and evaluating low cost health services delivery in poor urban barrios. This program demonstrated some cost effective approaches though the final results are not complete yet. Ministry of Health personnel have kept close contact with the project. The project was contributory to the local service delivery development of the Ministry.

Nutrition funds under Health Sector Loan 075 have contributed to developing the ongoing GOC national nutrition planning mechanism and to broadening the view of nutrition by the agencies working in the nutrition related areas. In October 1974, after President López began his 1974-1978 presidential period, a National Food and Nutrition Plan was announced as one of the GOC principal programs. A Multisectorial Nutrition Committee composed of representatives from the agricultural and health ministries, and the Colombian Family Welfare Institute (ICBF), the Colombian Research Institute (IIT), the National Planning Department (DNP), AID, and some invited institutions, was organized to help in the approval and guidance in spending AID-GOC funds, in the areas of nutrition training, technical assistance and pilot projects and studies.

The committee met approximately twice every month. Forty pilot projects and studies were implemented (US\$500,000). All these studies and pilot projects assured that the proposed nutrition interventions were studied before larger programs were to be launched.

In the area of technical assistance the services of 15 experts were contracted to provide specific services. Similarly ten people were trained at the graduate level (long term training, mainly masters), as well as over 20 people in short term training.

Comment: Regarding regionalization the AID contribution was to identify components and seek to have them strengthened through the use of loan conditions. We believe that this plus other Mission efforts to assure that these areas were dealt with, did give them a higher visibility than before. Though it was and is difficult to know what direct influence AID had, we do believe that the AID approach did have considerable indirect effect. In the MCH program AID funds did help expand the program. Through other channels AID has been supportive of increasing family planning efforts within MCH. It appears that AID did effectively assist in the increased vaccination coverage, even though the reported number of shots decreased. Further study would be required to determine the effect of the reporting problem; it is obvious that much remains to be done. The most direct influence of the Loans in this area was through the PRIMOPS and Nutrition funding. The nutrition influence was very positive through dollar and peso expenditure as well as direct assistance on the part of the AID personnel. We consider that the output of all Loan 075 nutrition efforts significantly contributed to the establishment of the necessary inputs of the GOC Nutrition Plan.

C. Human Resources (Ministry of Health)

Progress: Throughout the four years of the loan the training for various positions was programmed and executed in clear quantitative terms. In only one year, 1974, did actual training exceed that programmed for both the aggregated professional group and the aggregated auxiliary-technician group (See Appendix B ). In other years execution ranged from 45 to 91% of programmed. Consistently, about twice as many months of training were completed for auxiliaries and technicians than for professionals. Consistently, the professional training budget and expenditures were larger than those of the auxiliary-technician group and when cuts were made, they were usually in the non professional group. The funding received one year for training affected the next year program accomplishments as can be seen in the following. The doubling of budget in 1973 resulted in the greater than 100% target completion in 1974 (measured in months of training) and the continued higher budget in 1974 resulted in a significant increase in the target for 1975. However, the 1975 targets were 25-50% unfulfilled in part due to inflationary increases and subsequent loss of money value as well as government spending cuts. Financial cuts reduced the GOC amount and through the ratios also reduced the AID component with the result that long term professional commitments were honored over short term auxiliary training (See Inputs Financial - Comments). Irrespective of these factors the percentage and absolute numbers of promotoras and auxiliary nurses rose much faster than did physicians and nurses. This is true for all intervals from 1970 to 1975; though in 1973 there was a bigger rise in promotoras than for other years. Considerable problems remain in appropriate personnel location.

Comment: AID attempted to assist in this area through funds and the inclusion of three programmatic conditions in loan 069 which emphasized auxiliary

group training and one condition in Loan 075 to strengthen the Central Human Resources Division and carry out a comprehensive manpower survey in 1975-1976. We believe the greater increases in trained auxiliaries than professionals is consistent with AID's loan purposes, and the marked Promotoras increase in 1973 was probably directly influenced by the Loan. AID, through a loan condition, attempted to focus attention on delegation of function or reassigning of functions to assure personnel and services where they were poor or non-existent.

Though AID realized that financial cuts in human resources were falling mainly on the auxiliary category; bringing this to the attention of the GOC had no effect.

While the manpower study was not completed in 1976, a national inventory of health workers, health education facilities and position tasks is underway.

D. Health Protection (National Institute of Health (INAS),  
Malaria Eradication Program (SEM))

Progress: The direct campaigns run by SEM - Malaria, Yellow Fever and Yaws - were carried out and reported in a very professional manner - (Summary Appendix D). SEM has received almost all budgeted funds and, in 1970 pesos, the annual amount has retained about the same annual purchasing power (through 1970-75) through SEM indicates that prices in 1970 terms have increased. The Malaria spray coverage has decreased, and the percent of positive blood samples has increased. Generally, there seems to be a deterioration in the Country's Malaria situation. A similar trend has been noted elsewhere in Latin America. We believe the Malaria program is well run, and do believe they are correct in noting increasing costs and population opposition to program as having caused much of the present situation. To prevent Malaria spread the program has to keep reasonably continuous field work going and as a result the SEM Malaria program is often in debt early in the year when flow of funds is poor. On occasions SEM has discontinued or decreased their spraying program because of funding problems. Unfortunately, in 1976, part of the program was stopped for a while because the boat carrying the insecticides arrived during a harbor strike and left without unloading. The 8 month delay in insecticide purchase through the loan due to Washington's need to develop an environmental impact statement also was detrimental. The Yaws program continues to progress toward eradication of this disease in country. We expect Yaws eradication will be a reality in the 1980's under the present program.

The INAS rural sanitation program (Appendix E), has always been an example of a well-designed and run program. The statistics showing increasing population coverage are impressive. The reliability of funding and timing of funding has been poor and in the recent past quite poor. Funds arrive late in the year which results in a poor annual execution of planned programs. By June of the

following year when the previous year's funds have been spent, the percent of project completion had improved considerably. INAS personnel note that aqueducts are becoming more expensive because the unserved population is becoming more dispersed requiring longer aqueducts. The average number of persons served by each new aqueduct is decreasing each year.

Comment: Through the loans, AID tried to assist in the extension of coverage of the Malaria, Yellow Fever and Yaws programs and both loans had program conditions related to using SEM personnel to provide health education and basic health care services. Regarding the first point, the difficulties of program extensions which are occurring in the Malaria program, noted above, are in part out of the hands of SEM and the situation in Colombia is not unique to Colombia. It is difficult to know if the situation would have been worse without AID's assistance to SEM. The Yellow Fever programs and the Yaws programs have been more successful. The study to determine whether SEM personnel might provide additional health service was done in conjunction with UNICEF, with the result that it was feasible. Though a plan was developed as required in loan 075, the study results were not extended partially because the MOH was developing the MACs for service extension.

