

UNITED STATES GOVERNMENT

# Memorandum

**TO :** Mr. Robert Jordan, LAC/DR

**DATE:** October 28, 1987

**FROM :** Mr. Mark Silverman, Chief DR Office  
USAID/PERU

*MS*

**SUBJECT:** DRR Document.

Enclosed please find the Project Assistance Completion Report, prepared by Michael H. Hirsh, Project Manager for the Peru: Disaster Relief, Rehabilitation and Reconstruction Project.

*Regards*



Project Assistance Completion Report

Peru: Disaster Relief, Rehabilitation, and Reconstruction Project

(527-0277)

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## 1. Introduction

In 1983, two severe natural disasters struck Peru. In the northern part of the country, especially on the densely populated, agriculturally important coastal plain, the heaviest rains and floods in well over a century destroyed virtually all crops as well as over half a billion dollars of roads, houses, schools, water and sewerage systems, electric lines, and other infrastructure. Simultaneously, in the central and southern highlands, severe drought caused considerable crop loss and depletion of animal herds. These disasters resulted in food shortages, heavy migrations, and considerable human suffering. On a macro level, Peru's GDP declined by 11% in 1983, with more than half of the decline directly attributable to the disasters.

During the height of the disasters, there were extensive relief efforts, assisted by various GOP institutions, foreign governments, and private voluntary agencies. As this phase wound down, in mid-1983, the Government of Peru launched an ambitious rehabilitation and reconstruction program, directed at repair of damaged infrastructure in the north, agricultural recuperation in both areas, and implementation of labor-intensive small infrastructure activities in the south, the latter geared whenever possible to help alleviate future droughts. In addition, several local and international private voluntary agencies established their own rehabilitation efforts, with varying degrees of coordination with the GOP.

The IDB contributed to the GOP's rehabilitation and reconstruction effort with some \$100 million by reprogramming existing loans and providing new credits to the transport, electricity, irrigation, and water and sewerage sectors. The World Bank provided some \$27 million to the transport sector and a special allocation of funds to repair the Chira-Piura Irrigation System. The German Government provided funds to repair the Tinajones Irrigation System. AID, the largest donor, assisted in all phases and facets of the response with some \$180.9 million of assistance:

Emergency phase disaster relief and rehabilitation (OFDA)	\$	1.0
Reprogrammed medicines, food, and housing guaranty funds, from USAID/Peru's regular program		5.7
Bilateral Disaster Relief, Rehabilitation, and Reconstruction Project		60.2
Grants to private voluntary agencies		4.8
PL 480, Title II food donation to PVOs		18.3
PL 480, Title II monetized food importation		7.9
PL 480, Title I food importation (monetized)		10.5
Housing guaranty		12.5
Disaster Assistance Program Loan		60.0
	\$	<u>180.9</u>

The cornerstone of the AID effort was the \$60.2 million bilateral Disaster Relief, Rehabilitation, and Reconstruction (DRR) Project. This Project was implemented by 15 local departmental development corporations (a department being the highest level political division in the country). The Project was

coordinated at the national level by Peru's National Development Institute (INADE). The two monetized PL 480 funds also were coordinated by INADE and served to cover certain expenses and activities which could not be readily financed under the DRR Project.

According to HB 3, Chapter 14, an AID project manager is expected to prepare a Project Assistance Completion Report within six months of a project's completion date. This report is being prepared in fulfillment of that requirement, albeit approximately three weeks prior to the DRR Project's PACD of May 31, 1987. This report is meant to complement the Project's final evaluation, which was carried out by an independent contracted team.

The purposes of this report are:

- 1) To serve as a record of the DRR Project and of the other elements of the USG's response to Peru's 1983 disasters, as far as objectives and accomplishments are concerned,
- 2) to record lessons learned from the Project which might be helpful in similar project situations, and
- 3) to make recommendations involving follow-on actions to the DRR Project as well as actions to prepare for future disaster response.

#### B. The Disaster

The Peruvian coastal plain is one of the world's most arid regions. In most of the area, annual rainfall is only a trace in normal years - well under one inch. Only in the northern departments of Piura and Tumbes is there rainfall of any consequence - approximately two to four inches a year. The causal factor of the arid weather on the coast is the action of the cold Humboldt Current. Every year this current is displaced at its northern end by a warm tropical current. This brings the small amount of rain which does fall on the northern coast, it helps bring on a general summer warming up along the entire coast, and it is one of the factors which helps set off the rainy season in the sierra. Since this warm current tends to arrive in Peru around Christmastime, it is known as the El Niño Current (after the Christ child).

On an irregular basis, but averaging every six or seven years, a series of anomalous weather conditions develops in the tropics, including a change of wind patterns and changes in sea temperature, currents, and sea level. This condition is called the El Niño Phenomenon (not to be confused with the normal El Niño Current). The consequence for Peru during the El Niño Phenomenon is significantly increased air and sea temperatures, sea levels, and rainfall along the coast, frequently as far south as Chimbote. There is also a 75% correlation between the El Niño Phenomenon and significantly lower rainfall in the southern sierra.

In 1983 the strongest El Niño Phenomenon in at least a century occurred. Rainfall was heavy from Tumbes to Chimbote, with especially heavy concentrations at certain points. At the Piura Airport, which received relatively little rainfall, it rained 46.9 inches in six months, more than twice as much as in the previous 26 years combined. In the Chira area it rained 141.7 inches. Chulucanas got the most recorded rainfall - 165.4 inches in six months. While there are areas in the world where such rainfall levels are the norm, the infrastructure on the Peruvian coast had not been built to withstand them. Highways with inadequate culverts washed away, as did numerous bridges. Rivers flooded or changed course, washing away or damaging streets, housing, public buildings, electric lines, and other infrastructure. Sewerage systems clogged and became unusable. Perhaps most serious was that the area's irrigation systems, on which all agriculture there depends, were effectively destroyed. And while 1983 was the one year in which crops could have been grown without irrigation, virtually every field flooded, and the crop loss was almost total. In all, damage in northern Peru, from both production loss and damaged infrastructure, was estimated at close to a billion dollars. Damage was most severe and widespread in Tumbes, Piura, and Lambayeque, with small pockets of damage also occurring in La Libertad, Ancash, Cajamarca, Amazonas, and Lima Departments.

Meanwhile, in the southern and central sierra, one of the worst droughts on record was underway. During the normal rainy season in Puno, November through April, rainfall averages some 29 inches. During the 1982-83 season, rainfall was only 30% of that - too little for rainfed agriculture. Since only 4% of the 128,000 hectares normally in production in Puno is under irrigation, crop loss approached 100%. Likewise, the normally overgrazed pastures began to dry up, causing weight loss and generally increased mortality among livestock. Many farmers began to sell off livestock at distressed prices. In Puno Department alone, agricultural and livestock losses were estimated at over \$70 million. Major losses were also registered in the higher areas of Cusco, Tacna, Moquegua, Arequipa, Apurímac, Ayacucho, and Huancavelica Departments.

In human terms the costs were severe. Virtually all of the 1.7 million people living in the Departments of Piura, Tumbes, and Lambayeque were seriously affected in one way or another. An estimated 160,000 people were left homeless. In the southern sierra, at least 150,000 rural families were seriously affected. Since virtually all were subsistence or near subsistence farmers, the total loss of their crop combined with depletion of their herds drew many to the point of starvation. Massive migrations began to the high jungle and coastal areas. Furthermore, health conditions began to deteriorate in both disaster zones. In the north, in addition to a notable increase in malaria, there were increases in general morbidity due to destruction of health infrastructure and the inability to restock medicines in cut-off areas. In the south, tuberculosis increased significantly.

Unfortunately, the disasters struck just as Peru was suffering a serious economic downturn. In 1983 GDP declined by 11%. The Peruvian Central Bank estimates that at least half of this is directly attributable to the effects of the natural disasters. Furthermore, food shortages contributed to significantly higher inflation.

### C. Immediate Response

While the indicators of the El Niño Phenomenon began to appear in October, 1982, no one predicted that the event would be the worst in at least a century. Only as heavy rains began in late December and picked up in January did it become apparent that a significant disaster was at hand. As fields flooded and infrastructure damage occurred, the GOP declared the disaster in Piura and Tumbes on February 1. Peruvian Civil Defense initiated a series of actions, in conjunction with various national and international organizations, including building temporary river defenses, opening blocked roads, and shipping food, potable water, medicines, and needed supplies to isolated communities. During February it became evident that the drought in the south was also heading toward major proportions, leading to a GOP declaration on February 21. Civil Defense and various public and private entities initiated relief efforts there.

By early April it was apparent that major actions were necessary (e.g., massive food importations, negotiation of large foreign credits, mobilization of substantial local resources, imposition of austerity measures), beyond the capacity of Civil Defense to deal with. On April 14 the Peruvian President named a well qualified individual of his personal confidence - Ing. Juan de Madalengoitia - to be disaster coordinator. The GOP took a series of critical measures during the ensuing weeks, including opening negotiations with the multilateral banks and other major donors, the establishment of forced-saving Reconstruction Bonds, the initiation of a comprehensive damage assessment and reconstruction plan, and a stepping up of relief and rehabilitation activities.

By the end of April, international assistance had been received from the International Red Cross, UNICEF, UNDRO, FAO, PAHO, OAS, OXFAM, CARE, CRS, CWS, Germany, Australia, Belgium, Canada, Korea, Chile, Spain, China, Finland, Great Britain, Japan, Italy, Norway, Switzerland, the Vatican, Venezuela, the EEC, and the USG. Peruvian PVOs (e.g., Cáritas, OFASA, SEPAS), local emergency committees, private groups (e.g., the air club, the pharmaceutical producers organization), and public sector institutions (e.g., ONAA, the military) had established active relief programs. A telethon was held, and much local fund raising took place.

The USG response started off cautiously, with an official declaration of emergency shortly after the GOP's declaration, combined with the delivery of a \$25,000 check to the GOP. The next step involved assessing the situation, with visits of USAID representatives to various sites whenever possible. By



April a full-scale USG relief response was underway, involving a diversity of actions:

- 1) OFDA financed approximately \$1 million worth of activities:
  - a. 16 collapsible water storage tanks, of 3,000 gallons each, lent to the Departmental Development Corporations of Tumbes (12) and Lambayeque (4). OFDA subsequently donated the tanks to the CORDES.
  - b. Two sewer cleaning machines lent to SENAPA for use in Piura. In their first 5 1/2 months, the machines cleared 68 kilometers of clogged line and 1,350 sewer manholes. The machines continued to clean clogged line for over three years. OFDA eventually donated the machines to SENAPA, and they are still in use.
  - c. Provisional reopening of the 57 kilometer Piura-Paita Road - providing the City of Piura access to its port. This road had been broken in over 20 places, including the formation of a five kilometer wide lagoon. The reopening involved building an eight kilometer bypass around the lagoon and rendering the other breaks passable. This work, which involved considerable landfill, was hindered by the continuing rains, which on several occasions destroyed work already done. The reopening eventually took three months to achieve, only finishing once the rains ended.
  - d. Provisional reopening of the 70 kilometer Huarmaca Road, whose destruction had isolated 55,000 people. This task took 3 1/2 months in difficult terrain.
  - e. Clearing and rehabilitating an eight kilometer section of the Ayabaca Road, to enable it to be reopened.
  - f. Reconstruction of critical sections, totalling 403 meters, of the City of Tumbes sewerage system.
  - g. Rehabilitation of the water systems in 11 small communities in the Bajo Piura area of Piura Department and in seven small communities in Tumbes Department.
  - h. Provision of assessment and TA services by various OFDA-contracted technicians.
  - i. Grants to PVOs to transport food relief commodities. Also, three U.S. C-130 planes were contracted to transport emergency supplies from Lima to Piura.

2) The Mission, primarily through reprogramming, made considerable resources available to the disaster areas. The USAID Program Office estimates that the total value of reprogrammed resources from the Mission's normal program during the emergency response phase was \$5.7 million, the most notable components of which were:

- a. Reprogramming of \$1.4 million from existing HG-011(A) to provide the Materials Bank and the savings and loan system ("mutuales") with funds for rehabilitation and reconstruction subloans.
- b. Provision of medicines from the on-going Extension of Integrated Primary Health Project (527-0219). Six tons of supplies, consisting of nine basic medicines plus oral rehydration salts, valued at approximately \$100,000, were purchased locally and shipped by air to Plura. From there they were delivered to 10 cut-off communities by helicopter and burro. While this operation was logistically and bureaucratically complex, it was highly successful and saved numerous lives. USAID also purchased four potable water testing kits for use by the Ministry of Health in the flooded areas.
- c. Reprogramming of food. Early in the relief phase, some 1,000 metric tons of food, valued at approximately \$400,000, were reprogrammed from the normal PL 480 Title II Program and donated to CARE, Caritas, OFASA, and the Red Cross for use in the disaster areas. This was repeated some two months later. Furthermore, some 2,562 metric tons of powdered milk and 274 metric tons of butter oil, valued at some \$2.5 million, were added to the commodities already programmed for the disaster areas under the Section 416 School Feeding Program.

D. Rehabilitation and Reconstruction - General Description

The line between immediate relief and longer term rehabilitation and reconstruction is not easy to draw, particularly in disasters which occur gradually over some months. Nonetheless, for the purpose of organizing this report, immediate response is defined as those activities which began while the rains were still going on (through June, 1983) or in the first months of the drought, and could be expected to be completed by the end of CY 1983. Activities which began later and could be expected to carry into 1984 or beyond - even though some of these, particularly in the south, continued to have relief characteristics, are considered disaster rehabilitation and reconstruction (DRR).

AID's DRR Program consisted of the following (in millions of dollars):

Project 527-0277 - bilateral	\$ 60.2
Project 527-0277 - PVO grants	4.8
PL 480 Title II food donations to PVOs	18.3
PL 480 Title II monetized food	7.9
PL 480 Title I	10.5
HG-011 Disaster Amendment	12.5
Disaster Assistance Program Loan	60.0
	<u>\$ 174.2</u>

This Program was the result of an intensive period of project design activity, involving close coordination among the Mission, the GOP, and AID/W. Highlights of this process were:

- 1) Establishment by the GOP in April of a forced savings program, called Reconstruction Bonds, designed to raise funds which could serve as counterpart to major external credits.
- 2) Delegation to the National Planning Institute (INP) the task of preparing a rehabilitation and reconstruction plan, including analysis of damage and a preliminary listing of needed rehabilitation and reconstruction activities. The plan was completed in late June, about the time the rains were ending.
- 3) After meetings with the major donors, a decision that the most expeditious way to reconstruct major public sector infrastructure would be by reprogramming on-going IDB and IBRD credits to the irrigation, transport, electric, and water and sewerage sectors, with additional new credits to the same sectors to be made as funds became available. AID would fill any remaining gaps in the financing needs for major infrastructure but would concentrate on the financing of medium-sized infrastructure in the north and equivalent size activities in the south. AID would also help PVOs carry out small community level activities in both geographic areas. The only other donor offering significant reconstruction assistance was the German Government, to help repair the Tinajones Irrigation System.
- 4) AID came to the conclusion that the departmental development corporations (CORDES) should be the entities responsible for project implementation. Experience with the CORDES during the emergency OFDA-financed phase had been positive. As to a national-level coordinating agency, initially the Prime Minister's Office seemed the ideal place, for two reasons. First, the CORDES already reported to the Prime Minister. Second, the Prime Minister's Office already was home to the special hydraulics and jungle projects which crossed departmental or sectoral lines. There was a perception, however, on the part of both AID and GOP officials, that these special projects were languishing in the Prime Minister's Office without proper

attention, and that rehabilitation and reconstruction would also likely not receive adequate attention there. Thus the GOP, with AID encouragement, formed a new institution - the National Development Institute (INADE) - to handle both the rehabilitation and reconstruction effort and the GOP's special projects. Except for the IDB and IBRD credits, and a few other sectoral-specific activities, all external and internal rehabilitation and reconstruction resources would be channelled through the INADE-CORDES route.

- 5) USAID carried out assessments of food availabilities and planned massive feeding programs with the PVOs. Particular emphasis was given to the south of the country, where it was feared that the 1983-84 agricultural season would also be a weak one, and that the first decent harvest would not come until April-June, 1985.
- 6) USAID conferred closely with AID/W on the availability of funding from various sources.

#### E. The DRR Project - Overview and Objectives

While as early as the PID stage it was expected that the DRR Project would be in the \$58 million range, the exact amount and the loan/grant mix were not known until the Project was well underway. This was because the Project relied on deobligations/reobligations from a variety of sources over three fiscal years. It also took some time to identify the precise level of PVO needs.

Project 527-0277 was authorized as follows:

Original - 07/20/83 - \$ 4,000,000 (L), \$ 4,000,000 (G)  
Amendment 1 - 08/31/83 - \$ 2,000,000 (G)  
Amendment 2 - 09/30/83 - \$ 2,301,000 (G)  
Amendment 3 - 10/07/83 - \$30,000,000 (L), \$22,699,000 (G)  
Amendment 4 - 09/25/84 - An increase in loan of \$6,181,000 and a decrease in grant by the same amount, to reflect actual funding availabilities.

Thus a total of \$65,000,000 was authorized, \$40,181,000 in loan funds and \$24,819,000 in grant. The loan terms were 2% during a ten year grace period and 3% thereafter, for a total of 25 years from first disbursement.

Based on these authorized levels, on available funds, and on a determination by mid-1984 that the appropriate level of PVO support was \$4.8 million, the DRR Project was incrementally obligated as follows:

Original ProAg - 07/20/83 - \$ 3,000,000 (L), \$1,000,000 (G)  
Amendment 1 - 09/30/83 - \$ 6,301,000 (G)  
Amendment 2 - 10/17/83 - \$23,000,000 (L), \$5,200,000 (G)  
Amendment 3 - 03/30/84 - \$ 8,000,000 (L)  
Amendment 4 - 09/27/84 - \$ 1,228,000 (G)  
Amendment 5 - 12/28/84 - \$ 6,181,000 (L), \$6,290,000 (G)

Thus the Project was established at 60.2 million, \$40,181,000 in loan funds and \$20,019,000 in grant.

The DRR Project had two objectives. First was to fund rehabilitation and reconstruction subprojects - the repair of damaged infrastructure in the north and a program of agricultural and economic recuperation in the south. The specific subprojects were not preselected during the Project's design stage or early months. Rather, the PP presented a list of illustrative activities, based on the INP Plan, and the ProAg established that INADE would set up criteria against which specific subprojects would be selected. This was done to create a certain degree of flexibility, which was deemed necessary since it was impossible to determine precisely in the Project's early stages just what all needs were and what other funding sources would cover.

The other objective of the Project was to establish an institutional mechanism to effectively manage the GOP's DRR Program. This was always conceptualized as a "means to an end" endeavor, focussing on managing the program resulting specifically from the 1983 disasters. While all parties hoped that some remnants of the experience would remain in place to be mobilized for future reconstruction needs, no one expected that the structure set up to manage the DRR Program would then remain in place permanently (and mostly idle), awaiting further disasters. Thus the focus was on institutional strengthening to carry out the specific task, not on permanent institution building. To achieve the objective, a variety of TA activities and the covering of certain operating expenses were contemplated.

Within six weeks of the signing of the ProAg, the initial conditions precedents (legal ratification and the naming of official GOP representatives to the Project) had been fulfilled, the PILs setting out the Project's procedures had been issued, the first subproject had been received and approved, and the initial disbursement had been made. Nonetheless, it took six more months for the Project to really get underway, a not unreasonable timeframe considering the needs of definitive reconstruction. It was not until February, 1984 that the core project management staff was in phase and that the initial portfolio of activities to be financed was identified.