The extension of rural sanitation through INAS was a program of considerable interest to AID as seen by the funds programmed for it and the five program conditions which were in the loans. The conditions were acceptably completed. The actual numbers of rural sanitation projects completed have remained about the same each year despite variable late program funding. Budget cuts were made in the INAS budget which resulted in decreased GOC funds available for rural sanitation and therefore a decrease in AID disbursement for this program. Our discussions with regional INAS professionals always seemed to indicate funding was their main problem - that they could and would do more if the funds would come. AID's leverage was insufficient to assure that the program could be funded as desired, however, we believe the fulfillment of programmatic conditions did result in increasing Colombian attention in those areas; also the aqueducts are becoming more expensive and on the average new ones serve fewer people.

E. Facility Construction, Production and Acquisition of Complementary Inputs (National Hospital Fund (FNH)/Ministry of Health/National Institute of Health/Malaria Program/National Planning Department).

Progress: Regarding facility construction between 1971 and 1976, the completion of new hospital construction and addition of new beds was mainly at the regional level (16 vs 11 at local level and 2 university), while completion of remodeling and expansion occurred mainly at the local level. The number of hospital beds has fluctuated only slightly since the early 1960s and therefore the bed /population ratio has been progressively decreasing. Further review indicates the total country

hospital occupancy rate has stayed about the same while the average length of hospital stay has decreased and the discharges/bed have increased. The reasonable interpretation is that an increase in bed efficiency has been realized. The Ministry has dropped the idea of norms of beds/different population concentration for a strategy of improving the use of the existing beds and rationalizing the location of future beds. The FNH has reorganized and improved their ability to organize and monitor multiple projects; however, we have not been impressed with their ability to display their plans and plan execution, though some improvement has been made during this time. There has been an increase in Government out patient facilities from 1885 in 1973 to 2140 in 1975. Since 1972 FNH expenditures have become an increasingly high percentage of the total health expenditures.

Production of biologicals (Appendix E) has been variable when comparing accomplishments with plans reflecting changing priorities within a given year. It is difficult to appreciate GOC reasoning for non-attainment of programmed vaccinations when production is much higher than shows given and GOC notes vaccination shortage.

Comment: AID did not provide any funds to FNH in Loan 069 until FNH had adequately demonstrated their ability to carry out hospital expansion and project remodeling. This was satisfied when FNH had completed the FNH-PAHO reorganization plan. Under the second loan, FNH was to complete a study of norms and standardization of construction and equipment criteria for hospitals health posts and centers. The study for health posts and centers was well done. That for hospitals delayed; AID finally accepted a preliminary document for the local hospital level. This study is now progressing well. AID provided Technical Assistance from a hospital architect and also 3 members of a construction management firm. Without question, all of this assistance, combined with long term PAHO assistance, has improved FNH. AID also provided a small amount of financial assistance for local hospital expansion and remodeling and health post construction.

#### F. Loan Commodity Purchase

069 - One million dollars purchased 198 vehicles which were appropriately located.

075 - There were \$5,000,000\* available for the purchase of commodities. (Appendix F). Procurement activities did not really start until CY 1976 due to delays in equipment specification (GOC) and insecticide approval (AID 1 year). The purchase status of the three letters of commitment as of October 1977 are summarized in the charts and discussion as follows:

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\* Previous evaluation noted \$5,250,000 which was actually \$5,246,000 (Section 1.02 of the Loan Agreement). \$246,000 was allotted to Technical Assistance and Training "services."

1. National Institute of Health (INAS)

Letter of Commitment #514-u-07504 for \$870,500 expiring April 30, 1978.

All negotiations have been completed and INAS awaits arrival in port of only two groups of equipment. The major problem has been the customs clearance of the purchased equipment, with extensive delays caused by misunderstanding of Colombian laws or lack of funds on the part of INAS.

2. National Hospital Fund (FNH)

Letter of Commitment #514-u-07506 for \$949,500 expiring April 30, 1978.

This procurement (elevators) represented the first application of usage of Colombian Law 150 (procurement procedures). This contract was delayed for 7 months awaiting for complex approval process now required for all direct GOC procurements in excess of \$273,000. The contract was approved by the Minister of Health, the Council of Ministers, the Presidency and the Council of State.

3. Ministry of Health (MOH)

Letter of Commitment #514-u-07505 for \$3,180,000 expiring April 30, 1978.

All equipment initially planned for procurement by SEM and FNH together with MOH were combined into a single procurement effort.\* The resultant IFB was rebid two times due to the failure of multiple prospective suppliers who submitted incomplete bids. This procurement (except for a rebid of outboard motors and malathion) is in the contract approval stage. It is expected that due to experience gained by the MOH staff in handling the Law 150 approval process for the FNH elevators, the contract will be approved by the GOC with minimal delays (two months).

Comment: Due to increased GOC centralization, Law 150 and lack of exception for Government entities to avoid complicated importation rules, procurement remains a slow frustrating process. Delays are not caused by the IFB system but the multiple of approvals required for importation and nationalization. It is apparent the Colombian institutions have little control or working knowledge of the bureaucratic importation system. These delays did slow down the INAS well drilling effort and the SEM malaria spray program. However in the case of MOH communications program, TA revealed that they should not undertake this costly project and allowed them to reprogram funds to replace their aging ambulance fleet and expand that service to rural areas.

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\* Telecommunication equipment planned for MOH purchase was evaluated to be too costly and was dropped from the program; and other groups of equipment (ambulances, insecticides) were expanded.

G. Research (Ministry of Health, National Institute of Health)

Progress: The National Institute of Health has been and is carrying on much biomedical research and continuous monitoring of various biomedical indicators. The work is of high quality but it has been difficult to design adequate progress indicators for the projects. The unit of applied research has been quite active and now is almost entirely devoted to the National Health Survey which is presently underway. A Direction of Research was set up in the Ministry of Health in 1974. This has become a very active unit both in determining research priorities as well as facilitating national and binational research.

Comment: AID has contributed funds to the carrying out of biomedical research and has tried with only partial success to improve the means of monitoring the progress of such research. Of greater interest to AID has been the successful initiation and completion of the National Health Survey. Through non loan sources AID has provided financial and technical help. The survey design is very good. The sampling system was developed in the MOH unit of information (supported by AID) and the initial field stands have been completed. We have not been involved at all with the development of the Direction of Research in MOH.

LOAN 069 (000,000 pesos)

<u>INPUT</u>		1973			1974		
A. Financial	<u>Prg.</u>	<u>Actual</u>	<u>% Ex.</u>	<u>Prg.</u>	<u>Actual</u>	<u>% Ex.</u>	
I. AID funds requiring GOC counterpart							
A. <u>MOH</u>							
GOC	142.3	118.8	83.5	200.3	124.2	62	
AID	<u>35.1</u>	<u>35.1</u>	<u>100.0</u>	<u>73.3</u>	<u>48.8</u>	<u>66</u>	
Total	177.4	153.9	86.8	273.6	173.0	64	
B. <u>SEM</u>							
GOC	152.9	99.4	65.0	141.1	133.4	94	
AID	<u>30.0</u>	<u>30.0</u>	<u>100.0</u>	<u>31.0</u>	<u>29.6</u>	<u>95</u>	
Total	182.0	129.4	70.7	172.1	163.0	95	
C. <u>FNH</u>							
GOC	198.0	175.7	88.7	258.2	179.0	69	
AID	<u>42.2</u>	<u>32.2</u>	<u>100.0</u>	<u>55.5</u>	<u>38.9</u>	<u>70</u>	
Total	230.2	207.9	90.3	313.7	217.9	69	
D. <u>ICBF</u>							
GOC	303.0	342.3	113.0	356.7	362.8	102	
AID	<u>12.9</u>	<u>12.9</u>	<u>100.0</u>	<u>6.3</u>	<u>6.3</u>	<u>100</u>	
Total	315.9	355.2	112.4	363.0	369.1	101	
E. <u>INPES</u>							
GOC	196.5	120.7	61.4	201.0	149.3	74	
AID	<u>87.0</u>	<u>87.0</u>	<u>100.0</u>	<u>103.0</u>	<u>76.6</u>	<u>74</u>	
Total	283.5	207.7	73.2	304.0	225.9	74	
II. AID funds not requiring GOC counterpart							
PRIMOPS							
MCH							
DNP							
Total							
III. <u>SECTOR</u>							
GOC	992.7	856.9	86.3	1,157.3	948.7	80	
AID	<u>197.2</u>	<u>197.2</u>	<u>100.0</u>	<u>269.1</u>	<u>200.2</u>	<u>81</u>	
	1,189.9	1,054.1	88.6	1,426.4	1,148.9	80	

(4) Law 27 passed in 1975 increased considerably their income.

(5) Carry-over from Loan 069 was for a total of 70 million pesos.

LOAN 075 (000,000 pesos)

<u>Prg.</u>	(5) Carry Over Loan 069	1975		1976		
		<u>Actual Loan 075</u>	<u>% Ex.</u>	<u>Prg.</u>	<u>Actua</u>	<u>% Ex.</u>
264.2	50.4	197.0	74.6	371.6	268.9	72.3
<u>104.2</u>		<u>37.7(1)</u>	<u>84.1</u>	<u>89.5</u>	<u>89.5</u>	<u>100.0</u>
369.0		285.1	71.2	461.1	358.4	77.7
117.0	.4	126.8	108.4	161.0	147.3	91.5
<u>28.4</u>		<u>28.0</u>	<u>100.0</u>	<u>22.0</u>	<u>22.0</u>	<u>100.0</u>
145.4		155.2	107.0	183.0	109.3	92.5
329.4	1.5	205.0	62.2	269.5	269.5	100.0
<u>5.1</u>		<u>1.7</u>	<u>62.2</u>	<u>5.0</u>	<u>5.0</u>	<u>100.0</u>
334.5		208.2	62.4	274.0	274.0	100.0
626.4		1,395.7(4)	131.9	529.0	529.0	100.0
<u>20.0</u>		<u>20.0</u>	<u>100.0</u>	<u>18.0</u>	<u>18.0</u>	<u>100.0</u>
646.4		1,159.7	179.4	547.0	547.0	100.0
174.6	17.7	139.2	79.7	244.4	215.1	88.0
<u>91.3</u>		<u>52.4(2)</u>	<u>76.8</u>	<u>64.5</u>	<u>64.5</u>	<u>100.0</u>
265.9		209.3	78.7	308.9	279.6	90.5
2.0		2.0	100.0	2.0	2.0	100.0
30.0		28.3	92.8(3)	32.0	32.0	100.0
<u>7.6</u>		<u>7.6</u>	<u>100.0</u>	<u>8.0</u>	<u>8.0</u>	<u>100.0</u>
40.1		37.9	94.5	42.0	42.0	100.0
1,511.6		1,807.7	119.6	1,575.5	1,429.8	90.7
<u>257.2</u>		<u>210.8</u>	<u>81.9</u>	<u>207.0</u>	<u>207.0</u>	<u>100.0</u>
1,768.8		2,018.6	114.1	1,782.5	1,636.8	91.8

(1) 2,781,000 pesos were not disbursed due to overdisbursement in 1974.

(2) Two different INAS program categories were funded independantly - Research and Rural Sanitation

(3) Established loan target was higher than Colombian budget law. AID paid against budget

B. Non-Financial

GOC - Non financial inputs consist of the personnel, capital, policies and legal systems of the GOC, MOH and health related government agencies.

AID - Non financial inputs included the Mission staff and assorted Technical Assistance such as Bob Douglass - hospital architect, and George Gehr, Telecommunications-specialist.

Comment:

In 1973 AID peso disbursements to GOC were based on program accomplishment and need. From 1974 on the pesos were still based on program progress but were tied to GOC disbursements based on ratios. Due to the 1974 GOC financial situation AID elected to relax the ratios a bit to assure continued program progress. In every year the GOC disbursement was slow at the beginning of the year and nearly 50% of GOC disbursements were made in the last 3-4 months of the year which means the AID disbursements were also slow. Nearly 30% of GOC payment each year went into reservas to be certified and used the following year for business of the previous year. This, at times, also resulted in AID funds being unused for several months while the certification process was underway. Also in the first loan AID payments made to GOC did not always pass directly to the implementing GOC agency but were held up in special accounts.

In every year ICBF received more than was budgeted, through preferential government treatment related to welfare-bonds-and Law 27. INAS, MOH and FNH generally received 90% or less of the funds budgeted for them. After 1973 SEM received most of what was budgeted each year.

Since AID funds had been channeled to specific activities in the sector, the reduction of our disbursements because of lack of GOC counterpart had a peculiar effect. That is, those programs which we felt were priority and had been scheduled to receive AID funds suffered because of this cut in disbursements by GOC and then again by AID. These included the training of paramedical personnel by the MOH and the rural sewer and water programs of INAS.