Now, some 38 months later, the Project is virtually over, having successfully accomplished almost all of its objectives. There were innumerable problems along the way, which were addressed with varying degrees of success. There were also several failures mixed in with the successes. Managing a project

involving over \$60 million, spent in hundreds of separate activities, spread over 15 departments, and in less than four years has been a substantial and complex undertaking, involving the establishment of numerous new procedures and the need for dedicated involvement on the part of many. Clearly there are numerous lessons to be learned from this experience. The remainder of this report is geared to discussing this experience. It represents the personal viewpoint of the Project Manager, with some input (acknowledged in each instance) from the Project's final evaluation. It is organized as follows:

- Section F describes the subproject accomplishments (i.e., the fulfillment of the Project's first objective, discussed above). All recommendations for follow-up actions are contained in this section.
- Section G details the manner in which the Project's institutional strengthening activities were carried out, in fulfillment of its second objective.
- Section H discusses various implementation issues, including subproject selection, the way technical soundness was assured, cost controls, financial procedures, and the Project's timing. Certain recommendations applicable to future DRR projects are provided in this section.
- Section I describes the other DRR activities: Reconstruction Bonds, PVO assistance, PL 480 food distribution, the two PL 480 local currency funds, the Disaster HG, the Disaster Assistance Program Loan, and other donor contributions.
- Section J discusses issues which transcend the DRR Project or which are generic to reconstruction programs, including the GOP's coordination structure, GOP financial controls, the need for special AID procedures in reconstruction programs, the effectiveness of host country contracting procedures, USAID organization and support, data management, and the role of audits and evaluations. A number of recommendations applicable to future DRR programs are provided.

#### F. The DRR Project - Subproject Accomplishments

Any discussion of subproject accomplishments must begin with clarification of several points:

- 1) The basic units of activity were subprojects and components. Generally a subproject was an overall type of activity in a given department, such as Reconstruction of Rural Roads, while a component was a specific work thereunder, such as a certain road or bridge. While this system was suggested to the CORDES at the beginning of the Project, a number of CORDES interpreted it differently. For example, the Lambayeque Corporation had a subproject entitled Rehabilitation of Schools, with each school (a total of 30) as a separate component. The Cajamarca Corporation, on the other hand, aggregated all 32 schools it rehabilitated as one component under a larger subproject.

The La Libertad Corporation rehabilitated 26 schools as 11 components; the seven largest schools were separate components, while the other schools were lumped together by geographic area. Therefore, it is not valid to compare number of subprojects or components between departments without taking into account the peculiarities of those departments' coding systems. (It should be pointed out that achieving consistency would have meant changes in not only the CORDES' books but in those of the Ministry of Economy and Finance, a process that would have been so difficult to achieve that INADE felt it was not worth the benefits.)

- 2) Works could be carried out in three basic ways: through force account by the CORDES themselves, through contracts let by the CORDES, or through agreements with other public sector entities (e.g., ministries, public utilities, municipalities), which in turn could carry out the work by force account or contract. (The efficacy of the various modes is discussed in Section H below.)
- 3) The information and figures in this section refer only to AID financing from the bilateral DRR Project. While the majority of components funded under the Project were fully funded by the Project, a substantial minority also had other sources of funding. Sometimes these other sources had AID origins (the PL 480 local currency funds, the PVO assistance, the HG), sometimes they were GOP funds (Reconstruction Bonds, public treasury funds, the CORDES' own funds), and sometimes they were funds from other donors (the IDB, the IBRD, the German Government). Sometimes AID would pick up a work which had begun with other funds, sometimes it would leave a work to be completed with other funds, and on a very few occasions there would be simultaneous co-financing. While the appropriateness of this flexible approach will be discussed in Section H below, the reader should be aware that the figures given reflect only the AID DRR Project input.
- 4) The description within this Section is a summary of the achievements in each of the 15 participating departments, plus within the Ministry of Health and Materials Bank subprojects. It provides consolidated information plus highlights, not detailed information. For that, the reader is directed to the Annex of this report, where there is a list of all components, indicating amount spent by year, number of families benefitted, months of employment generated during the reconstruction phase, and physical objectives achieved. For yet further information, the reader is directed to the Project files, which contain detailed final reports from almost every CORDE, detailed INADE reports for each quarter (sometimes consolidated into longer time periods), the original subproject and component proposal forms, and a variety of site visit and other technical reports. Finally, the Project contracted with a Mission spouse in 1984/85 to put together a

descriptive album for each CORDE's program, containing primarily photographs of works in progress. While the written descriptions therein contain some deficiencies and lack details of the Project's final year, the albums nonetheless give an excellent visual account of the scope of the Project. Likewise several CORDES prepared similar albums on their own, which are also in the Project files, most notably Lambayeque, Puno, and Huancavelica. (For further visual images of the DRR Program, there is a file of loose photographs taken by various Project advisors, organized by CORDE; many of the site visit reports made by technical personnel also contain photographs; some of the CORDE final reports contain photographs; and at least three CORDES - Piura, Lambayeque, and Moquegua - made videotapes of the program, which are available from the CORDES.)

- 5) The figures given below are preliminary and may vary slightly as final commitments, disbursements, refunds, and financial adjustments are made. A breakdown of expenditures by CORDE and subproject by year is in the Annex to this report. The CY 1984 and 85 figures are final; the 1986 and 1987 figures are the latest available. Updates of the latter will be available periodically from the USAID Controller's Office, until the Project is completely closed out.

Of the Project's \$60.2 million, approximately \$51,824,000 was made available for subprojects. Of this, \$50,300,000 was made available to the CORDES; the remaining \$1,524,000 was for the activities of three other entities. Of the amount expended by the CORDES, 70.2% was for the north of the country, comprised of seven departments, while the remaining 29.8% was spent by eight CORDES in the south. It should be pointed out that Piura alone accounted for 34.1% of the CORDE program, with three other CORDES - Tumbes, Lambayeque, and Puno - accounting for an additional 32.5%. Thus the remaining 11 CORDES shared the remaining 33.4% of the funds. Since the northern and southern programs varied so greatly, due to the nature of their disasters and to geographic and cultural differences, they will be handled separately below, followed by a description of the activities with the other three entities.

#### 1. Northern CORDES

The amount spent by AID under the DRR Project in northern Peru was pretty much in proportion to the damage incurred. Almost half the assistance went to Piura Department, where virtually all infrastructure had been destroyed or seriously damaged. Tumbes and Lambayeque also had large programs, receiving over \$5 million each. La Libertad and Ancash Departments, further down the coast, where the damage was more dispersed and less serious, had modest programs. And the two sierra departments, Cajamarca and Amazonas, where damage was limited, had the two smallest programs.



On the other hand, the amounts spent per type of activity reflect more the gaps in other funding sources than the overall reconstruction needs in those sectors. With the IDB and IBRD credits sector-specific, and with major decisions made early on by the GOP as to how the Reconstruction Bonds would be allocated, AID basically ended up financing what remained, which - with a few notable exceptions - was mostly small to medium-sized infrastructure, as the PP anticipated.

The biggest percentage of the funds allocated to the north - 28.4% - went to rehabilitate or reconstruct roads and bridges. Much of this went to secondary roads, but a substantial portion went to reconstruct stretches of major roads after other sources of financing ran out.

A top priority of the GOP and all donors was to restore the coastal area's irrigation system, upon which its economy depends. AID responded with some \$6,974,000, 19.8% of the funds spent in the north - the second biggest sectoral allocation. Over 65% of this was spent in 1984, mostly early in the year, and it was an essential element in achieving a satisfactory harvest for the 1984 agricultural year.

The sector receiving the third biggest amount of AID funds - 18.9% - was streets in urban areas. Some 76% of this amount went to Piura, which had had virtually every street destroyed by the floods. The DRR Project provided virtually the only source of funding for this activity.

Other sectors receiving fairly large shares of the funds allocated to the north were water and sewerage systems (10.1%), electric systems (7.4%), river defenses (7.3%), and housing (4.7%). 2.7% of the funds financed the rehabilitation of schools, health posts, a fishing terminal, an airport, and other infrastructure. The final 0.7% of the funds was a general allotment provided to some of the CORDES in the final year of the Project to enable them to carry out technical and financial liquidations of all works which had been implemented until then.

A CORDE by CORDE description follows:

a) Piura - \$17,157,000. Piura was not only the Project's largest program, but it was one of the most successful. Top CORDE officials were competent and supportive, and the CORDE assigned good people to the operating unit. Almost all works were contracted, either directly by the CORDE or by other public sector entities under agreement with the CORDE. All in all, the CORDE carried out 80 components in eight sectoral areas:

- Irrigation. As soon as the rains stopped, the CORDE, in conjunction with the Ministry of Agriculture's Irrigation arm - INAF, began an urgent effort, using IDB and Reconstruction Bond funds, to clean out and repair the Department's irrigation system, to try to prepare for the 1984 agricultural season. The IDB funds ran out on 12/31/83, before the work was completed. AID provided \$2,473,000, mostly to reimburse for work taking place from January through April, 1984. Though only counted as five components - one for each valley where the work took place, the AID funds allowed rehabilitation to be completed on dozens of individual canals and irrigation structures. Because of the urgency of the work, much of it was done with little technical planning. This had its costs, and indeed a major work - a barrage across the Piura River at Mocará to raise the water level so water could flow into the principal canal in the Lower Piura Valley - washed away soon after constructed and had to be rebuilt. In spite of such inefficiencies, it was probably a wise decision to have proceeded so urgently. Some 81% of the Department's agricultural land was back in production in 1984, turning out a record harvest of some \$116 million. Close to 100% was back in production in 1985.
  
- Roads and bridges. The major AID expenditure in Piura was for roads and bridges, counting for \$5.5 million, or 32.1% of the total. Eleven roads and four bridges were reconstructed. The largest expenditure was for the Piura-Paita Road, linking the City of Piura with its port, over 50 km. away. This was co-financed with the World Bank, which financed the realignment, grading, and compacting. The DRR Project financed the asphaltting and other finishing touches, at a cost of \$1,764,000. The next largest road expenditure was the Sullana-Paita Road, for \$884,000. Other important roads financed were Piura-Catacaos (the main road to the Lower Piura agricultural area), Talara-Negritos, Marcavelica-Poechos, and Catacaos-Puente Independencia. The four bridges were important but relatively small in size, averaging \$65,000 each. They were the Carrasquillo, Chipillico, Santa Ana, and Negritos Bridges.
  
- Urban streets. Spending slightly over \$5 million, the Project financed the reconstruction of most of the major streets in the City of Piura (including Castilla), as well as the most severely destroyed streets in Sullana, Bellavista, Paita, Talara, and Chulucanas. Nineteen separate components were financed, ten of which involved packages of streets. The need to realign underground utility connections caused delays and cost increments in some of the components, but on the whole these works were carried out efficiently. One work - Av. Sánchez Cerro - is going to have to be

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partly rebuilt with CORDE funds, because inadequate underground drainage is causing settling and premature deterioration of the pavement.

- Water and sewerage. Approximately \$2 million was spent on four works. By far the largest was the rebuilding of the sewerage system in Sullana, a city of over 200,000. Costing some \$1.2 million, this work was plagued by contractual and technical problems, which took a great deal of attention and effort to resolve. The local water and sewerage utility - SEDAPIURA - eventually had to rescind the contract and finish the work by force account. The story fortunately had a happy ending, with the system now fully in service. With the CORDE's own funds, SEDAPIURA is still carrying out a few minor finishing touches and complementary activities. Two major components of the important Paita-Talara water line were also rebuilt, as were the water and sewerage lines under the City of Piura's main street. In addition, in early 1984 the water systems of eight small rural communities were reconstructed.
- Electricity. Approximately \$1 million was spent, all in 1984, for the rehabilitation of damaged lines and posts in 22 communities, plus the reconstruction of two important transmission lines - Paita-Talara and Paita-El Arenal.
- Housing and urban rehabilitation. Sites and services were established at seven locations, to provide resettlement areas for those who lost their homes. Urban infrastructure (e.g., schools, community centers) were rehabilitated in two communities. Using HG funds through the Materials Bank, and with assistance from CARE, 516 houses were rehabilitated and 398 were constructed (adobe and cement block), in 11 sites. Under a separate agreement with CARE, 250 other houses were rehabilitated. These components, costing a total of approximately \$850,000, were hindered at first by the fact that the CORDE had determined the relocation sites shortly after the rains stopped in 1983 without having taken an adequate census and survey of the flood victims, and without having analyzed the victims' needs. Thus there was resistance to occupy the sites once finished. The intervention of CARE established the needed community participation, and the urban rehabilitation efforts can be considered reasonably successful.
- Health infrastructure. In 1984, the Sullana Hospital and the health posts in Catacaos, Castilla, and Morropon were rehabilitated at a total cost of \$64,000.
- Other. In 1984, when there were still massive feeding programs in Piura Department, the CORDE sponsored a nutrition education and

family garden campaign for those receiving food. Slightly under \$60,000 was spent on these efforts.

Reconstruction in Piura has basically been completed. All infrastructure has been restored to pre-1983 levels, with the exception of some secondary streets. I suggest that the Mission follow-up on the Sullana sewerage system, the rebuilding of the deteriorating segment of Av. Sánchez Cerro, a small repair that needs to be carried out on the Piura-Catacaos Road, and the finishing of community infrastructure in 13 de Abril. Also, the CORDE has indicated its intention to build housing in San Cristo with Materials Bank credits, utilizing the CARE model.

b) Tumbes - \$6,436,000. The Tumbes program was hindered by a much lower level of institutional capacity than Piura's. The CORDE was less efficient in planning, designing, contracting, managing, and supervising works. Furthermore, its program was disrupted for approximately six months by the presence of an unsupportive CORDE president of questionable honesty. Nonetheless, with USAID and INADE giving this program probably more attention than any other, it achieved virtually 100% of its objectives. Activities took place in nine sectoral areas:

- Pan American Highway. The entire Pan American Highway from Talara to the Ecuadorean border - over 150 km. - was seriously damaged and had to be reconstructed. The most severely damaged 80 km. stretch, requiring total rebuilding, was divided into 20 km. stretches for financing by various donors. With one stretch remaining unfinanced, INADE requested that the DRR Project provide the funding. This work was contracted to a responsible firm, and a well known engineering firm was contracted to provide supervision. The work was implemented without significant problems or delays, at a cost of slightly over \$1.5 million.
- River defenses. This was the second most costly element of the Tumbes program, with a funding level of slightly over \$1 million. A series of vane dikes and gabions were built on the Tumbes River, to channel it toward intakes and away from infrastructure that could be damaged. TA was obtained from the U.S. Army Corps of Engineers and from Peru's most prominent firm on river control. Defenses were also built to protect towns on three other smaller rivers.
- Irrigation. Approximately \$1 million was also spent in this sector. As in Piura, this involved major cleaning and repair of silted and damaged canals, as well as the rebuilding of intakes and other structures. Most of the emphasis was on the large agricultural area on the south side of the Tumbes River. As in

Piura, a number of the works had been started by INAF in 1983 and were picked up by the Project when IDB funding ended on December 31, 1983. Also, 23 irrigation wells were rehabilitated under the Project. As in Piura, restoration of the irrigation system was a major success story.

- Electricity. Some \$860,000 was spent on this sector, in eight components. The major expense, accounting for 77% of the whole, was in restoring the heavily damaged distribution systems in Corrales, Zorritos, and Zarumilla.
- Water and sewerage. Approximately \$700,000 was spent, in nine components. Some 40% of the amount financed rehabilitation and reconstruction work on the water, sewerage, and storm sewer systems in the City of Tumbes. Some \$200,000 financed the reconstruction of the critical Cruz-Zorritos water line, which was still being completed as this was being written. The remaining funds financed water and sewerage works in smaller communities - Lomas del Viento, Cerro Blanco, Tocural, Pampas de Hospital, and San Jacinto, and the water connections in the five resettlement sites described below.
- Streets. Approximately \$541,000 was spent on this activity, all to reconstruct the main street of the City of Tumbes, which runs through the lowest part of town and was totally destroyed in the 1983 floods.
- Housing and urban rehabilitation. While this was only the seventh largest sectoral activity, it was probably the most controversial, due to three problems. First, as in Piura, the CORDE selected the six relocation sites without adequately surveying the flood victims and determining their needs. Secondly, one of the relocation sites was built in an area with inadequate drainage and had to be abandoned, but fortunately before families had moved in. Third, after CARE was brought in and 203 quincha (bamboo and mud) houses were constructed, it was discovered that the roofs had been poorly designed and had developed leaks. This is now in the process of being corrected. Once the roofs are repaired and the houses fully occupied, and once the remaining sites are more fully occupied, this will probably be considered a successful activity, taking into account the benefits versus the relatively minor costs (total of \$315,000). But it could have been a more successful subproject with better technical planning and community participation early on.
- Schools. Approximately \$247,000 was spent to rehabilitate five major schools which had been damaged in the floods. An additional \$8,000 put a new roof on the Zorritos Health Post.

- Fishing. Approximately \$125,000 was spent to rehabilitate the important Zorritos fishing terminal. Whereas the cold storage chambers were repaired, as well as other elements of the terminal, the Ministry of Fisheries was not able to repair the damaged ice making equipment. New equipment will have to be procured with GOP funds in order for the work to be fully functioning.

The Tumbes program is going to require considerable follow-up by the Mission. The works incomplete at this writing are the Cruz-Zorritos water line, San Juan de la Virgen river defenses, the electrical connection to the Tumbes storm sewer pumping system, El Piojo river channeling, and the repair to the roofs. On the Zorritos fishing terminal, a small sewerage leak must be repaired, and assurance should be obtained that the GOP will procure new ice making equipment. The Lomas del Viento water system requires a small amount of work for its functioning. When these actions are completed, the DRR Program in Tumbes can be considered a success.

c) Lambayeque - \$5,888,000. Lambayeque had a successful program, with excellent staff and good CORDE support. It was a program almost exclusively of small works, with 145 separate components. It also was the exception to the rule that physical infrastructure works should best be done by contract. Virtually all the works were carried out by force account, at reasonable prices and with good quality standards. The program financed works in eight sectoral areas:

- Irrigation. This accounted for 27.8% of the CORDE budget and 31 of the components. Many of these were begun by INAF with IDB funding and picked up by the Project in early 1984. In 1985, more definitive work took place on reconstructing a number of intakes and related structures. Also in 1985, the Project financed a major element (\$480,000) of the rehabilitation of the Tinajones irrigation system, after German Government funding ran out. The Project also financed a new intake and a new initial section of the major Huaca de la Cruz irrigation system, costing \$358,000. In all, the Project helped restore irrigation on virtually 100% of the agricultural lands in the department.
- Streets. Approximately \$1 million was spent on the reconstruction of 17 major streets, most in the City of Chiclayo, but some also in Chongoyape, Túcume, Mórrope, and Ciudad Eten.
- Roads and bridges. Some \$768,000 was spent on four works. The important Chiclayo-Chongoyape highway, 43 km. long, was patched and reasphalted for most of its distance. The same was done on a 16 km. section of the old Pan American Highway, which was seriously damaged. A ford was constructed on the Zaña-Cayaltí-Nueva Arica

Road. Finally, the Zanjón-Batangranda Bridge was reconstructed. This bridge, 40 mt. long, one of the few contracted works in Lambayeque, collapsed during construction. The CORDE took over the work and, with the help of USAID, INADE, and contracted engineers, reformulated the work plan and reconstructed the bridge, to take as much advantage as possible of in-place structures and salvageable materials. The CORDE also absorbed all costs beyond what the Project originally had agreed to finance. The bridge was actually completed not long after it originally would have been and is now in service. It should be noted that the Project also financed a technical study for the CORDE on the Eten Bridge, which has yet to be reconstructed.

- River defenses. This activity, costing \$723,000, financed 18 separate components. Most of these were to protect bridges, intakes, and other infrastructure. Some 174 gabions were constructed, as well as over a dozen retaining walls and other structures.
- Water and sewerage. This subproject spent \$529,000 and repaired damaged segments of line in 13 communities. By far the largest component (\$222,000) was in Túcume.
- Housing and urban rehabilitation. This was somewhat better implemented than in Piura and Tumbes, in that the flood victims participated more closely in the initial selection of sites. Three sites were prepared with lots and services. Housing activities took place on these three plus in three other areas. Unlike Tumbes and Piura, no PVO was involved, but the Catholic University of Lima participated in helping the beneficiaries in one site construct seismic-improved adobe housing (with some resistance on the part of the beneficiaries). In all six sites, the CORDE supplied some of the materials; the beneficiaries supplied the rest of the materials, plus labor. The CORDE also put together a team of social promoters and technical instructors. The Materials Bank was not normally involved. In all, 686 new houses were built, and 109 houses were rehabilitated.
- Electricity. The seventh largest sectoral area, at \$429,000, this subproject was the most problematic in Lambayeque to implement. ELECTROPERU, which had implementation responsibility under agreement from the CORDE, insisted on a set of components that had little to do with rehabilitation. It took over eight months to come to an agreement with INADE and USAID on an acceptable group of works. (This tended not to happen in Tumbes and Piura, where there was IDB money for the electricity sector in addition to Project funds.) Once agreement was reached, ELECTROPERU was slow and inefficient in implementation. Seventeen of the 18 components eventually got

completed, but three important communities (Oyotún, Chóchope, and Mórrope) are without service pending completion of the household connections, which are being financed by the Housing Bank. The uncompleted component is the Chiclayo-Monsefú line. ELECTROPERU is finishing with its own funds the transfer of cable from the old posts to the new ones.

- Schools. The Project reconstructed 30 small schools, at a cost of \$165,000. This subproject was a definite success. Two health posts were also reconstructed.

The Lambayeque Program requires little Mission follow-up. The Mission should assure that the household electrical connections are completed in Oyotún, Chóchope, and Mórrope and that service is restored there. It should also assure completion of the Chiclayo-Monsefú line. Three small water and sewerage activities also deserve follow-up. The Túcume water system requires the installation of a pump, which reportedly has arrived but lacks a part. The Pacora sewerage system is functioning but is not connected to the oxidation pond. And the Mórrope system should be checked to assure that the wells and windmill are functioning properly.

d) La Libertad - \$2,024,000.- Significantly smaller than the programs further north on the coast, the La Libertad program concentrated 87.8% of its funds on the two sectoral areas where damage was most severe - irrigation and roads. The program was plagued by ineffective CORDE personnel and a high turnover at the top level of the CORDE. Nonetheless, it ultimately achieved its goals, but at the cost of considerable INADE and USAID attention.

- Irrigation. This consisted of nine components, at a cost of slightly over \$1 million. A small amount of river defense work, protecting canals and agricultural areas, was also included in this subproject. The biggest work was reconstruction of somewhat over 3 km. of the Sausal-Quemazón Canal, which had been washed away in the 1983 floods. This required considerable blasting through rock and other difficult techniques. After numerous delays, the canal was eventually completed. Most of the other works were done early in the life of the Project, enabling damaged canals to be in use for the 1984 or 1985 agricultural seasons.
- Roads and bridges. This consisted of 19 components. The only major work was reconstruction of 8 km. of the Sausal-Salinar Road, for \$275,000. Other significant works were the 40 mt. Baños Chimú Bridge, the Simbal-Sinsicap-Paranday Road (24 km.), and rebuilding the shoulders on 32 km. of the Pan American Highway.



- Other. The remaining 12.2% of the Project budget in La Libertad financed the rehabilitation of 26 schools, 12 small potable water systems, the Trujillo sewerage system, and the Salaverry electric line.

Mission follow-up is required to assure that the Sausal-Quemazón Canal is in full operation. Some complementary work on a downstream section was required for the canal to be fully functional.

e) Ancash - \$1,709,000. This program had competent personnel and good CORDE support, even though the project office (in Chimbote) was located some six hours away from the departmental capital (Huaraz). While damage was relatively small in Ancash, the program successfully repaired or rebuilt what infrastructure had been damaged.

- Roads and bridges. This subproject almost completely consisted of the reconstruction of two important bridges over the Lacramarca River, just outside of Chimbote, each a little over 30 mt. long. Including accesses and river defenses, the cost of the bridges was \$493,000. Two rural roads were also rehabilitated. The San Juan-Jimbe-Colcap Road (63 km.) was cleaned of debris and compacted, and the Casma-Buena Vista-Quillo Road had two small bridges replaced and critical areas rehabilitated.

- Irrigation. This consisted of six components, costing \$359,000. Most significant was building a new intake for the La Víbora-Rinconada-Tambo irrigation system, for some \$186,000, which put 5,300 hectares of land back in production.

- River defenses. This consisted of building containing walls and other structures at critical points on three rivers - the Santa, Nepeña, and Lacramarca, at a cost of \$354,000.

- Water and sewerage. This consisted of eight components, all of which were undertaken in 1984 (two extending into 1985). Most involved cleaning out clogged sewerage systems. The largest was in the low-lying El Acero slum area, where 4.7 km. of line, 554 household connections, and 77 sewers were cleaned out.

- Electricity. A small work was done in 1984 to build four caissons for the transfer of four high tension posts.

The Ancash program was successfully completed and requires no Mission follow-up, except to assure that the electric line caissons are in use.

f) Cajamarca - \$1,652,000. The damage in Cajamarca was primarily centered in the western part of the department, in the Pacific watershed. The program was hindered and delayed by the dispersed and

isolated locations of the individual works, by the politicized nature of the CORDE and frequent turnover in its presidency, and by the indifference of CORDE personnel to this small program. Nonetheless, this program of 54 components, almost all of small size, eventually achieved its objectives.

- River defenses. This was the largest activity, encompassing 13 components and some 45% of the budget. The most significant work was the channelling of Quebrada Honda through the town of Tembladera, at a cost of a little over \$200,000, including two bridges. This work was one of the very few contracted in Cajamarca, and it suffered from continual contractor problems. The contract was eventually rescinded, and the work was completed by the CORDE. IG auditors recommended that further defenses be built upstream, which were underway as this was being written. Other important works were the channelling of Quebrada Huertas at Chilete, defenses on the Cascacén River, and the channelling of Quebrada Juan XXIII in the City of Cajamarca.
- Roads and bridges. This encompassed 21 components and some 31% of the budget. Most works were small, including replacing five pedestrian bridges and seven vehicular bridges (of 4 to 10 mt.) which had washed away, and grading roads which had been damaged by the heavy rains. As throughout the DRR Project, bridges were a special problem, and one pedestrian bridge fell prior to termination. It and a similar uncompleted bridge have been redesigned and are under construction again as this is being written. They are expected to be completed by the PACD.
- Irrigation. This was composed of 18 works, including cleaning out and repairing damaged canals, building short new stretches of canal, and constructing intakes. It utilized approximately 18% of the budget.
- Other. In Contumazá Province, where the damage was greatest, 32 schools were rehabilitated. There was also a small forestry activity in the upper watersheds where the flooding had been greatest, to control erosion and future runoff.

The program in Cajamarca requires follow-up by the Mission on five works which are still underway at this writing but are expected to be completed by the PACD. They are the Chancay Baños pedestrian bridge, the Chancay-Uticyacu pedestrian bridge, the Cascas bridge on the Chilete-Contumazá-Cascas Road, the Miraflores Canal, and the upstream river defense work above Tembladera.

g) Amazonas - \$442,000. With no workable airport and only unpaved roads subject to landslides, Amazonas Department was isolated for weeks at a time during the heavy rains of 1983, causing food shortages and economic losses among its 200,000 inhabitants. Originally, a DRR program was proposed encompassing various sectors. But the isolation of the department, the low implementation capacity and low level of interest of the CORDE, the greatest turnover of any department as to the CORDE presidency, and the difficulty INADE had in contracting personnel to go there, caused INADE and USAID to limit the program to nine components, of which the two most important utilized over 75% of the budget.

- Roads. The main highway crossing the department was almost impassable after 1983. The Project financed the rehabilitation of a critical 25.8 km. section, of which 17.8 km. required major rebuilding. This cost \$191,000. The Project also financed the rehabilitation of two other sections of the same highway, of 17.2 and 6.5 km. respectively, and the technical plans for yet another section.
- Airport. To reduce the isolation of the department, the GOP contracted the building of an airport at Chachapoyas, the departmental capital, with Reconstruction Bond funds. The Project was asked to fund the platform where the planes taxi and park. This cost \$122,000. The airport now receives regular commercial jet flights.
- Other. The Project rehabilitated three small irrigation works, including cleaning out, lining, and reconstructing the respective canals. It also cleaned out the channel of a river where accumulated debris had caused significant flooding.

The Amazonas program ended in mid-1986, with adequate inspection by USAID of all works. No further follow-up is necessary.

## 2. Southern CORDES

The programs in southern Peru were generally smaller and of a different nature from those in the north. The activities were typically of three types: public works activities geared to create larger-scale employment during the period preceeding the first normal harvest, activities geared to counter the physical effects of the drought (e.g., provision of seeds, vaccination of weakened animals, recuperation of pastures), and activities geared to help this area of recurrent droughts better utilize its scarce water resources (e.g., construction of new irrigation systems, introduction of soil conservation techniques). Many activities fulfilled two or more of these objectives. For example, hand-dug well construction created employment as well as increased water availabilities.

Irrigation in general received 44.7% of the budget. Some of these works had employment creation as their focus, while others were geared more toward future benefits. While some were carried out by force account and a very few by contract, the majority were implemented by various dependencies of the Ministry of Agriculture, under agreement with the CORDES. Road construction represented 13.7% of the budget, again with a variety of objectives, including creating employment and providing access to drought-stricken areas. Agricultural activities, including seed distribution, animal vaccinations, pasture recuperation, and forestry, utilized 20.8% of the budget. All of these were carried out by various dependencies of the Ministry of Agriculture, under agreement with the CORDES. Public works activities, principally in Puno, represented 9.1%. Potable water subprojects, also primarily in Puno, utilized 6.2% of the budget, and river defenses in Ica, 3.3%. The final 2.2% of the budget represents small amounts given to the CORDES in 1986 to help them liquidate their programs.

A CORDE by CORDE description follows:

a) Puno - \$4,026,000. CORPUNO quickly mounted a large program, geared to providing widespread assistance to the affected populations. In fact, 56.8% of its Project funds were spent in 1983 and 1984 (disbursements made in 1983 were considered part of the 1984 program in USAID accounting records), with another 32.1% spent in 1985. The program received considerable CORDE support during its first two years. Unfortunately, the new staff after the 1985 change of government was much less capable, and the remaining works tended to incur implementation problems.

On the whole, though, this can be considered a successful program. In one way or another, it touched virtually every affected family, helping them through the difficult two years until the harvests normalized in May-June, 1985.

- Public works. Some 28.9% of the Puno budget was spent on a variety of small public works in 1983-85, geared specifically to creating employment. Promoters from the CORDE, the local university, and various branches of the Ministry of Agriculture were assigned to reside in the rural areas, to supervise the activities (as well as those of the other subprojects listed below). Achievements were impressive. Some 420 wells were dug by hand, 142 small reservoirs were constructed, 134 km. of canal were dug and 187 kms. cleaned out, 3,949 family or communal gardens were established, 863 kms. of roads were cleaned and patched, 125 small animal production facilities were established, 82 school rooms were rehabilitated, 28 community centers were built, 15 community feeding centers were established, 15 handicraft training centers were set up, a trout pond was built, and 16 cattle dips were constructed.

- Irrigation. This activity, representing some 27.9% of the funds, began in late 1983 with an employment focus, and continued on with the objective of helping to alleviate future draughts. The central activity was nine medium-sized new irrigation systems, representing a total of 37.1 kms. of new canal construction, to irrigate some 955 hectares of previously unirrigated land. The canals were successfully finished, and training in irrigation use was provided to the beneficiaries. A tenth and much larger irrigation, Lagunillas, was initiated, but the CORDE somewhat capriciously decided in mid-1986 to suspend the work and redesign it. The construction already completed will serve as a base for when the work is reinitiated. Another large work - Chihuané (also known as Totorani) - had its technical designs and access road financed by the Project, plus demonstration plots served by small irrigation systems were established in the area which will eventually be irrigated. The Project also financed the equipment required to distribute the water from three deep wells which had been financed from other sources.
- Pasture recuperation. This subproject, which cost \$582,000, mostly in 1984, had several components. Through improved seeds delivered to peasant families and communities, some 2,534 hectares of pasture were planted to replace dried out areas. Also, over 47,000 weakened sheep, 9,000 alpacas, and 5,200 head of cattle were either vaccinated, dewormed, or provided with emergency rations. Also, two alpaca breeding centers were established. Some 2,430 families received first-round rotating fund credits, in the form of seeds and/or services.
- Other agriculture. In addition to the above activities, a subproject was set up in 1983 to provide seeds to those who were served by irrigation and could expect to obtain a crop in spite of the drought. Some 1,178 MT of seeds were distributed to 3,945 families, enabling planting to take place on 3,261 hectares. Another component of this subproject cleaned out and rehabilitated canals which had been not in full use, so as to maximize water use during the drought. This subproject cost some \$443,000.
- Potable water. In the best of times, water is rationed in the city of Puno, with each neighborhood receiving service for a few hours a day. During the drought, the water supply virtually dried up. The irony is that Puno sits on the shores of Lake Titicaca, although the water in the bay adjoining the city is polluted. The idea of the subproject was to pump water from Lake Titicaca, from beyond the bay, into Puno's water treatment plant, and from there into the distribution system. The work was divided into two parts, and each was contracted. Because of contractor problems from the start, and

an unexpected rise in Lake Titicaca to its highest level ever recorded, the work suffered from serious delays. When progress was approximately 74%, with \$689,000 in Project funds spent, the work became paralyzed, and one contract was rescinded. Attempts to rebid it failed. The water authority - SENAPA - has recently agreed to finish the work by force account, and the CORDE has funds in its 1987 budget allocated for this purpose. During the month of April, SENAPA had a team of engineers in Puno working on a redesign.

The Mission should closely monitor the potable water subproject, to assure that it is properly terminated. It should also follow up on the Lagunillas irrigation component. It also should encourage the CORDE to continue the training programs for new irrigation users. No other follow-up is needed in what was a fairly successful program under the difficult circumstances of the drought.

b) Moquegua - \$2,347,000. Moquegua, Tacna, and Cusco have large highland areas adjoining Puno, and most of the Project activities were centered in these zones. The Moquegua program was highly concentrated in irrigation and road construction. It had good initial CORDE support, which dropped off sharply with the change of government.

- Irrigation. Various irrigation activities were financed, for a total of approximately \$1 million. Four reservoirs were constructed, to store a total of 11,719 cubic meters of water. Two new canals were constructed, totalling 4.4 km. in length, and 3.5 km of another existing canal was lined. A fourth canal was designed and preliminary work undertaken. Eleven deep wells were perforated and/or equipped, each serving some 20 to 35 hectares of land. And four private parcels totalling 14 hectares were equipped with drip and similar water-saving irrigation equipment, to serve as demonstration centers for more efficient use of the area's scarce water resources.

- Roads. Six components were financed, also for approximately \$1 million. Started in 1984 as primarily employment generating activities, these components to some degree took on a life of their own, with INADE and USAID feeling a certain obligation to complete them, even when the employment generation needs were no longer as critical. The four larger works, each costing somewhat over \$200,000, were Moquegua-Omate, Carumas-Chilligua, Cruce Cuajone-Yacango-Torata, and the entrance into Moquegua of the Moquegua-Puno Road. The two smaller works, both carried out only in 1984, were Coralaque-Ichuña, and the road into the Ilo Hills, the latter providing access to an area appropriate for forage during the drought.

- Other. The CORDE also carried out certain agricultural activities during 1984 and early 1985. They included seed and fertilizer distribution, insect control, the planting of seed banks, and provision of emergency cattle rations. Some 56 families received first-round rotating fund credits for improved seed. In all some \$205,000 was spent for these activities.

The program in Moquegua has terminated satisfactorily. No additional follow-up is required.

c) Tacna - \$1,935,000. The program in Tacna was heavily geared toward irrigation - some 76.3% of the total. The program started off with considerable problems, due to unqualified personnel and inadequate CORDE support. The situation tended to improve, and by 1986 it was one of the most efficiently run programs in the south.

- Irrigation. Various irrigation activities were financed. About a third of the funds went to construct four major reservoirs, of 2,500 to 8,600 cubic meters capacity each. Thirty small canal works were also constructed, some of which were new constructions of 1 to 3 kms. each, others of which involved lining existing canals, and others of which were constructing new intakes or other structures. Also, one deep well was perforated and 45 existing wells were cleaned or otherwise rehabilitated. As in Moquegua, some drip irrigation equipment was installed. Finally, it should be noted that a small amount of road work was carried out under the irrigation subproject, mostly because the roads provided access to or were otherwise associated with irrigation works.
- Agriculture. Principally in 1984, the CORDE carried out a variety of agricultural activities. These included distribution of 312 MT of seeds, pest control involving sterile insects, construction of four seed storage sheds, provision of emergency cattle rations, vaccination of some 15,000 head of cattle and 8,000 alpacas, construction of 46 silos, and introduction of forestry in appropriate areas. These activities cost approximately \$311,000.
- Potable water. Water systems were constructed in three small highland communities particularly affected by the drought. These were successfully completed, at a cost of some \$125,000.

There is one work which is still underway at the time of this writing - Putinoso Reservoir, which should be followed up on by the Mission. It is expected to be completed by the PACD. Also, one reservoir finished in 1985 - Corahuasini - has not been put into service yet. Other than those works, the Tacna program has been successfully completed.

d) Cusco - \$1,783,000. The Cusco program also concentrated heavily in irrigation - 76.9% of the whole. Unfortunately, the program was plagued by poor management and lack of CORDE support throughout its life, thus requiring disproportionate USAID and INADE support. It should be noted that Cusco was one of three departments which received approximately \$500,000 each in PL 480 Title I funds in 1986 to finish up works started under the DRR Project. Thus its total budget was over \$2.2 million.

- Irrigation. The CORDE initiated 14 irrigation works in 1983, principally as a means to generate employment. Some were not as well conceived or designed as they should have been, and considerable effort later had to go into redesigning them. In all, over 50 kms. of new principal canals were constructed, and some 27 kms. of existing canal improved and lined. Over 2,600 hectares of land have been brought into irrigation or had their irrigation assured. In 1986, training courses were set up to teach the beneficiaries how to properly utilize irrigation water and how to construct secondary canals. These should be continued if full benefit is to come from these systems.

- Agriculture. Primarily in 1984, through the Ministry of Agriculture, the CORDE implemented a series of agricultural activities, including provision of seeds through rotating fund loans to 4,839 families, installation of family and community gardens and small animal raising facilities, vaccination of cattle, and a soil conservation component. The latter, using improved techniques on traditional terraces, more than doubled crop yields.

The Mission should encourage the CORDE to continue the training courses for new irrigation users. No other follow-up is required.

e) Arequipa - \$1,320,000. Arequipa also concentrated on irrigation, accounting for 58.7% of the total. Roads and potable water accounted for virtually all of the rest.

The program in Arequipa suffered throughout its life from poor management and lack of CORDE interest. The Arequipa program also suffered from a syndrome which, fortunately, was rarely repeated elsewhere. Though one of INADE's selection criteria was that only activities would be approved which could be completed in two years, the CORDE presented a number of activities which were small parts of larger works which would not enter into service for many more years. The CORDE then misrepresented this fact in its proposal documents. With the rush to get started in 1984, plus the fact that the departmental advisor had just gotten on board, and the need to initially concentrate USAID's limited engineering staff on the



programs of larger departments, it was not until after these components were underway that we realized we were financing unfinishable activities.

INADE and USAID made the best of the situation, providing a disproportionate amount of attention to the Arequipa program. Where it was felt that the unfinishable works were providing needed employment opportunities or other benefits, they were continued. If not, we tended not to provide further financing.

In spite of this problem and that of poor CORDE management and support, the Arequipa program financed a reasonable number of useful works. It will require Mission follow-up, however, to assure that the investments are capitalized on.

- Irrigation. Twenty-five components were financed, including seven reservoirs, four new canal constructions, and considerable lining of canals and rehabilitation of intakes. The two largest works, together accounting for over half the cost of the entire subproject, were among the unfinishable ones. One was Dique de los Españoles, where a series of water channeling structures were built. These, however, will not be of benefit until a dam and other infrastructure are built, and these are currently hindered by a land dispute. A feasibility study on the dam is now being prepared, and the CORDE indicates that work will continue in 1988. The other large component was the fabrication of concrete plaques to line Arequipa Department's major canal - Pañe-Sumbay - at certain points where filtration has been a problem. The plaques must be installed during the month of November, when the canal is out of service for cleaning. The CORDE promised to install the plaques in November, 1985, then in November, 1986. We now have written assurance it will install them in November, 1987.

- Highways and bridges. Representing \$370,000, 28% of the DRR budget, this subproject consisted of six components, all activities either with an employment rationale or to provide access to drought-affected areas. It included the construction of two small vehicular bridges and one 12 mt. pedestrian bridge, and the construction of stretches of two rural roads, at least one of which will require years to reach its destination. The largest component - representing almost \$180,000 - was a major bridge - Puente Collota. This work was contracted in 1983 and was picked up already underway by the Project. There were numerous contractual problems, mismanaged so by the CORDE that at the end of 1985 USAID withdrew from the work, with the bridge some 75% complete. We understand that it has been completed with the CORDE's own funds, but it has not yet been inspected by USAID engineers.