AID's recognition that too often in the first loan AID funds (Health and other) were sitting idle in GOC special accounts resulted in a change in the AID disbursement mechanism. This of course, solved AID's problem and increased GOC's attention on their own disbursement system; however, GOC improvements were minimal.

The quarterly report required by AID from GOC included extensive financial reporting along with activity reporting. Inconsistencies, errors, financial (and activity) problems as well as success were discussed after each report with the GOC responsible personnel. Corrections were made in both areas but mainly in the activity sections.

Regarding non financial inputs the GOC health leadership fluctuated (See 16-B - External factors) but a body of civil servants remained to provide continuity during these changes. We are especially indebted to Jaime Gómez in DNP during these periods. These periods of political change were reflected in increased difficulties in completing loan requirements. (Such as the programmatic conditions.) As the GOC personnel attention was directed toward defining new policy or change in policy and funding needs, the quality of the loan condition submissions declined and on several occasions AID requested that the documents be done again. Also the GOC ability to handle administrative matters with dispatch and accuracy was frequently limited. The enactment of Law 150 requiring a lengthy purchase approval process greatly hindered AID dollar purchase (See Outputs F "Loan Commodity Purchase").

AID/C was fortunate in having considerable staff continuity during the loan period. When the project manager left, the new project manager had been present in the Mission since the initial loan discussions. However, U.S. Government policies at times hindered the program such as when the insecticide procurement process was held up 8 months while an environmental impact statement was being developed.

AID determined early that the GOC and MOH were technically capable of handling all phases of the loan and as a result Technical Assistance was a minimal component except in nutrition plan development.

## 22. LESSONS LEARNED

A. Original Assumptions. Health Sector Loan II followed and overlapped an earlier loan for similar objectives; although designed and largely negotiated late in the four-year term of office of one Colombian administration, it was signed and implemented under a successor administration. It was originally assumed that national budget allocations and program emphasis would continue in accord with negotiations and patterns set under the earlier administration. This, however, was not always the case. Allocations were less than anticipated in certain areas, frequently delayed, and too often locked in end-of-year "reservas" for recertification and subsequent release in the following year.

Lessons Learned: (1) Sector loan disbursement levels and schedules should not be directly linked to the annually legislated budget, which may be variable and unpredictable. (2) Original assumptions should be reviewed periodically, with project design revisions as appropriate. (3) When there are major government changes or changes of key host country personnel, AID must assure that they become conversant with and honor the commitments of the ongoing loan.

B. Allocations to Agencies. Loan disbursements were based on the needs of sector agency programs to be supported rather than on specific project investments, and were made in a fixed ratio to counterpart negotiated with the GOC. Reductions and delays in counterpart budget releases frequently led to corresponding reductions and delays in loan disbursements, with resulting shortfalls in implementation.

Lessons Learned: (1) Linking sector loan disbursements to counterpart levels provided is, at best, a risky and uncertain means of achieving levels of host government sector support. (2) Linking sector loan funding to increments of technical or physical change may result in such change, but offers little assurance of sustained host government budget support at the new levels required. (3) Successive and overlapping loans to the same sector result in excessive mission workload in project monitoring and differentiating between funding sources, and in maintaining TDD discipline. (4) Any future sector lending plans by AID should carefully consider application of the Fixed Amount Reimbursement (FAR) technique.

C. Loan Development, Implementation Management & Monitoring. Multiple agency participation in this loan and its complexity resulted in a great amount of USAID/C staff time required for management and monitoring, and contributed to delays in implementation.

Lessons Learned: (1) Loan development personnel must include key individuals from the host country implementing agencies and offices to assure realistic design and expectations. (2) Design of this type of loan should require as a Condition Precedent the establishment of a host country management structure for loan implementation, i. e., a single central project manager and sub project agency managers, a coordinated structured communications system and standard reporting formats for the life of the project. (3) When developing the loan there must be a careful decision regarding the depth of monitoring and evaluation which can be done in terms of personnel available. The U.S. Mission role in implementation management and monitoring might be minimized by use of the Fixed Amount Reimbursement technique.

D. Evaluation. Some of the original end-of-project status and progress indicators proved cumbersome and ineffective in achieving their monitoring/evaluation purpose, and some basic assumptions proved invalid.

Lessons Learned: (1) Periodic evaluations done collaboratively with the borrower and participating agencies each year should be accompanied by suitable revisions in assumptions, EOPS and progress indicators. (2) Where host country and AID funds are comingled to achieve an output, it is difficult to identify the AID contribution and its impact.

FINANCIAL ANALYSIS OF ITEMS OF INTEREST

Several facets of the Loan program which have been discussed at various times include:

- ✓ (1) Can the effect of the health sector loans on the health sector be demonstrated by an increase in GOC budget or expenditures for health;
- ✓ (2) Did the areas within the health sector preferentially supported by AID also receive preferential treatment in the GOC budget an expenditure process. We have found it difficult to evaluate the expenditures especially in relation to the budget because final expenditures for a given year may not be made for three additional years, and;
- ✓ (3) Have the budgeted or expended central government health pesos increased per inhabitant for whom the central government feels responsible?

The following comments and data address these questions:

Inflation has been a significant factor in the Colombian economy. While the central government budget appears to have increased considerably, in constant pesos the purchasing capability has actually decreased between 1970 and 1976. The government health budget has increased; however, the investment portion has actually decreased in constant pesos. Although the operating budget doubled in constant pesos between 1970 and 1976, the amount available to the central government actually was cut in half. The remainder consists of transfers of Situado Fiscal and liquor tax for direct support of departmental health programs. This does indicate increased dispersion of health funds from the national to the departmental governments consistent with the MOH policy of centralized development of norms, peripheral program implementation.

✓ At most, the health budget as a percent of GNP has not increased and may have decreased slightly. As a percent of the entire government budget, the health budget did increase significantly and appears to have done so in relation to the Loans.

Concerning the central government amount budgeted/inhabitant the amount has been variable but without significant change.

APPENDIX A

Two graphs indicate that the health sector has increased more than two other sectors AID has interest in i. e. , Agricultural and Education.

In terms of influencing the distribution of funds within the Health budget, it appears that the AID funds supported the general MCH and human resources trends of receiving an increased percent of the budget. AID provided a little support for FNH and that support was for remodeling and increasing facilities - no new construction. The FNH expenditures as a percent of total health expenditures were unchanged by (did not decrease) AIDs lack of attention. The loan may have been of some assistance in the increased 1973 - 1975 INAS expenditures though this obviously did not continue into 1976.