- Potable water. Water systems in five small communities were financed under the Project, plus the technical plans for a sixth, at a total cost of \$109,000. By the end of 1986, three of the five constructed systems were not in service, due to the need to take care of small technical finishing touches and to resolve two political disputes (one over water rights, the other over where to place an intake).

The Arequipa program requires Mission follow-up to assure that works either have been completed by the CORDE during 1987 or (in the case of the unfinishable works) that they are being continued with the CORDE's funds toward eventual use. The works that should be finished and put into use during 1987 are Canal Madre Lluta, installation of the Canal Pañe-Sumbay plaques, the Callalli, Lomas, and Ispacas water systems, Canal Urata, the Huami Reservoir, and Puente Collota. Works which should be continued toward eventual completion are the Andagua-Soporo and Pomacocha irrigation systems, Dique de los Españoles, the Quicacha water system, and the Siqui-Salamanca Road.

f) Huancavelica - \$1,457,000. Huancavelica and Apurímac (as well as Ayacucho, whose program was funded under PL 480 Titles I and II) suffered not only from the drought but also from terrorism. Hence the CORDES decided to do no large works, but concentrate on a series of small community based activities, with as direct an impact as possible.

Huancavelica was also one of the departments which received approximately \$500,000 each in PL 480 Title I funds in 1986 to terminate works started earlier under the DRR Project. Hence the above total figure and the other figures given in this subsection tend to understate the size of Huancavelica's program.

The program in Huancavelica benefitted from good management at the DRR operating unit level, but was hindered by rapid turnover of the CORDE presidency. All in all it was one of the most successful programs in the south.

- Irrigation. Accounting for \$525,000 in DRR Project funds, 16 components were financed. Eleven were irrigation systems involving new canal construction, serving 50 to 400 hectares of land each. Four were small reservoirs, of 150 to 1,400 cubic meters of capacity each. Each work benefitted 60 to 300 families, and none cost more than \$60,000.
- Agriculture. A variety of activities were funded, primarily in 1984. These included seed distribution, pest control, establishment of seed banks, vaccination of some 234,000 sheep and 65,000 alpacas, establishment of a breeding station for improved dairy cattle, and

forestation of over 1,000 hectares. Some 363 families or community groups received rotating fund credits, through which potato and other seeds were distributed, with repayment to be made in kind. There was also a small subproject to provide equipment and working capital to handicraft producers, in the fields of weaving, leather work, basket making, stone carving, and ceramics. All of these activities accounted for \$653,000 in Project funds, of which 77.6% was spent in 1984.

- Roads. Six components were financed, for a total of \$233,000. These were principally labor-intensive rehabilitation of existing rural roads, with each costing between \$20,000 and \$56,000.

The program in Huancavelica was completed with PL 480 Title I funds. Many of the activities are being continued with expanded objectives utilizing CORDE or Ministry of Agriculture financing. There is no need for Mission follow-up.

g) Apurímac - \$1,256,000. As in Huancavelica, the Apurímac program was geared toward small, community-level works, with as direct an impact as possible. The program had an acceptable level of CORDE support, although it was difficult to attract professionals with good management skills to Apurímac. In all, it was a successful program.

As in Cusco and Huancavelica, the CORDE received approximately \$500,000 in PL 480 Title I funds in 1986 to complete its DRR program. Thus, the figures given in this subsection understate the size of the Apurímac program.

- Agriculture. A variety of activities were implemented, for a total of \$500,000. These include seed and fertilizer distribution, establishment of seed banks, rehabilitation of terraces, pest control, establishment of demonstration plots, reconstruction of a sheep and alpaca breeding station, and forestry activities. Some 2,197 families received rotating fund credits, under which seeds, fertilizers, and small animals were distributed.
- Roads and bridges. Seventeen components were implemented, mostly the rehabilitation of existing rural roads or the labor-intensive construction of new stretches of roads being extended. One small vehicular bridge and one pedestrian bridge were also constructed. In all, \$372,000 was spent; no component accounted for more than \$67,000.
- Irrigation. Fifteen components were implemented, with none exceeding \$24,000 in cost. Seven were small reservoirs, with 200 to 800 cubic meter capacity each. The rest were new canal

constructions or lining of existing canals, plus the building or improvement of intakes, each system serving 25 to 150 hectares of land.

- Other. As in Puno, a series of community-level actions were undertaken, designed to create employment as well as diversify the productive base. These include chicken, swine, and other small animal raising activities, introduction of beekeeping, establishment of family and community gardens, and setting up of a handicraft training center. Approximately \$175,000 was spent on these activities, most in 1984.

The Apurímac program was completed in 1986 with PL 480 Title I funds. Many of the activities are being continued and expanded with CORDE or Ministry of Agriculture funds. There is no need for Mission follow-up.

h) Ica - \$846,000. Ica is a special case from the rest of the program. It is dependent for its water on five river systems, which flow down from the highlands of Huancavelica and Ayacucho, areas affected by the 1983 drought. Ica was thus declared a disaster area because of the drought. Its real problems occurred, however, after the drought broke. Heavy rains in the highlands in early 1984 caused extraordinary run off as well as considerable erosion of the hard-baked soils. Ica's irrigation system seriously silted up. A number of intakes were destroyed, and floods occurred in both rural and urban areas. Ica's DRR program was thus designed to counter the effects of these problems. It was a program of limited size and objectives, and it can be considered successful. CORDE interest and support were satisfactory.

- Irrigation. At a cost of \$269,000, 23 canals were cleaned out, four intakes were reconstructed, a settling chamber was constructed, various retaining walls and other structures were built, and two studies on further activities to be done were carried out.
- River defenses. Retaining walls and other defenses were built at over 30 points where the rivers had flooded. Several rivers were cleaned of rocks and other obstructions. On the Chíncha River, at Canta, a structure was rebuilt which helps channel the river into two branches. TA on the defense works was provided by an expert from the U.S. Army Corps of Engineers.
- Forestry. Since the flooding problems in Ica stem in large part from inadequate soil absorption, some \$49,000 was spent on forestry activities. Some took place in the upper watersheds (actually in Huancavelica and Ayacucho Departments), where 79 hectares were reforested, while others took place at selected points in the lower

watersheds, where 115 hectares were forested. TA was provided by a U.S. Forest Service expert.

The program in Ica terminated in mid-1986. No additional follow-up by the Mission is required.

While it is possible to visually attest that reconstruction was successful in northern Peru, it is not easy to come up with reliable overall impact information for the south. Likewise, while agriculture has recovered in both areas, and while in the north it is easy to point to the rehabilitation of the damaged irrigation systems as the principal factor, in the south it is difficult to know how much should be attributed to the return of the rains and how much to the activities carried out under the Project. In the Annex to this report are charts detailing impact by component. When summed together, even accounting for duplication, results are impressive. Seeds and other inputs were widely distributed, and labor-intensive construction activities kept people employed until they could return to agricultural self-sufficiency. The most serious effects feared in 1983 - starvation, wide-spread migration, and the inability for a rapid agricultural recovery, due to lack of seeds and working capital - were in large part stemmed. Interviews with beneficiaries carried out by the rotating fund evaluation team, and interviews with Ministry of Agriculture personnel, CORDE officials, and local officials by the final evaluation team and various USAID personnel, indicate that the program is well thought of as having effectively contributed to small farmer recapitalization and to drought recovery in general. (Elsewhere in this report are recommendations on the most appropriate activities in a drought rehabilitation program and on the need for better baseline data.)

At the end of each CORDE section above is a list of physical works requiring Mission follow-up. In addition to the physical works, Mission attention should be given to general follow-up of the agricultural activities in the south. First of all, momentum has been created in a lot of useful activities. Rotating funds have been established and are operating. Pest control using sterile insects, animal vaccination programs, terrace rebuilding, other soil conservation activities, family and community gardens, small animal raising, and forestry activities all have gotten underway. Animal breeding centers, storage sheds, silos, cattle dips, and other small infrastructure have been built and require recurrent funding for their continued operation. The Mission, in its normal contacts with the Ministry of Agriculture, should review the different activities and determine which deserve continued GOP (or perhaps AID) support, and then assure that it is provided. Secondly, there are a substantial number of new irrigation systems in the south, which require

construction of lateral canals as well as training of the beneficiaries for optimum use. A limited amount of such training activities got underway in Puno and Cusco in 1986. These should be continued and others initiated. Organized follow-up of this activity would help assure proper utilization of a substantial AID/GOP investment.

Such follow-up is recommended whether or not the Mission intends to pursue further development work in the Central-South Sierra - the area slated as highest priority by the current GOP administration. If the Mission does intend to work there, I recommend that a full technical evaluation of the activities implemented under the DRR Program in that area be undertaken, before memories and programs fade too far away and documents are lost. The DRR Project probably funded more activities in the Central-South Sierra than any other in recent times - AID financed or not. There are many technical, social, and organizational lessons to be learned.

3. Subprojects with Other Entities

a) Materials Bank - \$1,000,000.

The Materials Bank was created in 1980 to provide loans in the form of materials to low income families. It got off to a successful start. When the El Niño floods occurred in 1983, the Materials Bank was looked upon as a potentially effective way to finance house rehabilitation and reconstruction. For this to occur, the Materials Bank needed to significantly expand its operational capacity. From 1980 through 1983, it had provided fewer than 20,000 loans throughout the country. Participation in the DRR Program meant that it would have to provide some 8,000 to 10,000 more credits over two years in the northern coastal area than it otherwise would have during that time period.

The DRR Project provided \$1 million for this purpose. Approximately \$429,000 enabled the Bank to open new offices in the north and expand existing offices, by financing salaries, training new personnel, conducting promotional campaigns, procuring office furniture, and the like. Some \$162,000 built up the Bank's working capital, through an increase in its inventory of building materials. USAID procured \$84,000 in computer equipment and \$99,000 worth of vehicles for the Bank's expanded operations. And USAID contracted a long-term Housing Advisor for 2 1/2 years, at a cost of \$226,000.

The assistance was successful. The Bank provided over 7,000 HG-financed credits in the northern coastal areas and at least a couple of thousand more with its own funds than it would have had its

capacity not been expanded. The Housing Advisor was a useful resource in assuring that the assistance was utilized properly and in a timely manner. There is no doubt that the Bank was an excellent vehicle in providing housing assistance to a stratum that otherwise would have been difficult to reach.

b) Ministry of Health - \$507,000. The disasters caused a significant increase in malaria in the north and tuberculosis in the south, plus a general depletion of medicine stocks in the affected areas. As described in Section C above, immediate needs were met by reprogramming existing project funds and purchasing medicines locally.

A \$600,000 subproject was included in the DRR Project to carry out longer term treatment and prevention measures for malaria and tuberculosis in the affected areas, to equip laboratories and train persons to carry out proper diagnosis of the two diseases, and to rebuild depleted stocks of other medicines. In early 1984, representatives of USAID's, Health and Nutrition Division met repeatedly with officials from the Ministry of Health's Epidemiology Division to plan the details of the subproject. By late April, PIO/Cs were written for the purchase of the medicines and the laboratory equipment and supplies, for an estimated cost of \$499,560. A PIL committed the remaining \$100,440 for training courses (\$38,000) and local purchases of laboratory supplies (\$62,440).

The Ministry of Health subproject has been cited in audit reports for a series of delays and problems. Most medicines and laboratory supplies took from three to six months to arrive in Peru, with one key malaria drug taking 11 months. Of 33 imported items, most languished in Peruvian customs for an average of three to four months. Once released, only nine were shipped rapidly by the Ministry of Health to the disaster areas. The rest stayed in central warehouses for 3 1/2 to 4 1/2 months. Consequently, the medicines and supplies did not start to arrive in the disaster areas until March 1985 - 11 months from issuance of the PIO/Cs, and deliveries were not completed until August, 1985. In addition to these delays, there was overordering of some commodities, thefts in customs, and diversion of project commodities to nondisaster areas.

The procurements were carried out for some \$93,000 less than the estimated amounts in the PIO/Cs. Since there was no likelihood of the Ministry's effective utilization of these funds for other activities, this amount was reduced from the subproject's budget and transferred to other budget lines.

By April, 1986 - two years after funds had been committed, only \$8,850 had been disbursed to the Ministry for training courses, and none of

the local supplies had been purchased. Just as discussions were taking place with the Ministry to see whether these activities could be reactivated or not, a serious crisis occurred in Peru concerning oral rehydration salts purchased under other AID projects. Since the Ministry of Health subproject was the most readily available source of funds, the Mission approved the use of \$36,165 of undisbursed funds for the recall of the salts. Meetings were then held with the Ministry on the use of the remaining \$55,425 (\$100,440 less \$8,850 less \$36,165), and indeed the training activities have been reinitiated and some of the local supplies have been procured.

The reasons for the deficiencies in this subproject have been documented by the Health, Nutrition, and Education Office. The main reason was organizational. This was the only major component of the DRR Project without a full-time advisor. USAID's monitoring tasks apparently could not be adequately carried out by individuals with other responsibilities. On the GOP side, the subproject was assigned to the Director of Epidemiology, a position which changed three times and entailed numerous other responsibilities. Furthermore, little consultation was carried out with field personnel. Both sides should have assigned or contracted full-time managers and carried out necessary coordination between the two institutions and with the field.

Another reason was that the Mission and the GOP carried out the subproject as a normal activity, not according to the urgency it warranted. Special arrangements should have been worked out with AID/W procurement personnel, with Peruvian customs, and with the Ministry of Health's internal bureaucracy.

A final reason was that the subproject was excessively complex. Instead of sticking to just five basic malaria and tuberculosis medicines, 33 items were eventually procured, of which 23 were sophisticated pharmaceuticals. Furthermore, the training aspects required considerable organizational efforts to carry out.

All this is not to say that the health subproject was an utter failure. Many lives were saved by the medicines. Indeed, the fact that some of the Project-purchased medicines were diverted to nondisaster areas was in part because the Ministry had borrowed for the disaster areas from other stocks destined elsewhere, in order to cover malaria and tuberculosis needs during the period the Project's medicines were delayed. So, though not as effective as anticipated, the subproject nonetheless achieved the better part of its expected benefits.

c) CONCYTEC - \$17,000. In late 1983 and early 1984 there were fears that the El Niño Phenomenon would occur a second year in a row,



something which has happened on occasion. Also, the 1983 experience showed that there were serious deficiencies in the GOP's ability to predict the El Niño Phenomenon, based on existing data sources. Perhaps the most serious of these deficiencies was the reluctance of Peruvian organizations to share scientific data with each other.

At the request of the GOP's scientific coordinating council - CONCYTEC - a small subproject was financed to bring several of these organizations together into a commission to share data and recommend how they could permanently work together in making predictions. The subproject can be considered useful - not only for bringing the organizations together but also for the three volume report the commission produced, which has been widely discussed. Further follow-up is warranted, using OFDA resources.

#### G. The DRR Project - Institutional Structure

The other major objective of the DRR Project was to help the GOP set up an institutional structure to effectively manage its DRR Program. As indicated above, early in the emergency period the idea of working directly through the sectoral ministries was rejected both by USAID and by the GOP's newly designated disaster coordinator, in spite of the fact that the IDB and IBRD chose that route for their assistance. Instead, the CORDES were chosen as the primary entities responsible for implementation. USAID had had good experience with the CORDES in the Integrated Regional Development Project (527-0178), and the CORDES proved effective implementors during the disaster emergency phase. (The costs and benefits of working simultaneously through two separate institutional mechanisms will be discussed further in Section J.)

Once the CORDE route was chosen, the need for a national-level coordinating entity became apparent. With the CORDES reporting to the Prime Minister's Office, that seemed a proper choice, but the Prime Minister did not appear interested in his office taking on this task. In fact, the Prime Minister was trying at that time to free his office from the various special hydraulics and high jungle projects which he was in charge of. From this desire of the Prime Minister to free himself of one burden and not take on another, grew INADE. As soon as INADE was established, a Rehabilitation and Reconstruction Division (GRR) was formed.

USAID realized from the first that both the CORDES and INADE would require considerable TA and financial support to be able to effectively implement the DRR Program, and these were built into the PP and ProAg. Furthermore, it became obvious that USAID's requirements for managing this Program would exceed its operating expense budget, so certain operating expenses had to be drawn from the Project.

Eventually some \$8,376,000 was spent on TA and support, broken down as follows:

Short-term TA	\$ 184,000
Long-term TA	1,916,000
Local Consulting Firms	3,145,000
INADE/CORDES Operational Support	2,175,000
DRR Operational Support	956,000
	<u>\$8,376,000</u>

As discussed below, these figures understate the full operational cost of the program.

1. INADE and the CORDES

In keeping with the decentralized strategy, INADE's GRR was kept fairly small. It included a cadre of technical personnel, to review subproject requests and to visit the CORDES to inspect works and help resolve technical problems. It included a financial unit, to interface with the Ministry of Economy and Finance (MEF) and help deal with the complex budget procedures discussed later in Section J. And it included a data processing unit, to maintain records on subproject achievements and funds spent, including Reconstruction Bonds. In addition to the GRR personnel, the Project financed a small group of persons in other units of INADE, especially its Administrative Division, who dedicated most or all of their time to the DRR Program. The number of people working in INADE financed by the Project averaged about 35 during the life of the Project.

INADE was basically effective as the Program's national level coordinating entity. It did an especially excellent job dealing with budget procedures, and for about a year even set up a three person subunit within the MEF. It also provided valuable assistance to the CORDES in dealing with AID procedures and with the national offices of the various sectoral ministries involved in the Program. In many ways it served as a type of consulate for the CORDES in Lima, in addition to providing TA and other support. One factor kept INADE from being as effective as it might have been. Early in the Program some of the GRR's technical unit was staffed by engineers and architects who had been placed for political reasons and were not interested in the Program. The Program suffered from delays as these people let pending actions pile up. This situation was somewhat offset by having an excellent Chief of GRR, as well as a competent and supportive Chief of INADE. With the elections and change of government in 1985, the ineffective staff members departed. The new Chief of INADE kept on the GRR Chief and assigned a most competent staff member as his deputy. From then on INADE served as a truly excellent coordinating body for the Program and as an excellent counterpart organization for AID. The lesson to be learned is that cronyism has little place in a DRR program.

The CORDES were the key elements in the institutional structure. Since the CORDES were relatively independent entities (though very dependent on the central government for funding), INADE and USAID debated long and hard at the beginning on how best to deal with them. The decision taken was not to impose any specific structure on the CORDES but to encourage them to establish separate DRR operating units, with a fairly strong degree of autonomy. Some CORDES set up such units from the first, while others were reluctant to do so, leaving DRR activities in the hands of other operating units. In these cases, the DRR programs generally got bogged down - receiving low priority and little support. By the end of 1984, every CORDE had taken the decision to establish a DRR operating unit. While the names varied among the CORDES, these units were generically known as PIRR units, for the Spanish acronym signifying the Integrated Rehabilitation and Reconstruction Program.

The degree of autonomy accorded the PIRR units varied by CORDE. In Piura, the PIRR unit was limited to technical personnel; but since reconstruction was such a major part of the CORDE's overall program, the CORDE president ordered that all other divisions give priority to the DRR Program. In other CORDES, the PIRR units developed practically into micro-CORDES, with their own administrative, accounting, procurement, legal, and technical personnel, as well as their own motor pools and separate physical locations.

Since CORDE salaries were fixed at levels too low to attract quality professional personnel, and since INADE was able to pay higher salaries, INADE offered to the CORDES to pay the salaries of the top technical and accounting personnel in the PIRR units. These were always either personnel selected by the CORDE president or persons suggested by INADE but approved by the CORDE. On the average, some 75 professionals were in such a status - an average of five per CORDE. Having INADE-paid people in the CORDES strengthened the INADE-CORDE links, as well as brought into the PIRR units a much higher quality individual. It also created resentments among other CORDE personnel, some of whom were in positions where they could hinder the progress of the DRR programs. This could be and generally was overcome when there was a strong CORDE president, who was supportive of the Program. When there was weak leadership at the top, the DRR programs generally suffered.

The key element affecting the relative success of the various CORDE DRR programs was without doubt the human factor. When there was a competent and dedicated head of the PIRR unit, a good technical and administrative staff, and a strong and supportive CORDE president, the program generally ran well. This fortunately was the case the majority of the time. But when these conditions did not exist, the PIRR were far less effective.