SELECTED BUDGET ITEMS

1970 - 1976

Base year - 1970 - 100

Detail	1970	1971	1972	1973	1974	1975	1976
1. GNP Current prices 1970 pesos	130.361 130.361	152.262 137.918	186.092 148.635	243.235 159.185	329.155 168.797	419.012 176.500	557.899 185.348
2. Central Govt. Current Budget (CGB) 1970 Ps.	18.455.8 18.455.8	22.534.1 20.411.3	24.587.4 19.638.4	30.333.4 19.851.7	30.303.2 15.540.1	34.854.1 14.681.6	53.386.5 17.736.3
3. Central Govt. Current Health Budget 1970 Ps. (CGHB)	1.310.3 1.310.3	1.635.5 1.481.4	1.671.3 1.334.9	2.239.7 1.465.7	3.441.4 1.764.8	3.552.0 1.496.2	5.270.0 1.750.8
4. Central Govt. Health Invest. Current Budget (CGIIB) 1970 Ps.	920 920	1.144.1 1.036.3	1.183.5 945.3	1.467.3 960.3	2.348.7 1.204.5	1.753.2 738.5	2.572.9 854.7
5. Central Govt. Health Opert. Current Budget (CGHOB) 1970 Ps.	389.7 389.7	491.5 445.1	487.8 389.6	772.3 505.4	1.092.6 560.2	1.098.6 757.7	2.697.1 896.0
6. Central Govt. Current Health Operating Budget minus direct Transfers* 1970 Ps.	389.7 389.7	491.5 445.1	487.8 389.6	772.3 505.4	380.6 195.2	388.1 163.5	451.0 149.8

## Sources:

Banco de la República - Cuentas Nacionales de Colombia 1970-1975  
 Contraloría General de la República - Informe Financiero 1970-1975  
 Departamento Nacional de Planeación - Documento

\*Situado Fiscal and Liquor Tax were excluded.

APPENDIX A

CENTRAL GOVERNMENT HEALTH BUDGET AS

<u>Year</u>	(A)		<u>% OF GNP</u>		<u>CGHB + AID as % OF GNP</u> (1)/(2)+(3)
	<u>CGHB*</u> (1)	<u>AID</u> (2)	<u>GNP</u> (3)	<u>CGHB as % OF GNP</u> (1)/(3)	
1970	1310.0	-0-	130.361	1.00	1.00
1971	1635.5	-0-	152.262	1.07	1.07
1972	1671.3	-0-	186.092	.89	.89
1973	2067.5	172.2	243.235	.85	.92
1974	3172.1	269.3	329.155	.96	1.04
1975	3302.4	249.6	419.012	.78	.84
1976	5063.0	207.0	557.899	.90	.94

CENTRAL GOVERNMENT HEALTH BUDGET  
AS % OF CENTRAL GOVERNMENT  
BUDGET

<u>Year</u>	<u>CGHB</u>	<u>AID</u>	<u>CGB**</u>	<u>CGHB as % of CGB</u>	<u>CGHB + AID as % of CGB</u>
	(1)	(2)	(3)	(1)/(3)	(1)/(3)+(2)
1970	1310.0	-0-	18.455.8	7.09	7.09
1971	1635.5	-0-	22.534.1	7.25	7.25
1972	1671.3	-0-	24.587.4	6.79	6.79
1973	2067.5	172.2	30.333.4	6.81	7.38
1974	3172.1	269.3	30.303.2	10.46	11.36
1975	3302.4	249.6	34.854.1	9.47	10.19
1976 (c)	5063.0	207.0	53.386.5	9.48	9.87

\*CGHB - Central Government Health Budget

\*\*CGB - Central Government Budget

(A) Contraloría General de la República - Informe Financiero 1970-1975

(B) Banco de la República - Cuentas Nacionales de Colombia 1970-1975

(C) The 1976 information was provided by DNP thru Public Investment.

APPENDIX A

HEALTH BUDGET PESOS/INDIVIDUAL COVERED BY NATIONAL HEALTH SYSTEM

Year - Population (1)	Population* Covered by NHS	Health Budget Current		Health Budget Constant (1970 Pesos)		Change from Pre- vious Year	
		Values at Current Prices (2)	Pesos per Inhabitant	At Values at Constant Prices	Pesos per Inhabitant		
1970	21.138	15.642.1	1.310.3	83.76	1.310.3	83.76	-
1971	21.746	16.092.0	1.635.5	101.63	1.481.4	92.06	+ 8.30
1972	22.362	16.547.8	1.671.3	100.99	1.334.9	80.67	- 11.39
1973	22.983	17.007.4	2.239.7	131.69	1.465.7	86.18	+ 5.51
1974	23.619	17.478.0	3.441.4	196.89	1.764.8	100.97	+ 14.79
1975	24.258	17.950.9	3.552.0	197.87	1.496.2	83.35	- 17.62
1976	24.743	18.309.8	5.270.0	287.82	1.750.8	93.62	+ 12.27

\*74% of total population.

- (1) Londoño et al. - Descenso de la Fecundidad y Planificación Familiar en Colombia 1964-1975.  
 (2) Contraloría General de la República - Informe Financiero