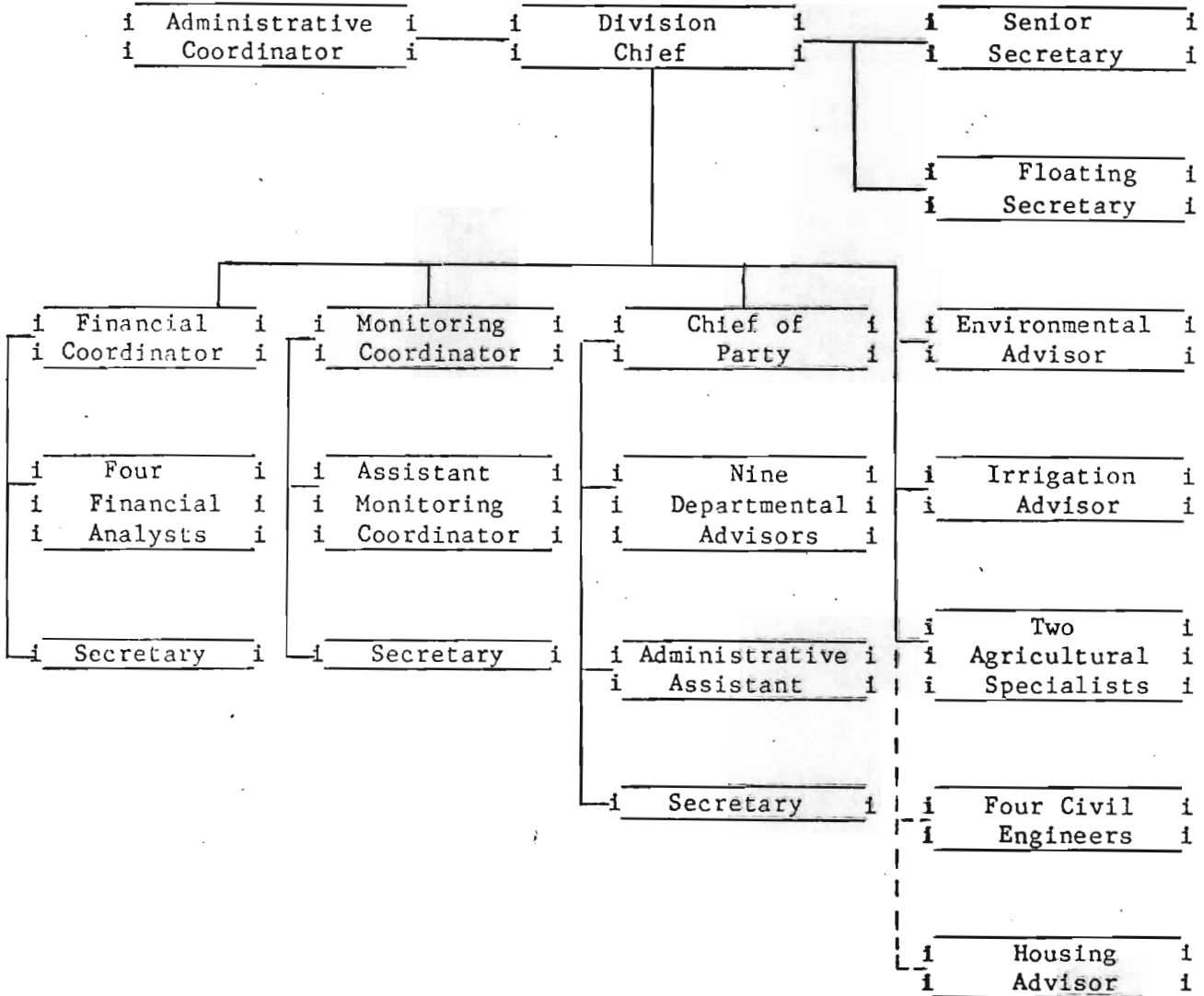
The \$2,175,000 listed above for INADE/CORDES Operational Support covered the costs of the employees in INADE's head office, the professionals contracted by INADE for the CORDES, certain INADE expenses (e.g., office supplies), and a small amount of office equipment provided the CORDES. All other CORDES personnel and operational expenses were charged to individual subprojects. These included resident engineers, draftsmen, and other technical personnel who worked on the specific subproject, a pro-rated share of other clerical and administrative personnel in the PIRR unit, and a pro-rated share of office supplies, gasoline, and other operating expenses. All in all some 6 to 7% of subproject costs went for such expenses, or some \$3 to \$3.5 million. While this figure combined with the earlier one gives the appearance of an inordinately high percentage of the Project going to operating costs, it should be kept in mind that INADE and the CORDES PIRR units also oversaw Reconstruction Bond funds, PL 480 Title I and II funds, and resources from certain other donors. The DRR Project was less restrictive than most of these other sources in accepting operating costs, and so much of these costs were covered thereunder. The percentage of the funds from the other sources going to operating expenses was generally smaller. All in all I do not believe that overall operating expenses were excessive, given the CORDES' need to comply with such a variety of legal, technical, and financial requirements. In fact, INADE made a concerted and fairly successful effort to keep these costs reasonable.

## 2. The DRR Division - Structure

Early in the Project USAID established a division to manage the Project and provide TA to INADE and the CORDES. Upon my arrival - November 2, 1983 - it consisted of a senior FSN detailed from Capital Development, a secretary, and myself. The Division grew with the needs of the Project, reaching a peak of over 30. Except for the FSN, who headed the Division's financial operations, all personnel were contracted, utilizing various mechanisms (PSCs, P.O.s, contracts under the Mission's FSN personnel system). Furthermore, except for the above mentioned three individuals who first formed the Division (and who were OE funded), all personnel were funded from the Project.

There were four main operational units within the Division: financial, monitoring, liaison with INADE and the CORDES, and specialized technical and management assistance. The organization was basically as represented in the following chart:

DRR Division



- a) The Financial Coordinator was the senior FSN mentioned above - a highly competent economist and financial manager. The financial analysts reviewed expenditure documentation in the field as well as provided assistance to the CORDES to comply with AID and GOP financial regulations. The financial management aspect of the Project is described in more detail in Section H below. All staff in this functional area were Peruvians.

- b) The Monitoring Coordinator and his assistant - both highly qualified professionals with technical and computer backgrounds - were responsible for managing the reporting, data processing, and progress monitoring aspects of the Project, as described further in Sections H and J. Both were Americans, the assistant being a Mission spouse.
- c) The Chief-of-Party's principal function was to serve as liaison between USAID and INADE. He physically was located, with his administrative assistant and secretary, in INADE. This was a difficult and often delicate task, which was handled extremely well by the person in the position.

The Departmental Advisors were generalists who were looked upon as INADE and AID's presence in the CORDES. They served as coordinators/facilitators, helping the CORDES properly carry out the myriad of tasks involved in implementing their DRR programs, in conformance with AID and GOP regulations. Their role will be discussed further in Subsection 3 below. The Chief-of-Party and six of the Departmental Advisors were Americans; the rest were Peruvians. The six American Departmental Advisors resided in the field (in Piura, Tumbes, Chiclayo, Puno, Arequipa and Cusco).

- d) Various specialized technical advisors were contracted for long periods under the Project. The Environmental and Irrigation Advisors provided widespread assistance in their fields. Two Agricultural Specialists were contracted jointly by DRR and the Office of Agriculture and Rural Development, both to inspect agricultural activities in the south of the country and to help resolve implementation problems. Four civil engineers were contracted with Project funds by the Engineering Division to do the same for infrastructure activities. While not formally a part of DRR, the contracted engineers collaborated closely with DRR and were a part of the Project team. Similarly, the Housing and Urban Development Division contracted a Housing Advisor, principally to oversee the Materials Bank subproject. The Environmental and Housing Advisors were American, while the Irrigation Advisor was a third country national. The Agricultural Specialists and Civil Engineers were Peruvians (except for one Civil Engineer who was an American residing in Peru).

The actual organization was more fluid than the chart might imply. With disbursements having to conform with approved technical plans and with physical progress, with the departmental advisors having to convey to the CORDES the results of technical reviews, with the technical advisors needing to be aware of the content of progress

reports before making field visits, and so forth, there was the need for constant communication among the four functional areas. Fortunately, an excellent spirit of teamwork developed, and there was considerable interchange among all Division personnel.

The Long-Term TA budget line financed the Chief-of-Party, the nine Departmental Advisors, the Environmental Advisor, and the Irrigation Advisor. The Housing Advisor was funded from the Materials Bank subproject. The rest of the personnel were funded from the DRR Operational Support budget line, which was authority INADE gave USAID to spend Project funds for Project management purposes. This line also financed certain equipment (e.g., a PC computer, filing cabinets) and some short-term TA costs. (The short-term TA budget line tended to fund TA actions proposed by INADE, while the DRR Operational Support line tended to fund those actions which were DRR's initiative.)

### 3. The DRR Division - Operations

The DRR Division had two main tasks - to manage the Project (as well as manage the two PL 480 funds and one of the PVO grants) and to provide TA to INADE and the CORDES. The Project management function was handled effectively. Specific aspects of it are discussed in Sections H and J of this report.

As indicated above, TA was of two types, one performed by a team of generalists, the other by a team of technical specialists, both of which also assisted in the management aspect of the Project. The team of generalists was considered a key part of the TA from the beginning of the Project, and recruitment took place starting shortly after the signing of the ProAg. An IQC firm was hired to place ads and screen candidates, and a joint INADE-USAID team made the final selections. It was decided that Americans would be most appropriate for the positions, given that impartiality and knowledge of USG regulations were critical requisites. All advisors were on board by February 7, 1984.

The Departmental Advisors spent some 75% of their time in the field (with six residing there). When the team was at maximum strength, none covered more than two departments. Once every two months the entire advisory team would come to Lima for a week of orientation and review of Project progress.

It is hard to imagine the Project taking place without these advisors. They were key elements in helping the CORDES deal with AID regulations and develop sound management procedures. They were the central point of contact for all aspects of the Project affecting their CORDES, similar to the brand manager concept in marketing.

The final evaluation team brought up certain issues regarding the advisors. First, it sensed that the concept of generalist advisors was poorly understood, that there was some confusion on the part of the CORDES as to their role. It even suggested that the title "Advisor" was misleading. Actually, I believe that the problem was not one of the generalist role not being accepted but the very fact that the individual advisors were generalists themselves. This can be understood in a country where a professional title is a prerequisite to advancing into administrative or advisory positions. I believe that the CORDES recognized the need for someone to fill this role - to serve as a coordinator/facilitator/liaison. But I believe that they found it difficult to accept that a generalist, without a professional title, was giving advice to a CORDE president, himself usually an engineer or lawyer. There is no easy solution to this when developing a TA program. Few engineers have the broad developmental experience needed to be effective generalist advisors. Perhaps what is required is a combination of seeing if broad based people with professional titles are available, of better educating the recipient institutions about the purpose of the TA and about the background of the advisors, of bringing in the sort of advisor who can prove himself quickly, and (when all else fails) of creating titles for the advisors to use.

The team also questioned the heavy reliance on Americans. The original group of Departmental Advisors contained exclusively Americans. The three Peruvians were added a year later, when it appeared that more intensive coverage was required. Americans indeed are much more expensive, averaging three to four times more than an experienced Peruvian. Americans generally have the advantage of impartiality and knowledge of USG procedures, while Peruvians generally have the advantage of more country-specific knowledge. In practice, however, three of the American advisors had worked for long periods of time in Peru, and three others had worked for long periods in neighboring Bolivia and Ecuador. All were experienced in development activities and had worked for or closely with the USG previously. Their learning curve was relatively short. The Peruvians, on the other hand, took quite a while to feel comfortable with AID regulations. While there were a number of problems and delays involved in getting the American advisors settled in their sites, I wonder if it would have been possible at all to have found qualified Peruvians who were willing to live in such places as Puno or Tumbes. In short, I think it was reasonable to have recruited an American team, which was done quickly, drawing on a large pool of experienced development generalists, many with experience in Peru. Adding Peruvians later when the recruitment and training could be done more calmly, worked out well and added balance to the team.

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A final issue brought up by the evaluation team was whether the generalist TA team (and perhaps some of the technical team, as well) should have been contracted as PSCs, or whether an institutional contract might better have been used. Based on the Mission's experience, the PSC method provided an advantage in timing. The full team was on-board six and a half months from the signing of the ProAg, and some five months from when the recruitment process started. Large institutional contracts entered into by USAID/Peru have invariably taken longer from initiation of the RFP process to having the team on board. Another apparent advantage of the PSC route was the ability to develop a closer working relationship between the team members and DRR management. The team had only one loyalty, and there was no other layer separating the team from the DRR Chief. Furthermore, there was more direct involvement of INADE and DRR in the recruitment process than there likely would have been in an institutional contracting process. Cost was probably also an advantage of the PSC route, although there are numerous overhead costs the Mission had to assume to support the team. Depending on the overhead factor an institution would have charged, the total cost may or may not have been lower than if an institution had been used. An institutional contract would have had the advantage, though, of shifting these overhead costs from OE to the Project. The biggest disadvantage of the PSC route was that Mission support was weak (see Section J). The team members expended considerable energies, especially in the early part of the Project, dealing with various logistical and financial problems with a host of different Mission divisions. In an institutional contract, a logistics support function can be built in. The evaluation team concluded that an institutional arrangement is normally preferable. I personally do not think that we could have gotten as high quality, hard working, and loyal a team from an institution, and probably not as quickly. Managing the PSCs' contracts and dealing with the numerous support problems obviously put a much greater burden on me, but I think the results were worth it.

As to the technical specialists, all worked out of Lima (with the exception of the Irrigation Advisor, who was stationed in Arequipa), inspecting works on a regular basis as well as making special visits to address specific problems. Thus they assisted DRR in the project management function as well as provided TA to the CORDES. In their latter role they helped the CORDES draw up implementation plans, carry out procurements and contracting, and resolve logistical and technical problems hindering implementation.

The final evaluation team questioned the need for an expatriate Irrigation Advisor. I agree that sufficient skills in that area exist in Peru for us to have found the needed expertise. It also

questioned the need for a long-term Environmental Advisor. While the Environmental Advisor was useful in calling attention to the need for proper watershed management, and helped us analyze the effect of our agricultural activities in the south, it is true that this expertise could have been obtained on a short-term basis from Peruvian sources.

It should be pointed out that the Financial Analysts also served a dual role. In addition to reviewing expenditure documentation, they provided considerable assistance to the CORDES in complying with the complex array of AID and GOP regulations.

In addition to on-the-scene assistance by the array of personnel described above, a very effective method of working with the CORDES was through structured training sessions. Orientation meetings were held in Lima with the CORDE presidents early in the Project and again after the change of government. CORDE administrative and accounting personnel also had an intensive two-day session in Lima on AID and GOP procedures. Three sets of regional meetings were held, where Project procedures and general problems were discussed, as well as a review of each CORDE's progress. Separate sessions were sometimes held simultaneously for different groups of CORDE personnel. These meetings also allowed top GRR and DRR managers to become aware of the problems the CORDES perceived as hindering Project implementation.

I do not think that the Project could have achieved what it did without the constant presence in the field of this combined management/TA team. It provided problem solving assistance, technical advice, and prodding when necessary. It tended to keep the Project fast moving and honest. While opinions may differ on the exact composition or nationality of the group, the fact that somebody representing AID/INADE was almost always in every CORDE minimized the risk of serious implementation problems.

Finally, it should be mentioned that short-term TA was also effectively used, though sparingly. When there were some questions on the setting of concrete in high altitude cold areas, two experts were brought to Peru from the Army Corps of Engineers' Cold Area Research Station in New Hampshire. An expert from the Corps of Engineers' Waterways Center in Mississippi made a valuable contribution in modifying the designs of gabions and vane dikes used as river defenses in Peru. A Forest Service technician helped GOP officials in Ica decide what upper-watershed forestry strategies would be best to control downstream flooding. A U.S. environmentalist helped look at the effects of DRR and other activities on the Tumbes mangrove forests. Peruvian technicians and firms in a variety of fields were contracted by USAID and INADE to provide specific problem-solving assistance, including the behavior

of the Tumbes River, water table levels in Piura, and how best to organize food relief distribution.

4. Local Consulting Firms.

It was foreseen in the PP that the CORDES were weak in subproject design and supervision and that local engineering consulting firms would be contracted to assume part of this task. INADE decided to use two different approaches. One was to enter into an agreement with a public sector entity which had particular expertise in working in three departments. The other was to contract with private firms to provide assistance to 11 other departments. (One department, Ica, was not provided with this assistance, but it contracted with several private firms on its own to provide technical designs.)

The public sector entity was the Sierra Micro-Regional Program (PMS), which was originally a division of INADE but later passed to INP (where its acronym became PEPDMEES). INADE proposed this assistance to USAID by letter dated December 15, 1983, and USAID approved it by PIL on January 9, 1984. The departments covered were Puno, Cusco, and Cajamarca. PMS assigned a resident TA coordinator in each department and established a team of agricultural specialists and civil engineers, some of whom resided in the departmental capitals and others of whom worked out of Lima. PMS was also willing to contract short-term specialist assistance when needed. The assistance lasted for three years, through December, 1986. PMS's agreement did not specify that it would do design or supervision work, and PMS was reluctant to take on these tasks; rather it saw its role as an on-site technical facilitator, helping to assure that the CORDE one way or another fulfilled its design and supervision obligations.

INADE began the process of contracting the private consulting firms in March, 1984, with the preparation of detailed scopes of work for each department. These were then discussed with and cleared by the respective CORDE president. Meanwhile, USAID obtained a waiver from AID/W on the need for advertising the RFPs in the United States. INADE prepared the RFPs and invited all registered Peruvian engineering consulting firms to participate. Firms could only bid on the departments where they had experience. USAID participated in the selection process, and 10 firms were chosen to provide assistance to the 11 CORDES. USAID approved the process and committed funds in late June, and the contracts were signed July 4, 1984.

The scopes of work were relatively precise, and the firms were required to take on specific design and supervision tasks. After a series of modifications, the CORDES received a total of 143 months of

assistance, an average of 13 per CORDE, with a range of 7 to 24 months.

In all, \$3,145,000 was spent on the assistance to all 14 CORDES - \$2,840,000 to the private firms and \$305,000 to PMS (including the purchase of three vehicles). This assistance was probably absolutely essential to building up the technical capacity of the CORDES to a sufficient degree during the critical part of the Program to enable them to design and implement their portfolio of works. (It should be mentioned that the firms designed and supervised a number of works funded by Reconstruction Bonds, in addition to those funded from the Project.) It was also an expensive element of assistance, and there are probably a number of lessons which can be learned if such assistance is to be provided in the future.

First of all, it is interesting to compare the differences between the experience with PMS and that with the private firms. The PMS assistance got started much more quickly, lasted longer, and was much less expensive. PMS assigned dedicated public servants to the assistance team, all with extensive experience in the respective departments. The team members felt they were part of the Project team and dedicated considerable efforts to solving implementation problems. Likewise, PMS was always receptive to hiring short-term expertise, often on short notice. On the other hand, PMS did not fulfill the most needed roles, those of actually designing and supervising works. As a public sector entity, it did not believe that it could take on those tasks, which in Peru imply certain legal and professional responsibilities. The programs in all three departments suffered from certain delays as a result.

The private consulting firms took on those tasks, and they tended to utilize a more highly trained level of professional than the public sector could offer, but they also brought other problems. Generally the firms looked upon this as just one more job. They overdesigned works, took little interest in solving problems, and were inflexible about doing tasks not specified in their scopes of work. Frequently they substituted technical people of lesser calibre for those described in their proposals.

There was one additional problem. Though the CORDES were involved in drawing up the scopes of work, they tended to look upon these contracts as INADE's. With INADE in Lima and the work taking place in the field, often INADE was not aware of problems with the contracts until they were difficult to resolve.

The gist is that we and INADE underestimated the degree of attention and sophistication required to properly manage these contracts. INADE should have had a person assigned full-time as contract manager, with a team of individuals traveling frequently to the CORDES (with some perhaps residing in the field) to supervise progress. INADE also should have signed agreements with the CORDES concerning the consulting firms (as it did on other matters, such as the computers and the vehicles), spelling out the responsibilities of the two parties in managing the contracts. As to PMS, INADE should have been insistent that PMS find a way to take on the design and supervision responsibilities. If it could not, then private firms should have been substituted.