APPENDIX A

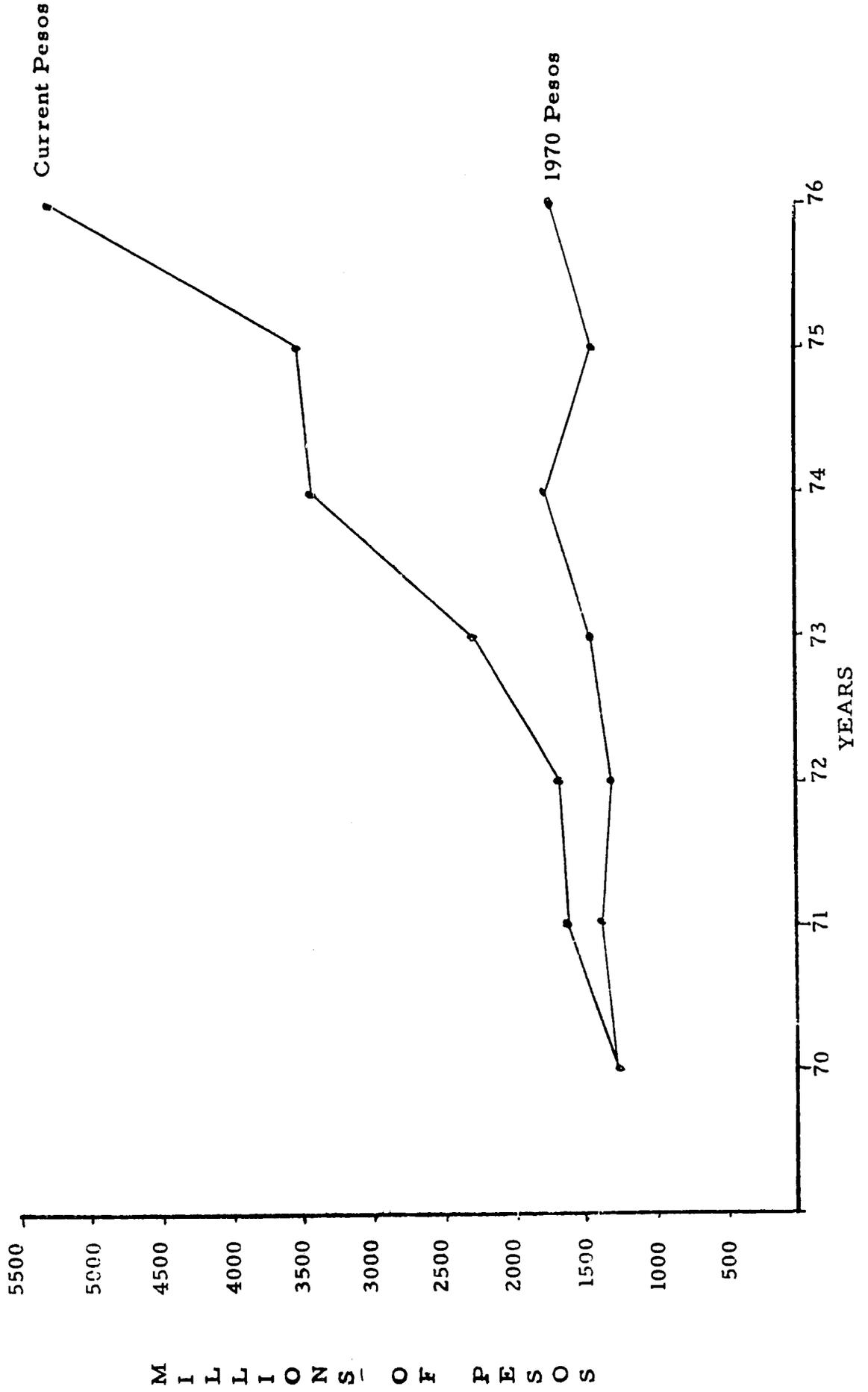
EXECUTED INVESTMENT BUDGET (%)

PROGRAM	1970	1971	1972	1973	1974	1975	1976
1. Admin. Health Sector	-0-	.52	.51	.93	2.45	1.29	1.24
2. Medical attention	.32	3.58	.47	.43	.21	.22	.90
3. MCH	1.63	1.31	2.13	2.27	1.76	2.78	3.44
4. Environmental san.	9.15	.89	.96	1.57	1.09	1.52	1.54
5. Epidemiology	-0-	-0-	-0-	-0-	1.80	1.10	2.67
6. Human Resources	1.81	2.36	2.66	5.74	4.42	5.34	4.05
7. SEM	12.20	8.25	10.21	9.24	8.28	11.34	6.55
8. FNH	4.83	14.28	7.80	12.21	30.73	16.25	15.42
9. Rural Sanitation*	-0-	8.16	6.17	11.63	10.26	12.29	8.80
10. Rest INAS	-0-	1.50	1.97	1.97	1.49	.83	.76
11. ICBF	30.81	24.48	31.49	23.62	17.51	18.71	23.51
12. Insfopal	31.57	32.21	34.46	29.13	19.28	27.42	29.59
13. Other	7.68	2.46	1.17	1.26	.72	.91	1.53
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

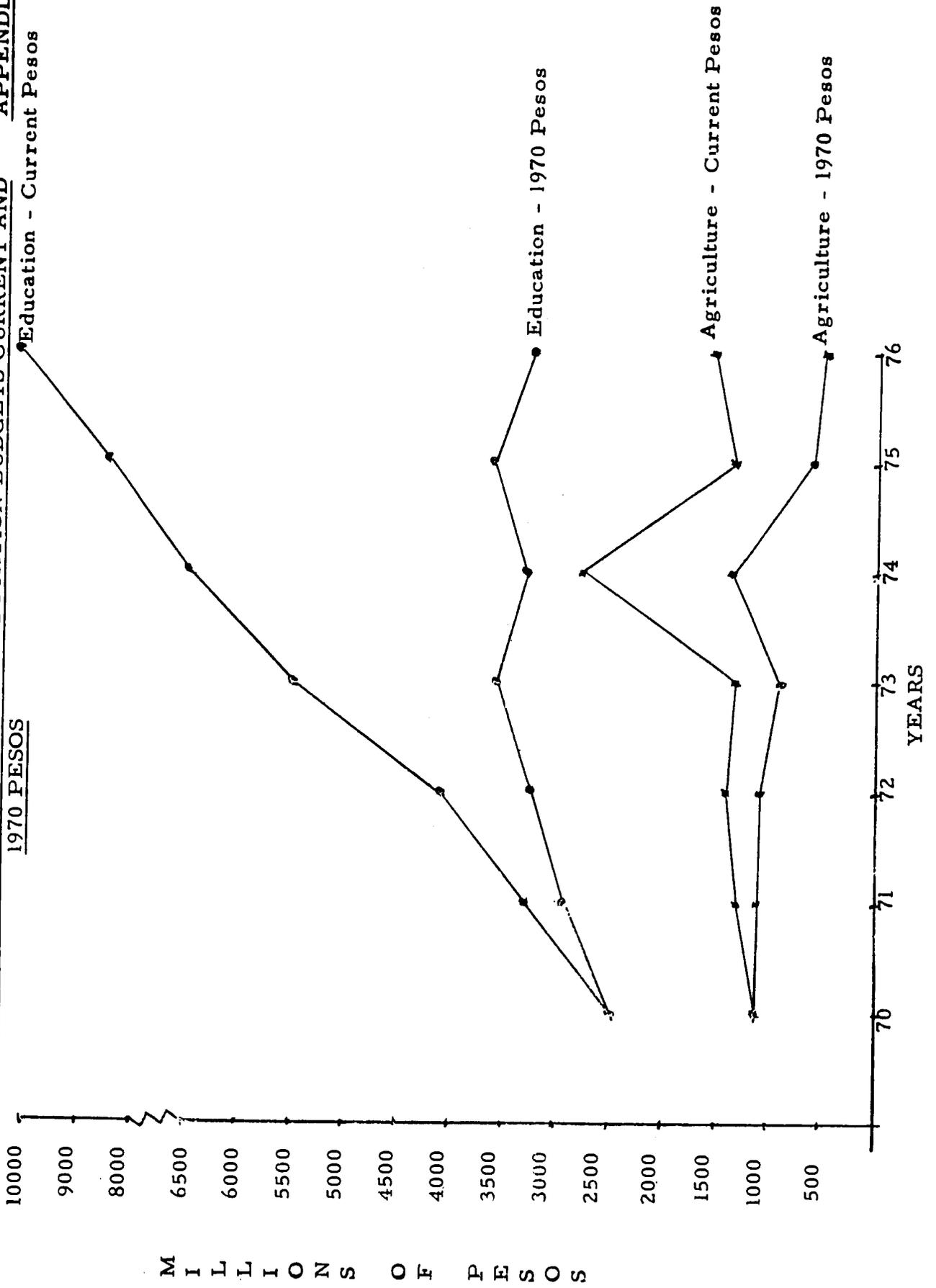
Source: Informe Financiero de la Contraloría General de la República 1970-75  
Anexo II al Informe Financiero de 1976.