5. Summary

In all, the objective was fulfilled of establishing an institutional structure which enabled the GOP to effectively carry out the DRR Program. Even though there were deficiencies in some elements (such as the performance of the consulting firms), these were relatively minor compared with the results obtained. The essential elements which led to success were:

- a) Use of a decentralized structure, with most responsibility at the field (CORDE) level.
- b) Provision of TA in sufficient quantity, but not in a way that took implementation responsibility away from INADE and the CORDES.
- c) A continual presence of INADE and DRR representatives at the CORDE level, available to help resolve implementation problems.
- d) Establishment of implementation systems (described in the next Section) which imposed discipline, honesty, and high technical standards without creating unreasonable complexity or paperwork burdens.

H. The DRR Project - Implementation Procedures and Issues

1. Subproject Selection

The Project utilized what might be called a modified ICI format. That is, instead of a determination at the beginning of the Project exactly which works would be financed by AID, INADE was allowed to submit proposals throughout the life of the Project, as long as they fulfilled an agreed-upon set of criteria. Obviously, the Project would have been much easier to implement had some certain group of

works been decided upon at the beginning of the Project. On the other hand, the flexible approach used enabled AID financing to be utilized for works or activities which had run out of funding from other sources or whose need had not been fully identified at the beginning of the Project. Since the AID Project was geared toward financing small to medium-sized works, it would have been difficult to have come up with a full list of activities at the beginning. All things considered, I would say that this flexibility was one of the strengths of the Project. The Project financed a large array of worthwhile components which never would have been financed had any other format been utilized.

In early January, 1984, INADE presented USAID with the criteria to be utilized thereafter for subproject selection. Like so much in the early part of the Project, the criteria were put together quickly, perhaps without the explicitness and precision they might have had. Yet I believe that the criteria were well understood by all parties and served well as guidelines.

In PIL 1, a format was presented to INADE and the CORDES for presenting subprojects. After some months of experience with this, a more comprehensive system of three forms was introduced. Form "A" gave general information on a subproject level, against which conformance with the criteria could be judged, and which also enabled major compliance matters, such as contracts over \$100,000, to be anticipated. Form "B" gave detailed information on a component level, covering technical and financial aspects, beneficiaries, and expected impact. Form "C" was for technical certification and is discussed below in subsection 3. Later, a Form "D" was added, which served to indicate changes in any of the other forms. This system proved to be highly effective in obtaining all the information necessary to judge a specific work or activity. It also provided an information base for the computerized monitoring system.

## 2. Types of Activities Financed

The activities in the north were basically noncontroversial. Well over 99% of the funds went to rehabilitate or reconstruct damaged infrastructure. The two areas which might have gotten out of hand and had to be kept within reasonable limits were river defenses and housing. River defenses were limited to critical points, mainly protection of other infrastructure. Special care, including the visit of a U.S. expert, was taken to assure the most cost-effective technologies. Rehabilitation of damaged housing and replacement of lost housing could easily have eaten up the whole Project budget. Most housing activities were therefore left to the Disaster HG. Project funds were limited to assisting the lowest income stratum,

including provision of sites and services and the rehabilitation and reconstruction of a relatively small number of housing units (slightly over 2,000). In most of these cases the Project funds complemented Materials Bank credits. Thus all housing activities, including the sites and services, accounted for only 4.7% of the Project funds spent in the north.

The south presented a more complicated case. At issue was what is a proper strategy during and after a severe drought. Some of the activities - labor intensive small public works, provision of seeds, pasture recuperation, animal vaccination - were clearly geared directly to addressing the immediate effects of the drought (e.g., lack of income among subsistence farmers, scarcity of seeds, dried up pastures, weakened livestock). Other activities, however - certain irrigation, road, and potable water subprojects, plus soil conservation and forestry activities - were directed more toward mitigating the effects of future droughts.

Different observers have come to different conclusions on this issue. IG auditors believed that such activities were by their very nature inappropriate for a DRR project. They argued that only short-term activities which addressed the effects of the particular drought were appropriate; the other activities should be left for longer-term development projects. I disagree. Extent of damage during a drought is determined not only by lack of rain but also by agricultural practices, land use, and the existence of certain infrastructure. In an area of recurrent droughts, if such factors are not addressed, AID and other donors will soon be back in with another major assistance program. While it is easy to say that such activities should be financed under another project, that is generally not practical. The time to undertake them is when memories are fresh and receptivity is high. Also, there are opportunities for combining objectives. Combining provision of seeds with instruction in proper land use techniques, for example, is a practical way to achieve both objectives simultaneously.

The issue then becomes one of how much of this sort of activity is appropriate, and under what circumstances. The final evaluation team addressed this issue at length. It observed that while many of these activities were done in a short-time period and made valuable contributions to communities in drought-prone areas, others really should have required longer periods to become fully effective than the Project allowed. Indeed, a few components still have physical objectives incomplete at the Project's end. More commonly, especially in irrigation subprojects, one finds that the physical objectives (e.g., canal construction) have been achieved, but complementary activities (e.g., training) need to take place for the works to be fully productive.

The team suggested that what might better have occurred is for USAID and INADE to have divided the activities in the south into two groups - "fast track" and "slow track." Fast-track activities would have been those which were necessary for rehabilitation, could be done quickly, required no significant follow-up, and required a level of analysis no more sophisticated than what the Project already provided for. Slow-track activities, on the other hand, should have been analyzed more rigorously for benefit/cost and should have been undertaken with greater calm (i.e., no cutting corners on full technical planning or contracting). Then only those slow-track activities should have been undertaken which could reasonably have been expected to be fully completed by the PACD, based on full technical analyses.

I agree with the team that this would have been a better approach. We were aware from early in the Project that some of the irrigation activities in particular might require more time or inputs for full functioning than the Project would provide for. Nonetheless, with pressure on us from INADE and the CORDES to proceed, we assessed the risks and came to the conclusion that it was proper to proceed. We did not, however, conceptualize the issue the way the evaluation team has. While most of the components we financed probably would have remained in the Project had we established a two-track system, it would likely have helped eliminate a few which have proved difficult to complete or marginal in benefit.

All this is not to say that our program in the south was not worthwhile. Indeed, a large number of highly worthwhile activities were undertaken. And for those which we realize will require post-PACD activities for their termination or optimal functioning, INADE and we have made a major effort to get commitments from the CORDES and the Ministry of Agriculture to finance and implement them. But the team's suggestion is a valuable one for how we might have proceeded more effectively, and it should be kept in mind when designing any future drought rehabilitation projects.

3. Dispersion among 15 Departments

In 1983, the GOP declared 17 departments in disaster emergency. USAID decided that the damage in Lima Department - which was relatively minor and of the type that recurs annually - was being covered adequately from other sources and did not require USG assistance. It also decided that the terrorist situation precluded our working directly in Ayacucho Department, and it was agreed that PL 480 Title I and II resources would be more appropriate to utilize there.



The question of how many of the other departments to work in was hotly discussed during 1983. The original PP proposed working in six departments (the five coastal departments in the north and Puno in the south), although it recognized damage in 10 (plus Lima and Ayacucho). The revised PP, dated October 25, suggested working in 12. By the end of 1983, the decision had been made to work in all 15. The reasons for this decision were (a) humanitarian, to assist all who were affected, whether they happened to live in one of the most affected departments or not, (b) to persuade the GOP to channel Reconstruction Bond funds and other resources throughout the disaster area (there was a fear that virtually all resources would go to Piura, since most of the GOP officials involved initially in the DRR Program were from there), and (c) to establish throughout the disaster area the effective institutional structure described in Section G above, given that the DRR Project was the main source of financial and technical support for the structure. On the other hand, there was concern that working in 15 departments would overwhelm INADE and DRR's management capabilities, distracting energies and perhaps resources away from the most severely affected departments.

As it turned out, resources were properly allocated in proportion to the damage. Piura received 34.1% of DRR CORDE subproject funds, while the total percentage going to the six departments originally slated for assistance was 74.0. The nine other CORDES all set up workable PIRR units and received an equitable portion of Reconstruction Bond funds. The programs in those departments proved useful. For example, 7,476 small farm families in the affected areas of the south outside Puno received rotating fund credits for seeds and other inputs. Had the Project limited itself to only the original six most-affected departments, its overall impact would have been less, especially given that there were sufficient funds to meet the needs of both groups of departments (that is to say, the marginal benefit of the next subproject which would have been financed in the most affected departments would have been less than what actually was financed in the lesser affected departments).

This strategy did, of course, have its costs. But as the final evaluation team pointed out, the decentralized nature of the Project tended to stem these costs. That is, an implementation problem in one department had little effect on another. With a sufficient cadre of departmental advisors, financial analysts, and technical personnel, DRR could provide support to all 15. Where there were costs were in the top management levels of GRR and DRR. Concentrating on the progress of 15 instead of six CORDES, receiving visits from 15 sets of officials, having to plan regional meetings to accommodate all 15 CORDES and reviewing 15 sets of reports all took

up considerable management time. But I agree with the evaluation team that the benefits tended to outweigh the costs and that operating in 15 departments was a proper strategy.

4. Technical Soundness

Initially, no specific measures were instituted to assure that adequate technical plans existed on the component level. It was assumed that USAID engineers would visit each work prior to its initiation or in its early stages to review the plans. Early on it became obvious that the number and dispersion of the components were too great to permit such visits, especially given engineering staff size and the pressures to get the works underway. The early subprojects were thus handled on a case by case basis. Some approval PILs stated that initial disbursements would be subject to receipt and review in Lima of the entire technical plans. Others asked for a certification from the CORDE president that adequate plans existed. In CORDES where the Engineering Division (ENGRI) had recently visited or was familiar with the quality of the work, nothing was requested.

This system proved inadequate as well. The CORDES were not consistent in the quality of their plans. Furthermore, some CORDE presidents took the certification responsibility too lightly, while others required more detailed plans than were necessary before they would sign. So, to provide consistency, assure that a proper quality of plan really did exist, speed up the review process, and provide for timely follow-on visits, two measures were instituted. First, a group of four civil engineers was contracted by ENGRI with Project funds to provide more frequent and intensive visits to the various works. Second, a technical certification form (Form "C") was required to be filled out by the CORDE and approved by ENGRI (or in some cases, by the Office of Agriculture and Rural Development - OARD), prior to disbursement of Project funds. The form was designed so that it could only be properly filled out if a certain minimum degree of technical planning existed. Furthermore, it required the signature of both the CORDE president and a registered civil engineer (or agronomist), certifying the existence and quality of the documents checked off on a checklist.

This system worked exceedingly well. It provided not only for a certain minimum standard of technical preparation, but it also gave needed flexibility. For example, a small, easy to carry out work would be approved if only a certain array of items were checked on the checklist, whereas a larger, more complex work required many more. Whenever there was a doubt, an engineer could be dispatched to check the plans first hand - now much more feasible with the staff considerably larger.

Once a work was underway, its progress could be followed on the monthly physical/financial progress reports each CORDE was required to submit. Furthermore, information on progress or problems came to us from INADE engineers, the departmental advisors, and other visitors. The contracted civil engineers, plus ENGRI's regular staff, visited works on both a regular basis and when it appeared a problem was at hand and were quite effective problem solvers. The two agricultural specialists, the irrigation and housing advisors, and those of the departmental advisors with technical backgrounds also provided effective technical support.

Technical problems fell into many different categories. A large percentage, however, had a single common denominator - poor supervision. Whether a work was carried out by force account or contract, and whether supervision was provided by the CORDE, provided by the local consulting firm, or specially contracted out, if the supervision was good, there was a significantly higher chance of trouble-free implementation. It took us some time before we realized this and began to insist on better quality supervision. Future projects might even consider orientation sessions for resident and supervisory engineers.

Another common problem area, especially in force account works, was the inability of certain CORDES to effectively manage all the diverse elements of project implementation. Sometimes crews would be on board but materials had not arrived. Or crews would walk off the job when payrolls were late. Or CORDE machinery would break down. A good CORDE resident engineer could usually make the difference between successful implementation and a work getting bogged down in problems. Another problem area was the occasional tendency to have irresponsible contractors, whose objective was to drive up costs rather than get the work done. This will be discussed further in Section J. Yet another problem area was what might be called exogenous factors. For example, a potable water system would be restored, with the pumping station ready to begin providing service. All of a sudden it would be discovered that the electric company was not willing to make the electrical connection because of a long outstanding bill owed to it by the water company. The work would be paralyzed for months while negotiations took place. During this period, the motor to the pump would be stolen. These were the most frustrating types of problems and often required a disproportionate amount of time to resolve. Finally, special mention should be made of bridges. A high proportion of bridge works - large and small - suffered from major implementation problems. It might have been advisable for us to have provided special TA in this area.

Assuring reasonable cost of works was a complex part of the Project. In works carried out by force account, many of the costs - minimum wage, cement, steel, machinery rates - were fixed by the government and were out of the CORDES' control. Generally they would be maintained for quite a while, even as devaluation continued on - thus favoring delays. But then all of a sudden they would shoot up, throwing off the planned budget. In contracted works, as discussed further in Section J, costs were generally kept reasonable when the contracting process obtained a responsible contractor and when the CORDE's management of the contract was properly done. ENCRI was quite effective in helping the CORDES find ways to avoid unnecessary cost increases and in helping us, when increases did occur, decide whether or not they were reasonable. There were at least two cases when we ended our financing because we felt costs were getting out of hand.

All this is not to say that the Project was fraught with technical problems. On the contrary, one must realize that there are general weaknesses in Peru as to technical planning, supervision, and management. The DRR Project could not attempt to correct all the deficiencies but rather do the best possible job given the realities. Comparing the Project-funded works with others carried out in Peru by the CORDES or any other public sector entity, I would say that the DRR Project gets extremely high marks for quality, timeliness, and reasonable cost.

##### 5. Implementation Modes

As described in Section F, individual components could be carried out by contracting or by force account, or under an agreement with another public sector entity, which in turn could utilize force account or contracting. The final evaluation team came to the conclusion that CORDE contracting was the preferable mode. I would qualify that conclusion. Indeed, as discussed further in Section J, when a CORDE had the interest and experience in managing contracts, our experience was that contracting was preferred over force account. But there were cases when force account was more efficient. The Lambayeque Corporation, for example, had a relatively good equipment pool plus a team of engineers who were excellent in managing force account works. The CORDE carried out some 120 works - mostly small - by direct force account, and there is little doubt that it did better, especially on a cost basis, than it would have had it contracted those works out.

Implementing works under agreement with another entity has certain advantages. When the entity is specialized (e.g., the national electric company, the agricultural extension service), it generally

has the only group of specialized technicians available in the country to carry out or supervise the work. In other cases, a work's remoteness or its need for complicated community level intervention makes it advisable to utilize the entity working closest at that level. Also, having a work done by the entity eventually responsible for its maintenance and use often brings a feeling of propriety, generally assuming better quality workmanship and a higher probability of future upkeep. On the other hand, having another entity involved creates another level of bureaucracy. Many of these entities, especially the centralized sectoral ministries, are notoriously inefficient; others, especially certain municipalities and newly founded organizations (e.g., Cooperación Popular), proved to be inexperienced in carrying out projects. Furthermore, many of these entities were already strained in carrying out their normal programs, and the added responsibilities were often given short shrift. Our experience was mixed, even with the same entity. For example, the Ministry of Transport and Communications (MTC) took an interest in and efficiently managed the rebuilding of the stretch of the Pan American Highway we financed in Tumbes. On the other hand, the works detailed to the MTC in Huancavelica became paralyzed and had to be pulled back by the CORDE. I would say that the deciding factor of success generally rested with the CORDE. If it actively managed and supervised its agreement with the other entity, things generally went well. But if it washed its hands of the component, thinking it was now the responsibility of another institution, delays and problems tended to occur.

In all I would say that having various implementation options available was a positive factor in the Project's success. The needs of each CORDE and each work were different. Had we imposed or strongly encouraged one mode, say contracting, over the others, we likely would have run into more problems than we had. Where we might have done better, however, is to have oriented the CORDES more fully on the advantages and pitfalls of each mode, and on how to effectively manage each case, since some CORDES did not always choose the best mode or did not always know how to manage the one chosen.

6. Financial Procedures

USAID disbursed directly to the bank accounts of the CORDES, each of which opened an account for loan funds and a separate one for grant. The National Bank (Banco de la Nación) did a fairly good job in promptly transferring by telex our deposits to the CORDE accounts at the local offices. I consider this a positive innovation of the Project.

Disbursements to INADE and the CORDES were almost exclusively in the form of advances. This did not mean that INADE and the CORDES always had sufficient liquidity. It was common for the CORDES to be slow in complying with the various prerequisites for AID disbursements - an approved technical certification (Form "C") for each work, a voucher sent to USAID, and being reasonably up to date in liquidation of prior advances. Thus most funds went to pay accounts payable, and the CORDES generally were in a state of perpetual illiquidity.

The vouchers prepared by INADE and the CORDES had to include a statement indicating use of prior advances and status of cash on hand. Based on this statement and on other financial information we had on hand, we would process the voucher for the amount requested or for a lesser amount, based on what we reasonably expected the cash needs would be for no more than the 30 following days. This provided another check on keeping advances from getting too high. Thus, in spite of inflation and devaluation of some 100 to 200% a year during most of the life of the Project, devaluation losses were kept minimal. An exception to the 30 day advance policy was typically made at the end of the calendar year. At the GOP's request, the Project's accounting followed the GOP's fiscal years (which coincide with calendar years). For disbursements to be made for a new year, the CORDE had to submit new Forms "A", "B", and "C", and USAID had to process new commitments of funds. Thus, the last disbursement of a year was usually made large enough not only to provide enough to finish out the fiscal year (GOP provisions allow certain expenses made up through March 31 to be charged to a prior FY), but also to provide funds which could be carried into the new year, giving a cushion until the initial disbursements for the new fiscal year could be made.

Since the CORDES and INADE were often short of funds, and to avoid any further implementation delays, the USAID Controller's Office used the emergency disbursement procedures, under which local currency checks could be issued at the Mission level, based on Embassy purchases of local currency with Treasury Department dollar checks. This procedure normally allowed checks to be issued in seven to ten calendar days after receiving a voucher. On occasion the system broke down due to lack of dollar checks or to other problems, delaying disbursements some days longer.

In all, the system of advances worked satisfactorily. It would have worked better if the GOP had enabled some of its funds to have been used to front money to the CORDES, which then would have been reimbursed by AID disbursements. This, however, would have gone against the whole GOP financial control structure, which will be discussed in Section J. It would be advisable, however, to try to negotiate such an arrangement in any new project of this nature.

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At the beginning of the Project, the CORDES were asked to liquidate their advances by sending original expenditure documentation to USAID for its review and processing. This system proved unwieldy, both from a paperwork sense and because the Controller's Office had too few analysts to review the documentation. Plus, no field reviews were taking place. By mid-1984, there was literally a roomful of unreviewed and unprocessed liquidations.

This system was revamped in the following ways. First, USAID requested that the CORDES only send summary liquidations to USAID, using a format established by PIL. Secondly, DRR contracted four financial analysts, whose principal task was to review the original documentation in the field. This system was highly successful. Spending 60 to 70% of their time in the field, the financial analysts were able to do such important tasks as check inventories, review the documentation relating to procurement and contracting procedures, conciliate bank statements, and make spot checks on works in progress. As a result, there was undoubtedly better control of expenditures than had documentation continued to be reviewed primarily at the Lima level. Furthermore, the financial analysts provided assistance to the CORDES in complying with AID's financial procedures. Consequently, liquidations tended to be submitted in proper format and on a fairly regular basis.

It should be noted that the financial analysts did not replace the Controller's Office. Once the financial analysts reviewed the liquidations in the field, DRR would send them to the Controller's Office with a memo, which indicated our recommendation of the amounts to be approved and the items to be disallowed. The Controller's Office would then review the summary liquidation and the memo and, if in agreement, would issue a no-pay voucher. There were many times when the Controller's Office would call DRR for a clarification. Also, on two occasions, DRR and the Controller's Office jointly agreed that an outside public accounting firm be contracted to review the liquidations and other accounting records of two CORDES.

Peru is a country with considerable corruption, and a \$200 a month accountant or purchasing agent handling hundreds of thousands of dollars of project funds cannot help but be tempted to channel some aside. While I cannot deny with certainty that such irregularities occurred, I would say that this was probably as honest a project as could be implemented in Peru. The constant visits of the financial analysts and their in-depth reviews made it difficult to misuse Project funds. When cases were discovered, which happened some three or four times, they were vigorously pursued and the money was returned. In short, the public sector employees with access to Project funds apparently felt that it was easier to misuse other

funds than AID's. While the press was filled continuously with various CORDE scandals, there were remarkably few accusations of misuse of funds in the DRR Program. Furthermore, the GOP's Controller General carried out an extensive audit of the Program, sending teams to every one of the participating CORDES and spending weeks at INADE, with no negative findings of significance.

The DRR Project had some noteworthy financial complexities. USAID accounting records were kept on a subproject basis by year. At the end of each year, undisbursed balances had to be decommitted, unspent cash balances had to be transferred from one year to the next, and a whole series of new commitments had to be made for the new year. Plus there were continual adjustments to take care of such items as unspent contract balances and the amounts reimbursed to the CORDES by INADE (with PL480 Title I funds) to cover ineligible expenses. Each year there were many hundreds of accounting entries. Sometimes peculiar situations occurred, such as what to do with end-of-year cash balances from loan funds when in the new year the CORDE had spending authority only for grant funds. (See Section J for a discussion of GOP financial regulations, which greatly complicated the financial management of the Project.) Fortunately, both the Controller's Office and DRR had excellent financial people, who performed their tasks with accuracy and dedication. Also, the newly instituted computerized financial control ("MACS") reports were extremely useful in managing the flow and use of funds. In all, I would say that this was as well managed a project in the financial sense as any which AID has had in Peru, and its features could certainly be adapted to other USAID projects.

## 7. Reports

The ProAg stipulated that INADE submit quarterly reports on Project progress and accomplishments. While INADE sometimes consolidated quarters into as long as a year, it did submit reports for every time period during the Project's life. These reports were useful for DRR and make an excellent record of progress for those interested in looking deeper into the Project. (The ProAg also stipulated that INADE submit quarterly shipping reports for all goods and commodities shipped to Peru for Project use. No goods were purchased outside of Peru by the GOP specifically for Project use - any imported goods were considered shelf items, so this report never had to be submitted.)

The CORDES were asked by DRR and INADE to submit one report on a regular basis - a monthly report on physical and financial progress. Although this could be prepared manually, each CORDE was provided simple software and training on how to prepare the report on its IBM



PC computer (see Section J). While compliance was not perfect, the CORDES submitted the reports on a satisfactory basis, both as to quality and timing. This report was an invaluable management tool to INADE and DRR.

The CORDES were also asked to submit three reports as the Project neared its end. For each component which was completed, the CORDE was asked to submit a socio-economic report, detailing the outputs achieved, the number of immediate and longer-term beneficiaries, and the cost of the work. This information formed the basis for the data presented in Section F and the Annex of this report. Secondly, INADE sent each CORDE a diskette with instructions to input the physical accomplishments of each component, in somewhat different form than the socio-economic report. INADE has compiled this information for various reports to the GOP. Third, the chief of each PIRR unit was asked to submit a final report, following a basic outline prepared by INADE. These reports, in addition to containing a wealth of data, present the personal impressions and opinions of those in charge of each program.

Finally, it should be mentioned that DRR had its own computerized monitoring system and generated a number of reports for its own management use, inputting information from the above mentioned CORDE/INADE reports as well as other sources. This is discussed further in Section J.

In all, the reporting system was effective. It was kept simple enough not to be an undue burden on the CORDES, but it was structured to provide the information needed by INADE and USAID to manage the Project.

#### 8. Liquidation of Works

GOP regulations establish a three step process to be followed when a work is completed. First, a liquidation document must be prepared. In this document the original technical plans are updated to reflect changes made during implementation, and a complete cost breakdown is given. The second step is preparation of a resolution, signed by the CORDE president, accepting the work as physically described in the liquidation document, and for the cost indicated. The third step is the transfer of the work to the entity which will be responsible for its use and maintenance.

This process is extremely important. It provides a permanent set of completed plans, an official record of what was done and for how much, and assurance that the work is in the hands of the entity responsible for its use and maintenance. Unfortunately, in the rush

to implement works, little attention was paid to this process until the last year of the Project. By then it became a difficult task to pull together documents for so many works, many completed two years earlier.

While the CORDES eventually did an excellent job in preparing their liquidation documents, the cost of doing this was undoubtedly greater than if it had been done at the time of physical completion of each work. Indeed, a number of CORDES received a special assignment of Project funds during 1986 and 1987 to carry out this task. Some CORDES had to contract a special cadre of engineers and accountants to prepare the documents. It would have been much better had someone been hired or assigned by the CORDES from the beginning of the Project to be responsible for this liquidation process. Future projects might keep this in mind.

Where the CORDES did not do as well was in the transfer process, and a substantial number of works legally remained in the CORDES' hands at the end of the Project, even though they were in use. In Peru, maintenance is not commonly performed, and it certainly is not going to be performed by the CORDE for a work which will eventually pass to another entity. Furthermore, robbery, vandalism, and misuse of public infrastructure (e.g., throwing trash down sewers, disregarding highway or bridge weight limits) are common in Peru. I recommend that as part of the Mission's follow-on process to the DRR Project, pressure be put on the CORDES to complete the transfer process, before works deteriorate or become damaged. The odds of proper use and maintenance are much greater when these legal transfers are made.

9. PACD

The Project's completion date was originally July 20, 1986 - three years from the date of the ProAg. This was extended twice, once to March 31, 1987 and the second time to May 31, 1987. This provided more leeway to finish additional works and complete the liquidation and reporting process. In my mind, carrying out this large and complex project in just under four years was a major accomplishment. The modest extension in the PACD should not be considered a weakness.

The final evaluation team pointed out that the ProAg incorporated a little used device to provide more leeway on the forward end of the Project. The Project could finance costs occurred from June 17, 1983 - the date of PID approval. This is a useful legal mechanism available to AID project managers.

I. Other Rehabilitation and Reconstruction Activities

The following is a brief description of the other AID-funded DRR activities, the use of the Reconstruction Bond funds, and the programs of other donors. Those AID-funded activities managed by the DRR Division will be covered in somewhat more detail than the others. Readers interested in more information are directed toward the specific project files.

1. PL 480 Title II Food Donations to PVOs

Commodities worth an estimated \$18,342,716 were made available to five PVOs in three tranches from September, 1983 through September, 1984. The commodities were cornmeal (7,586 MT), vegetable oil (3,304 MT), rice (13,863 MT), flour (12,924 MT), and bulgar (11,205 MT) - a total of 48,882 MT. Two of the PVOs (C.R.S. and Cáritas) together received some 84% of the commodities, mostly for Cáritas' programs through parishes in the affected areas.

<u>PVO</u>	<u>MT</u>	<u>Value w/o Freight</u>	<u>Value incl. Est. Freight</u>
CRS/Cáritas	40,905	12,428,346	15,496,221
OFASA (SAWS)	2,978	850,772	1,074,122
SEPAS (CWS)	1,973	539,946	687,921
CARE	3,026	857,502	1,084,452
	<u>48,882</u>	<u>14,676,566</u>	<u>18,342,716</u>

Roughly 16.1% of the food was distributed to the north, the rest to the south. The needs were different in the two areas. In the north, there was a large food shortage during the floods and for the first 10 or so months thereafter. But as the reconstruction program brought money to the victims' pockets, as roads and other transportation facilities were restored, and as the successful 1984 harvest came in, the situation tended to correct itself. By mid-1984, there remained relatively few feeding activities in the north.

In the south, there was a critical food problem among at least 150,000 subsistence farm families, starting in early 1983 and lasting through the first normal harvest - May-June, 1985. The PVOs primarily distributed the food through food for work programs, whereby useful community infrastructure was built in exchange for the food.

The PVOs' administrative and program costs were covered by the PVO grants, discussed below. Transport costs from the ports to distribution points were generally covered by PL 480 Title II Monetization funds.

The food donations were managed by USAID's Food for Development (FFD) Division, which contracted a small group of persons to reside in Puno (the largest PVO program area) to oversee the PVO activities there. Monitoring reports and reports from the PVOs indicate that the food distribution program, in both north and south, was successful.

2. PVO Grants from Project 527-0277

It was foreseen in the PP for the DRR Project (527-0277) that a portion of the authorized amount would be made available to PVOs in the form of grants, to fund administrative and program costs of their food distribution program. The amount was estimated at different figures at different times. As needs were identified, the final distribution settled on was \$60.2 million for the bilateral DRR Project and \$4.8 million for the PVOs.

The funds were obligated in 20 separate agreements from August 31, 1983 through December 28, 1984, with the following distribution:

Cáritas	\$1,340,000
CRS	1,130,000
CARE	1,527,000
OFASA	483,000
SEPAS	320,000
	<u>\$4,800,000</u>

The Cáritas, CRS, OFASA, and SEPAS grants funded basically the administrative and program costs for their food programs. In the north, program costs included such items as "soup kitchen" equipment, while in the south it was more oriented toward tools, cement, and other materials. The PVOs tended to utilize the types of programs most familiar to them. Cáritas, for example, funded hundreds of small infrastructure activities organized by individual parishes. SEPAS expanded its already successful forestry program into new areas. OFASA tended to work more closely with the CORDES, in support of the latter's activities.

CARE received a disproportionate share of the grant funds in relation to the amount of food it received, due to its signing two grant agreements, totalling \$800,000, for activities in which food was not utilized. One was a subproject in Puno, whose principal objective was to construct or terminate 15 small irrigation systems, and on the irrigated land produce seed quality potatoes and other crops. The subproject fulfilled this objective, irrigating 572 hectares farmed by 1,410 families. Based on preliminary results, potato production on the land has risen from 5 to 12 MT per hectare, and other crops are showing similar increases in yield. The \$500,000 subproject is

expected to achieve an annual net increment in production of \$742,400. The subproject also constructed 13 rustic storage facilities and 622 shallow wells.

The other CARE subproject not involving food was a house construction and rehabilitation activity in Piura and Tumbes, in conjunction with HG funds channelled through the Materials Bank and a small amount of DRR Project funds channelled through the CORDES. In the Department of Piura, 516 damaged houses were rehabilitated and 398 new houses were constructed, in a total of 11 sites. In Tumbes, 203 new houses were built. Except for a problem with leaky roofs in Tumbes, now being corrected, this was a successful activity, with good community participation. This grant was managed by the DRR Division, while all the others were managed by FFD.

In all, the PVO activities were successful. The biggest weakness was lack of coordination at all levels, from USAID (both FFP and DRR seemed always too busy to talk together) to the field level (the PVOs often did not want to talk with the CORDES or even to each other). Because of this, some needy areas never received coverage, some duplication occurred, and some excellent opportunities for joint programming were missed. Stronger coordination mechanisms in both USAID and the GOP (as recommended in Section J below) might help stem this problem in the future, though it must be recognized that one of the realities (and strengths) of the PVOs is that they are independent entities.

### 3. PL 480 Title II Monetized Food

A bilateral agreement was signed September 22, 1983 to donate 10,600 MT of vegetable oil to the GOP. Since a large portion of Peru's vegetable oil comes from cotton seed grown on the northern coast, there was a severe shortage of this commodity in 1983. The vegetable oil arrived in five shipments from October 27, 1983 through January 18, 1984 and was sold by the GOP National Commodities Marketing Company (ENCI).

In accordance with the Agreement, the funds were placed in an interest bearing account to maintain their value, with INADE in charge of the utilization of the funds. All uses of the funds were required to have USAID's approval. On the USAID side, the Program Office was responsible for negotiation of the Agreement through the deposit of the funds in the account. DRR was in charge of the use of the local currency.

Since these were grant funds, INADE had GOP authority to utilize the local currency as it determined proper. INADE took its role seriously, setting up a system whereby it would present proposals to USAID on the same formats utilized by the DRR Project, and the Mission Director would countersign to indicate AID approval. To coordinate and manage the subprojects, INADE established a small separate unit within the GRR, complete with technical personnel and accountants.

In all, 57 subprojects were financed. Fifteen of these, representing approximately 26.8% of the total amount, were with the five U.S.-affiliated PVOs which received donated food and Project 527-0277 grants. Much of this went to distribute food from ports to distribution points, but a few other activities were funded as well, such as canal building and school reconstruction. Four other subprojects were with Peruvian PVOs, most helping to support feeding programs in the north.

Most of the rest of the subprojects were with the CORDES, funding activities which by their nature (e.g., distribution of WFP food) or because of various budget restrictions were not appropriate for funding under the DRR Project. These included health campaigns, bridge and road repair, distribution of roofing materials donated by Canada and Japan, and rehabilitation of small irrigation systems.

Since the DRR Project could not operate in Ayacucho, one large subproject and two smaller ones, totalling over \$1.25 million, were approved for there. The large subproject, with the CORDE, substituted for what would have been financed under the DRR Project, involving canal rehabilitation, a variety of agricultural activities, and the construction of small community infrastructure. One of the two small subprojects was to build an orphanage for children abandoned as families migrated from the twin blows of drought and terrorism. The other was an interesting activity, also with a U.S. PVO - Rural Development Services, in which credit was made available to 94 rural communities, utilizing the FINCA model established in Bolivia and other countries.

One of the 57 subprojects was to support INADE's PL 480 operating unit within the GRR. This amounted to some 6.9% of the funds.

One other use of the local currency funds was to advance money to the CORDES to initiate crucial DRR activities, while documents were being processed through INADE and USAID. This was done a total of 11 times with seven different CORDES, all but one of the times in the first half of 1984, when getting activities started took on a special urgency. USAID would then disburse DRR Project funds to INADE instead of the CORDE, to pay back the advance. This was a highly useful utilization of the PL 480 funds.

In all, the local currency generated by the food donation was well used. INADE took its responsibilities seriously, and many excellent subprojects were funded which otherwise would have had no funding source. INADE recently prepared a final report on the 57 subprojects, showing an impressive array of benefits, including 59 km of canals constructed and 185 rehabilitated, 350 MT of potato seeds purchased for Puno, 61,663 MT of foodstuffs transported, and many others.

The only problem area was that even though the funds were deposited in an account paying the highest interest rate permitted by law, devaluation exceeded that rate, causing a loss in real value. I estimate that a value of \$6.7 million in local currency was obtained from the sale of the \$7.9 million of vegetable oil. This is a difficult issue to deal with, since the interest rate at the time appeared reasonable. Devaluation outstripped virtually every expectation.

4. PL 480 Title I

A special Title I agreement for disaster assistance was signed on July 18, 1983, to provide 18,000 MT of rice and 10,000 MT of vegetable oil, worth a total of \$10.5 million. As with the Title II Monetized Agreement, there is no doubt that the food, which arrived the last four months of 1983, fulfilled a real need within the country, which alone would justify the assistance.

Unlike the Title II Monetized program, and even though the agreements were virtually identical, there were serious problems with the local currency generations:

- a) While ENCI apparently deposited all of the proceeds from the sale of the vegetable oil, the Rice Marketing Board - ECASA - evidently deposited only a fraction - some 50 to 70% - of the proceeds from the sale of the rice. There were some vague excuses about poor quality rice, but nothing was ever put in writing.
- b) Since these were loan rather than grant funds, the actual account was in the hands of the Ministry of Economy and Finance (MEF), rather than INADE. INADE could only request disbursements. MEF was secretive about the status of the account. Despite repeated requests from INADE, and one or two from USAID, we never had reliable information about the amount in the account.
- c) USAID's Program Office made only a half-hearted attempt to deal with the two above issues.

- d) Another effect of these being loan funds was that they were subject to the whole array of GOP budget procedures, discussed in detail in Section J below. Consequently, use of these funds required a budget law passed by the GOP Congress. The CORDES or INADE required monthly spending authorities.

These problems caused considerable frustration on the part of those assigned to manage the local currency - INADE on the GOP side and DRR for the Mission. In spite of the problems, however, the local currency served useful purposes:

- a) It reimbursed the CORDES for ineligible expenses under the DRR Project (primarily taxes), amounting to over \$600,000.
- b) It purchased over 50 vehicles for the CORDES - essential for carrying out their DRR Programs.
- c) In 1986, when it was less attractive than ever for the DRR Project to operate in the central and southern highlands, slightly over \$2 million of the local currency was programmed to complete on-going works in Huancavelica, Apurímac, Cusco, and Ayacucho (in the last case, picking up unfinished activities from the Monetized Title II program). INADE's GRR entered into an agreement with INADE's Central-South Sierra Special Project (PESCS), which was highly familiar with the area, to handle the distribution of funds and the monitoring of the activities.
- d) It financed several key highway reconstruction and other DRR activities in late 1984, when budget authorities were restricting utilization of additional DRR Project funds.

As with Monetized Title II, the Title I funds also suffered from devaluation. I would estimate that the real value of the local currency funds actually utilized was slightly over \$6 million, out of the original value of food of \$10.5. How much of the loss was from the original deposit shortfall and how much was from devaluation, I cannot say.

In all, the food aspect of this assistance was positive, as was the impact of that part of the local currency which indeed was used. The Mission may or may not at this late date wish to pursue the status of the account with more vigor. If special PL 480 Title I programs are utilized again in the future, the Mission may want to monitor them more closely or utilize monetized PL 480 Title II instead.



5. Disaster HG

The disaster HG was an amendment to existing HG-011 - facilitating its negotiation. It was signed May 1, 1984 for \$12,500,000, and half of that was obligated (disbursed by the lender into an escrow account for future disbursements to the project) the same day. The other half was obligated November 1, 1984. The borrower was the Housing Bank of Peru. The original December 31, 1985 PACD was extended to March 31, 1987.

The HG had three implementing entities. The Savings and Loan System made subloans directly to affected middle class families for home rehabilitation and rebuilding. Likewise, the Materials Bank made subloans in the form of materials to affected working class families for the same purposes. Finally, the Housing Bank made loans to electric and water utilities to enable them to provide connections to families who had lost their utility services, in the form of subloans which would be recuperated in their monthly bills.

The HG served over 37,000 families. Approximately 62% of the funds went to over 28,200 families for restoration of electrical service, at an average cost of \$206. Another 6% went to replace water and sewerage services for some 1,300 families, at an average cost of \$570. The remaining 32% served close to 8,000 families with rehabilitation or reconstruction loans (over 7,000 through the Materials Bank), at an average cost of \$504. The HG can be considered a successful element of the DRR Program.

6. Disaster Assistance Program Loan

The El Niño disaster had a significant macro-economic impact on Peru. In addition to a substantial decline in GDP (11% in 1983, of which at least one half was directly attributable to the effects of the disasters), Peru lost at least \$280 million in net foreign exchange due to reduced exports (primarily fishmeal, petroleum, and cotton) and increased imports (primarily food). On May 11, 1984, AID and the GOP signed a program loan (527-F-093) to provide \$60 million to Peru, designed to reduce the foreign exchange shortfall and stimulate economic recovery. The loan funds were to be changed to local currency by the GOP Central Bank. Seventy-five percent of the generated local currency was to be placed in an industrial reactivation fund through the Peruvian Industrial Bank, for sublending to private firms through public and private intermediate credit institutions. Another 23% of the funds were to be utilized as counterpart funds by the GOP, to support AID's and other donors' development and reconstruction projects. The final 2% was to help defray local USAID operating costs. Thirty million dollars was

disbursed to the GOP in June, 1984, and the remainder a year later. Utilization of the second tranche was delayed, however, until exchange rate conversion problems were resolved.

The loan, which has been managed by USAID's Office of Development Resources, has been successful in achieving its foreign exchange and industrial recovery objectives. It has, however, been hindered by a series of complex problems, as to agreement on rate of exchange for local currency conversion, diversion of funds by the Industrial Bank for other purposes, limited participation of private intermediate credit institutions in the program, overly complex information required of subloan applicants, and an inadequate subloan monitoring system. All these are well documented in the project files. The substantial efforts successfully taken by the Mission to correct the deficiencies are also well documented.

#### 7. Reconstruction Bonds

The GOP collected Reconstruction Bond funds for the period of a year as a forced-savings mechanism, from the salaries of most categories of Peruvians earning over a certain amount. The DRR Project ProAg stated that \$22 million of such funds would be considered counterpart to the Project.

The GOP collected S/.354,460 million, which is roughly equivalent to \$139 million, using the exchange rate of the last day of the month in which the collections were reported as having been made. The GOP also collected S/.164,339 million in interest, which is equivalent to over \$25 million.