\*In 1970 Rural Sanitation was paid of Environmental Sanitation.

CENTRAL GOVERNMENT HEALTH BUDGET CURRENT PESOS AND 1970 PESOS



CENTRAL GOVERNMENT AGRICULTURE AND EDUCATION BUDGETS CURRENT AND 1970 PESOS APPENDIX A  
Education - Current Pesos



APPENDIX B

MONTHS OF TRAINING PROGRAMMED/EXECUTED BY LOAN YEAR

	1973			1974			LT**	1975			L.T	1976		
	Col. Pgm.*	Exec.	%	Col. Pgm.	Exec.	%		Col. Pgm.	Exec.	%***		Col. Pgm.	Exec.	%
Professional Months/Year	11179	8209	73	7625	7987	104	7600	9491	7160	75	7000	7593	7253	91
Auxiliary Technician Months/Year	15565	13231	85	14276	18119	127	25500	26051	12834	9	26200	23701	15561	65

\*Col. Pgm. - Programmed in the Colombian Ministry of Health

\*\*LT - Loan Targets - a Colombian-AID decision determined at least a year before Col. Pgm.

\*\*\*% - % =  $\frac{\text{Exec}}{\text{Col. Pgm.}}$

AVAILABILITY OF MEDICAL & PARAMEDICAL PERSONNEL

TYPE OF HUMAN RESOURCES	TRAINED						CUMULATIVE TOTAL AVAILABLE					
	1970	1971	1972	1973	1974	1975	1970	1971	1972	1973	1974	1975
Doctors	499	483	557	347	686	565	9.266	9.614	9.992	10.421	10.982	11.504
Dentists	163	80	207	195	140	188	4.256	4.336	4.543	4.738	4.878	5.066
Nurses	131	164	214	320	279	389	2.100	2.264	2.478	2.798	3.077	3.448
Nurse/Auxiliar	1.017	1.221	1.125	1.339	1.572	1.394	6.132	7.353	8.498	9.817	11.389	12.783
Promotoras	1.120	616	690	1.305	1.617	1.487	1.507	1.622	1.717	2.334	3.186	4.003

SOURCE: Dirección de Recursos Humanos

APPENDIX B

AVAILABILITY OF MEDICAL & PARAMEDICAL PERSONNEL

TYPE OF HUMAN RESOURCE	Available per 100,000 persons					
	1970	1971	1972	1973	1974	1975
Doctors	44.6	45.0	45.5	46.1	47.2	48.0
Dentists	20.5	20.3	20.6	21.0	21.0	21.2
Nurses	10.1	10.6	11.3	12.4	13.2	14.4
Nurse/Aux.	29.5	34.4	38.7	43.4	48.9	53.4
Promotoras	7.3	7.6	7.8	10.3	13.7	16.7

SOURCE: Dirección de Recursos Humanos

MATERNAL CHILD CARE

	1973			1974			1975			1976		
	GOC		%Exe.	GOC		%Exe.	Loan*		%Exe.	Loan*		%Exe.
	Target	Exe.		Target	Exe.		Target	Exe.		Target	Exe.	
	(000's)	(000's)		(000's)	(000's)		(000's)	(000's)		(000's)	(000's)	
Persons Attended 1st Visit/Year												
-Women pre & post delivery	689	361	52.4	940	407	43.3	390	365	93.6	410	339	82.2
-Children under 1		439			467		480	495	103.2	500	502	100.5
-Children 1-4	2.927	652	52.9	3.593	675	54.4	830	665	80.0	910	703	77.3
-Children 5-14		761			814		790	814	103.1	820	1,084	133.3
-Funds (in million pesos)	31.4	31.4	100	35.3	37.3	105.8	49.2	49.2	100.0	77.5	77.5	100

\*GOC target was the same

COVERAGE IN PERCENT\*

<u>Year</u>	<u>Children Under One</u>	<u>Children One to four</u>	<u>Children 5 - 14</u>	<u>Women pre &amp; post delivery</u>
1970	75	22.8	11.1	31.1
1971	76.9	23.9	11.0	32.6
1972	79.9	24.0	11.1	33.9
1973	80.9	24.6	11.1	35.9
1974	83.7	24.8	11.6	39.4
1975	86.1	23.7	11.2	34.3
1976	85	24.4	14.6	30.9

\*Concerns population determined to be under the responsibility of MCH of Government

APPENDIX D

MALARIA AND YAWS PROGRAMS

SEM

Malaria	1970		1971		1972		1973		1974		1975		1976	
	P	E	P	E	P	E	P	E	P	E	P	E	P	E
Number sprays (in 000's)	1,943	1,830	1,935	1,760	1,680	1,517	1,682	1,424	1,543	1,313	1,308	1,140	1,453	1,1
Percent of execution	94.1		90.9		90.3		84.6		85.1		83.1		89.6	
Positive cases	31,887		22,206		30,763		56,119		22,312		32,572		38,839	
Blood Samples Examined	680,571		600,204		642,259		628,057		402,434		384,364		385,659	
Positive Blood Examinations														
Total Blood Samples Examined	.047		.037		.048		.089		.055		.085		101	
Yaws														
Homes Visited	280,300		227,022		251,789		177,256		111,635		188,934		77,273	
Cases found and treated	1,397		741		655		573		379		317		220	

RURAL WATER AND SEWER PROGRAM

INAS

Rural Sanitation

	1970	1972	1973			1974			1975			1976		
			Prg.	Ex.	%Ex.	Prg.	Ex.	%Ex.	Prg.	Ex.	%Ex.	Prg.	Ex.	%Ex.
<b>A. Water Programs</b>														
1. Aqueducts	NA	252	455	449	98.7	513	350	68.2	442	492	111.3	679	491	72.3
2. Small Aqueducts	NA	424	245	362	147.8	250	235	94.0	220	201	91.4	180	175	97.2
3. % of Population Covered	20.5	30.3	35.0			40.3			43.3			46.4		
<b>B. Sewer Program</b>														
1. Number	NA	83	126	128	101.6	122	85	69.7	151	114	75.5	137	105	76.6
2. School program	NA	111	150	160	106.7	173	143	82.6	150	101	67.3	160	104	65
3. Latrines (000)	NA	18.4	20	12	60.4	11	2.8	25.1	15	15	100	20.3	5.5	27.2
4. % of Population Covered	9.0	10.6	11.8			12.7			13.3			13.8		
<b>FUNDS (millions)</b>	NA	NA	227	167	73.6	194	143	73.7	166	153	91.6	244	215	88.0

SOURCE: INAS planning Office Reports - 1972-1973-1974-1975-1976

APPENDIX F

PRODUCTION OF VACCINES

<u>Vaccines</u>	1973 Pgmd Doses 000s	1973 Exec Doses 000s	% Ex.	1974 Pgmd Doses 000s	1974 Exec Doses 000s	% Ex.
Yellow fever	2,500	1,181	47.2	2,500	2,600	104.0
Antirabies dog	600	1,086	181.0	1,000	1,591	159.1
Antirabies human	630	586	97.8	550	530	96.3
Antismallpox	4,000	2,750	68.7	3,000	4,500	150.0
Anticholera	200	187	93.9	200	-0-	-0-
Antyphoid	1,200	410	34.2	900	103	11.5
DPT	600	280	46.8	2,900	-0-	-0-
Diphtheria toxoid	3,500	2,695	77.0	100	-0-	-0-
Tetanus toxoid	1,200	266	22.1	500	-0-	-0-
Shick test	100	-0-	-0-	100	-0-	-0-
BCG	1,000	678	67.8	1,000	570	57.0
Tuberculin	500	693	138.7	700	482	68.6
Antirabic serum	20	13	69.5	5	-0-	-0-
Antisnake serum	800	696	8.7	1	900	90.0

<u>Vaccines</u>	1975 Pgmd Doses 000s	1975 Exec Doses 000s	% Ex.	1976 Pgmd Doses 000s	1976 Exec Doses 000s	% Ex.
Yellow Fever	2,500	2,808	112.3	5,000	5,000	100
Antirabies dog	2,500	1,800	72.0	3,000	3,000	100
Antirabies human	500	449	89.8	500	450	90
Antismallpox	3,000	1,000	33.5	6,000	1,500	25
Anticholera	500	500	100	500	500	100
Antityphoid	500	500	100	500	500	100
DPT	2,000	400	20	2,250	1,200	53.3
Diphtheria toxoid	500	-0-	-0-	1,000	-0-	-0-
Tetanus toxoid	2,000	400	20	2,500	400	16
Shick test	500	-	-0-	500	100	20
BCG	1,000	1,047	104.7	2,000	1,000	50
Tuberculin	1,000	500	50	1,200	1,000	83.3
Antirabies serum	50	3,000	600	55	3,000	545.4
Antisnake serum	10	1,234	123.4	50	3,000	600.0

HEALTH SECTOR LOAN 075

I IFB INAS 003/75 Available

A. Funds Available - Letter of Commitment #514-u-07504 L/C  
 Appropriation #72-11X4103 which expires April 30, 1978 for  
 \$920,000 was reduced by \$49,500 through transfer of this  
 amount to L/C #514-u-07505 870,500

B. Obligations

<u>Group</u>	<u>Type Equip.</u>	<u>Representative</u>	<u>FOB Expected</u>	<u>Committed or Disbursed (D)</u>
I	Drilling Equipment	Arboleda Ltda.	Arrived	510.669.00(D)
II	Drilling Equipment	Arboleda Ltda.	Arrived Aduana problems	253.600.79(D)
III	4 pick up trucks	Lara e Hijos	15 Oct. /77	34.221.60
IV	4 air compressors	Worthington/Arboleda	Arrived	25.779.21(D)
V	2 survey equipment	Jorge Triana	Arrived Aduana problems	20.609.00(D)
VI	4 welders	Metalequpos	31 Dec. /77	6.484.32
VII	3 pumps	Arboleda Ltda.	Arrived	<u>18.208.00(D)</u>
			Total	869.571.92

C. Balance 928.08

II IFB ENH 02/76

A. Funds Available - Letter of Commitment #514-u-7506 L/C  
 Appropriation #72-11X4103 which expires April 30/78 for  
 \$1,000,000 was reduced by \$50,500 through transfer of this  
 amount to L/C #514-u-07505 949,500

B. Obligations

<u>Type Equip.</u>	<u>Representative</u>	<u>FOB Expected</u>	<u>Committed or Disbursed (D)</u>
Elevators	Otis Elevator		667.725.34
(2) Buenaventura		October	
(2) Santa Marta		December	
(1) Bogotá		November	
Laundry Equipment	Representations Cap.	Arrived	191.390.00(D)
Electric Plants	Representations Cap.	Arrived	<u>89.404.00(D)</u>
			949.510.34

C. Balance 980.66

III IFB MOH - 02/77

A. Funds Available - Letter of Commitment #514-u-7505 L/C  
 Appropriation 72-11X4103 which expires April 30, 1978  
 for \$3,080,000 was increased by \$100,000 through transfer  
 from L/C #514-u-07504 and L/C #514-u-7506 3,180.000

B. Obligations

<u>Item</u>	<u>Representative</u>	<u>FOB Expected</u>	<u>Committed or Disbursed (D)</u>
Items 1, 2, 4 and 5			
DDT ABATE, MALATION	INREPSA	January 78	611,185.00
Items 6, 7, 8, 9 and 14			
Sprayers, 16 mm projectors, Generators, 135mm projectors, Boats	Representation Cap.	January 78	171,020.80
Items 10, 11 and 13			
120 camionetas, 25 camionetas, 143 campers	L. Lara e hijos	January 78	1,878,877.00
Item 12			
15 pick ups	General Motors	February 78	<u>89,880.00</u>
		Total	<u>2,750,962.80</u>

C. Balance 429,037.20

IV IFB MOH - 04/77

<u>Item</u>	<u>Representative</u>	<u>FOB Expected</u>	<u>Committed or Disbursed (D)</u>
Malation			
Outboard motors			