Of the amount collected, 72.4% was disbursed to the CORDES for rehabilitation and reconstruction activities. The remainder went primarily to the Ministry of Transport and Communications for rehabilitating major highways; and smaller shares went to the armed forces, Materials Bank, and other entities for their DRR programs. The National Bank charged a 1% fee for handling the collections of the funds.

The percentage shares distributed to the CORDES was roughly the same as in the DRR Project, reflecting the extent of damage incurred. For example, Piura received 30.4% of the whole, and the four major departments (Piura, Tumbes, Lambayeque, and Puno) together received 62.2%. Ayacucho and Lima together received 8.1%. The other 11 departments received 29.7 %.

The Reconstruction Bond funds distributed to the CORDES were coordinated by INADE. The majority of the funds in real terms were disbursed in 1983 and early 1984, during the crunch to reopen roads and get the coastal irrigation systems back in operation. Consequently many works were implemented with less than ideal plans and supervision, but this could hardly have been any other way under the circumstances. Recognizing therefore that there was probably a certain amount of inefficiency and waste early on, the Reconstruction Bond funds were on the whole reasonably well utilized. While they more than adequately served as counterpart to the DRR Project, their utilization as counterpart for IDB and World Bank credits was not maximized, for reasons discussed in Section J below.

#### 8. Other Donors

This is the area in which we have the least information, due in part to INADE's not coordinating the IDB and World Bank credits, and to less than systematic coordination among donors (see discussion in Section J below).

The IDB reprogrammed existing loans in the irrigation, electricity, water and sewerage, and transportation sectors toward rehabilitation and reconstruction needs. This proved extremely useful in rapidly getting works underway, especially in irrigation. The IDB then signed special reconstruction credits for the transportation, water and sewerage, and electricity sectors. The total amount of IDB rehabilitation and reconstruction financing was in the area of \$100 million.

The World Bank provided \$27 million to the transportation sector for road reconstruction. It also programmed a portion of its on-going loan to the Chira-Piura Special Project for rehabilitation and reconstruction of that important irrigation system (estimated at \$5 million).

The German Government provided loans of over \$2 million from existing and new credits to repair the Tinajones Irrigation system in Lambayeque. This was coordinated by INADE and the CORDE.

The Japanese and Canadian Governments provided roofing material for Piura and Tumbes, and the Soviet Union provided construction equipment for Lambayeque. The Canadian Government also financed a fund of over \$1 million which could be used by the CORDES for certain community-level activities. All of these were also coordinated by INADE.

It is difficult to make comparisons, because of the different nature of the activities. The IDB credits, for example, went mostly for large-scale works, with entities with which it had had a close working relationship. AID, on the other hand, concentrated more on small to medium-scale activities, through the INADE-CORDE route. Nonetheless, where there was overlap (e.g., the Pan American Highway segments in Tumbes), the AID-financed activities outperformed the others as to timing, cost, and quality. Furthermore, informal contacts with IDB officials by USAID staff, and interviews by the final evaluation team, indicate considerable IDB disappointment with the results of their DRR program. Whether the deciding factor of the DRR Project's success was the institutional mechanism used, or the high level of TA and management presence, or a combination of both, is a matter of speculation, but the DRR Project appears to have been the most effective of the major outside interventions.

There was some cooperative funding among the various elements of the Program. For example, housing in Piura and Tumbes was constructed utilizing HG credits through the Materials Bank, a PVO grant to CARE, and funds disbursed to the CORDES from the DRR Project. In Puno, a number of DRR activities were supported by OFASA food. But these arrangements were the exception rather than the rule and probably represented only a small fraction of what might have taken place. The limiting factors were inadequate coordination mechanisms, at both the INADE and USAID levels. Both will be discussed in Section J.

In spite of that, the various interventions and funding sources complemented each other well, addressing Peru's different DRR needs (e.g., food, housing, macro-economic situation, major infrastructure, community level activities). The DRR Project alone would not have been successful had these other elements not existed.

## J. Special Issues

There are several issues which must be considered in the context of the entire DRR Program, not just the DRR Project. They are presented here in no special order:

### 1. GOP Coordinating Role

The INADE-CORDES institutional mechanism worked quite well for both the DRR Project and Reconstruction Bonds. Looking at the rhythm and accomplishments of the IDB and IBRD projects versus the DRR Project, I would say that there is no doubt that the INADE-CORDES route was more effective. Further evidence is that virtually all of the most problematic components in the DRR Project were those done under

agreement between the CORDES and the sectoral ministries. The final evaluation team also came to the conclusion that the INADE-CORDES mechanism was more effective than dealing directly with the ministries.

There were some elements of the DRR Project which INADE did not coordinate, notably the Ministry of Health and Materials Bank subprojects. And while most of the Reconstruction Bond funds were channelled to the CORDES and coordinated by INADE, some went directly to the ministries, principally the Ministry of Transports.

It is understandable that IDB and IBRD preferred to conduct business with ministries they were familiar with, and with which they already had agreements. By reprogramming on-going agreements, many months were saved versus negotiating new ones. It is also understandable that INADE, as a new institution, was reluctant to confront established ministries, which were eager to conduct certain aspects of the DRR Program on their own. Yet what were the costs of having two institutional mechanisms in force at once? One cost was that no entity in the GOP knew the entire picture of what was going on. Often INADE would find out by chance that a major road segment was going unfunded or that completion of an INADE-coordinated work was dependent on an action taking place in a ministry-funded work. Or often the ministries gave less priority to works done under agreement with the CORDES than to works they did directly. A bigger cost was that because of two systems being in place simultaneously, significant obligated funds were never able to be utilized. As indicated above, the GOP raised Reconstruction Bonds totalling some \$139 million, plus \$25 million in interest, which in theory should have been sufficient counterpart for all donors. But in practice INADE programmed its share of the Bonds for priority CORDE activities without much regard for the needs of the central ministries; and the latter programmed their shares without much regard for what the CORDES were doing. According to information provided by the IDB to the evaluation team, the GOP lost the use of some \$30 million in approved financing due principally to lack of sufficient counterpart.

I consider it a serious deficiency in the DRR Program to have had two systems operating simultaneously. The GOP could have addressed this by having established clearer legislation and by having negotiated a coordinating function for INADE in the reprogramming amendments to the IDB and IBRD agreements. I strongly recommend that in future disaster reconstruction programs, one entity be clearly named as coordinator for the entire program.

In Peru, Civil Defense is designated as the entity to coordinate disaster assistance during the immediate emergency phase. INADE has in its list of organizational responsibilities, as approved by the GOP

Council of Ministers, that of coordinating all longer-term rehabilitation and reconstruction activities. In practice, though, this is not always the case. When disasters are large, highly visible, or in politically important areas, other entities generally preempt Civil Defense and take control. In some disasters, it has appeared that several entities are vying for control and none is effectively in charge. Likewise, in several disasters this year requiring longer-term reconstruction activities, ad hoc coordinating committees were established without INADE participation.

INADE did an excellent job coordinating the DRR Program stemming from the 1983 disasters. While it is not realistic to expect INADE to keep its GRR unit staffed, idly awaiting a new disaster, it is realistic to expect INADE to be able to quickly gear up and participate in a new effort. A substantial number of the GRR staff and the INADE-contracted CORDE staff have been retained by INADE in other divisions. It would be easy to detail these people back to a newly reinstated GRR. Without a doubt, INADE has the most experienced group of people in Peru in reconstruction. That experience should not be wasted when needed. Thus I recommend that USAID do what it can to encourage the GOP to consistently utilize INADE as its reconstruction coordinator in substantial disasters.

2. Donor Coordination

The final evaluation team concluded that structured, periodic contacts among donors would have enhanced the DRR Program, rather than relying only on informal contacts once the initial emergency phase had ended. I agree completely. Indeed, a case of double funding which required considerable time to clear up could have been avoided, and a more rational program in certain sectors could have been achieved with better coordination. The team suggested that AID might have taken more of an initiative in this area. Perhaps. But I suggest that the GOP should have taken a more active role. This is another argument for one entity serving as overall DRR coordinator. Indeed, in future disaster reconstruction efforts, I recommend that the GOP establish periodic, structured coordinating sessions among donors, and that USAID actively encourage and support such an effort.

3. GOP Financial Regulations

Few aspects of DRR project management were more difficult and unpleasant than coping with the GOP's financial regulations. This probably took up more of INADE's time and energies than any of its other roles. Furthermore, these complex and archaic regulations probably caused more delays and more increased costs than any other factor, and they significantly reduced the effectiveness of the PL 480 Title I funds.

The GOP budget process begins in July, when all public sector entities are required to submit a detailed budget in Intis, on a subproject basis for the following year to the Ministry of Economy and Finance (MEF). The MEF issues detailed instructions on how to prepare the cost estimates, including estimated dollar exchange rates and rates of inflation, insuring that an inadequate amount of Intis are programmed for each subproject. The MEF then studies the budget, often making cuts. For example, in late 1985, it arbitrarily reduced the 1986 budgets of all the CORDES by 51%. The budget then winds its way through the GOP bureaucracy, finally arriving at the GOP Congress, which often makes further cuts. The budget is finally approved in late December.

Since the budget always is insufficient, supplemental budget authorities are invariably necessary. This requires the approval not only of the MEF, but also of the Congress - a process that takes anywhere from two to eight months. Similarly, if a CORDE wishes to transfer budget authority between subprojects, it requires a paperwork process with the MEF that takes a good two months.

Even when a CORDE has budget authority and has funds on hand - say from an AID advance - it still cannot spend the funds until it gets spending authority from the MEF. This is granted on a monthly basis and only upon submission of a considerable paperwork, detailing how the funds will be spent as well as how funds were spent in previous months.

Complicating the system is the often intransigent attitude of MEF personnel. For example, after considerable lobbying on the part of USAID and INADE officials, a clause was made a part of the 1986 budget law, establishing that supplemental budget authorities would not require Congressional approval but could be granted at the cabinet level by resolution of the Council of Ministers. Nonetheless, every time INADE and the CORDES presented the paperwork for a supplemental budget authority during 1986, MEF officials found some excuse for processing it the old way through the Congress.

The above system applies for all loan funds, as well as for GOP-generated resources. Grant funds are completely exempt. The DRR Project was able to cope reasonably well because it had a healthy dose of grant funds, which INADE could quickly program to fill gaps. Nonetheless, there were certain larger works which INADE preferred be loan funded, which were delayed while supplemental credits were being obtained. And the fact that loan funds on hand could not be spent until the monthly spending authority was obtained, caused considerable devaluation loss as well as implementation delays.

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This whole system is geared to keeping spending down in a public sector always suffering from illiquidity. It makes no sense, however, when funds are assured - whether foreign credits or earmarked locally generated funds (e.g., Reconstruction Bonds). A fast moving project cannot afford the disruptions of coping with this system. Thus I strongly recommend that in any future project of this nature, either exemption from the system be negotiated in the Project Agreement, or all funding be from grant funds.

#### 4. Audits and Evaluations

The Project was audited twice, in early 1985 by the GAO and in mid to late 1986 by the IG. The GAO team was in-country for three weeks. Its draft report focussed on the timing of AID's disaster assistance and recommended that a new category of assistance be created to implement DRR activities. USAID believed that the draft report did not take into account the tremendous efforts early in the Program. Furthermore, the Mission felt that the time standards set by the GAO were arbitrary and not in accordance with the PP or ProAg. It also felt the GAO team had not understood the institutional strengthening aspects of the Program. The Mission thus prepared a lengthy response to the draft report. Over a year passed and we thought the report had died on the vine. In March, 1987, quite by chance, a visiting professor said he had read the GAO report and gave us his copy. It had been issued in November, 1986 - considerably toned down from the draft version. To date we have been unable to locate anyone in AID/W who is aware of its existence.

The IG came twice to country, once to do its audit survey and later to actually carry out the audit. The three team members spent a total of about 16 person-weeks in country. The result was two reports. One had two recommendations - that the experience of the health subproject be documented to avoid similar errors in the future, and that river defenses be built at a particular location to protect investments made further downstream. The second report focussed on the subproject selection criteria, recommending that AID/W issue guidelines as to what is and is not appropriate in a DRR context.

We are, of course, gratified that neither audit came up with any negative findings as to use of funds, compliance with AID regulations, or project management. Nonetheless it should be recognized that both of these audits took up a great deal of our time, both in orienting the teams and in responding to the draft reports - so much time, in fact, that it disrupted the flow of the Project for several weeks several times. I recommend that agreement be reached with the audit agencies that during the implementation period of a DRR project, audits only focus on major compliance issues. If initial surveys



reveal no issues, the audit should be dropped. Audits on more generic matters (e.g., subproject selection criteria, or whether a new category of assistance is required) should be left to the end.

Evaluations, on the other hand, proved to be useful management tools. In mid-1984, AID/W, on its initiative, contracted with Checchi & Co., using Project funds, to carry out a mid-term evaluation. The Project at that point was in a relatively early stage, and there were a number of problem areas hindering its efficient implementation. The team made a number of useful recommendations, which were implemented, in such areas as streamlining financial liquidations, tightening up subproject selection procedures, and enhancing USAID-INADE relations.

One of the recommendations of the team was to utilize mini-evaluations as a way of understanding and analyzing specific topic areas. We contracted for two such evaluations. One was with a U.S. expert on Peruvian decentralization to study the DRR Project relationship with the CORDES and the Project's effect on them. The other was with a Peruvian consulting firm to study the use and impact of rotating funds in the southern subprogram. Both evaluations helped us gain a greater understanding of areas about which we knew less than we should have. The rotating fund evaluation, in particular, led to some useful recommendations to the CORDES for improving their management of the funds.

Finally, USAID contracted for a final evaluation of the entire DRR Program, also with Checchi & Co. Unlike the other evaluations, this was more an exercise in reflection, with considerable useful analysis of the implementation experience. A number of lessons learned were cited, and recommendations were made for future similar programs. This final report owes much of its substance to the conclusions of the evaluation team.

These four evaluations also were disruptive to the Project, but much less so than the audits. The evaluation team members were sensitive to project management needs, and there was a sense of working together to common ends, rather than the adversarial relationship an audit naturally engenders. Also, both Checchi teams were headed by former AID mission directors with experience in similar projects, and the experts carrying out the mini-evaluations were familiar with their fields, so the orientation needs of the evaluations were far less than for the audits. In short, my assessment is that the benefits of the evaluations were worth the costs, in terms of both money and time spent, and I recommend that a strong evaluation program be made a part of similar future projects.

5. DRR as a Separate Assistance Category

The GAO recommended that AID establish special procedures for disaster rehabilitation and reconstruction projects, with stepped-up implementation timetables and in-place waivers. While there is a certain attractiveness to this, I would say that the potential dangers outweigh the potential benefits. Literature on the subject cautions (see, for example, Disasters and Development by Frederick Cuny, Oxford University Press), and our experience confirms, that longer-term rehabilitation and reconstruction is quite different from short-term emergency assistance and should be handled very much like regular development programs. Once immediate needs of the victims are met, definitive reconstruction should be carried out with due regard for proper technical planning and financial controls. Establishing a new category of assistance carries the risks of cutting corners too much and unduly raising expectations.

In the DRR Project, waivers were utilized on a number of occasions. Those that required AID/W approval were granted rapidly. At no point did I feel that AID regulations caused significant project delays. On the contrary, AID regulations had the positive effect of establishing a certain discipline and high standards to the Project. Delays were generally caused by the GOP or by other factors discussed in this report. All in all, the DRR Project worked, and worked well. It shows that an effective rehabilitation and reconstruction project can be carried out under existing AID regulations. If the recommendations in this report and in the final evaluation report are followed, future DRR projects can work even better. Therefore I conclude that a separate assistance category for DRR is not called for.

6. Pesticides

Perhaps the one exception to the conclusion that current AID regulations are adequate for the implementation of DRR projects is the case of pesticides. AID regulations not only prohibit the purchase of pesticides with project funds, unless a rigorous and lengthy approval process is carried out, but also prohibit project funds from supporting the use of pesticides not specifically authorized. Apparently PL-480 local currency generations also fall under the same regulations, though the rules on this are not clear.

Whether we like it or not, the reality is that agricultural recuperation after a natural disaster requires the use of pesticides. Given the urgent time frame, farmers and extension agents are going to want to use the pesticides they are familiar with - those commonly sold in the host country. There is no time to try to introduce new pesticides or to establish training programs for their proper use. Nor is there the time to comply with AID's difficult approval process.

The only way to operate effectively then is in a grey area. In the DRR Project, no pesticides were purchased with Project Funds. At first, pesticide purchases were permitted with PL-480 Title I funds. When the RLA advised against that, all pesticide purchases were limited to Reconstruction Bond funds. While this literally was acceptable under AID regulations, obviously many of the goods and services being paid for under the DRR Project (e.g., extension agents' salaries, seeds which required pesticides for proper growth) were being used in conjunction with the pesticides. Though the Project had its own environmental advisor, and though there was a Regional Environmental Officer close at hand, we were never completely sure when we were complying with or violating the pesticide regulations. It was an uncomfortable situation to be in.

As a member of two of the environmental groups which lobbied hard for the current regulations, I am sensitive to the issue and in general am a proponent of strict controls. But a quick moving disaster rehabilitation program is not the time to effect long-term changes in farmers' agricultural practices. I recommend that an exception be made to the regulations for projects of this nature.

#### 7. Host Country Contracting

Almost all of the major works carried out under the DRR Project were contracted, plus many of the smaller works. The local consulting firms, a number of other firms providing specific services, and hundreds of individuals were also contracted by the GOP. In general AID host country contracting regulations proved to be satisfactory and caused no significant delays or compliance problems. We provided our advisors, INADE, and key CORDES with copies of HB 11 in Spanish, plus the AID regulations were a major theme in the regional meetings with the CORDES. About a year into the Project, once we were aware of which of the regulations required further explanation, we issued a PIL summarizing these.

AID project managers are required to maintain certain information on host country contracts and transmit periodic reports to AID/W. With the early crunch of work, we were deficient in recording this information, and it required considerably more work later on to go back into the files and catch up. I recommend that in a project with considerable host country contracting, the project manager establish from the start a system for recording information on and monitoring the contracts.

Host country contracts over \$500,000 are expected to be advertised in the "Commerce Business Daily," and waivers to this rule can only be granted by AID/W. We requested waivers for several specific large

works, plus a blanket waiver. All were granted promptly. The blanket waiver eliminated the advertising requirement for all contracts between \$500,000 and \$1.5 million, up to a total ceiling of \$10 million. While this was helpful, I cannot help but wonder if such waivers were required. Once it is determined in a given project that host country contracting is the best manner to proceed, and in a country like Peru where it is hardly imaginable for a U.S. firm to be interested (or legally able to participate) in contracts of the size being contemplated, one advance waiver at the PID or PP level should be all that is required. I therefore recommend that in projects such as this with considerable host country contracting, a blanket advertising waiver for the whole project be obtained in advance. If this is not possible, a blanket waiver of the type we obtained in the DRR Project is recommended.

As to the GOP's contracting regulations, these require a certain degree of sophistication to manage properly. If the public sector contracting entity does a good job managing its contracts, the system is equitable for both parties. If not, the door opens for the contractor to take considerable advantage of the contracting entity. Indeed, with the polynomial formulas built into the contracts, it is to the contractor's benefit to try to justify extensions.

The CORDES had limited experience with contracting, and neither INADE nor the Mission realized just how sophisticated a management effort was required until we found several works bogged down in serious contractual problems. I would recommend that in any future projects in Peru involving host country contracting, a concerted effort be made to work hand in hand with the contracting entity to avoid the delays and higher costs that can easily occur if contracts are not actively and efficiently managed.

In Peru the normal contracting method is the double averaging system. On the other hand, AID's regulations require awarding contracts to the lowest responsible bidder. In AID-funded projects, AID's system legally prevails, and I would say that indeed the AID system brings lower prices. Problems occur, however, when contractors bid particularly low, in order to get the contracts, and then direct their efforts to finding ways to run up the contract amounts. The key to avoiding this is to have an effective prequalification process. In the DRR Project, prequalification was carried out by the CORDES with varying degrees of seriousness, and I would say that there was a close correlation between how well that was carried out and the amount of future contract problems which occurred.

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Finally, there is a tendency in Peru to waive or modify contracting and procurement regulations in the wake of a disaster. Waiving the regulations is usually applied by the GOP only during the emergency period, and even there I would caution its use only in the most extreme circumstances. During a rehabilitation and reconstruction period, however, the GOP also sometimes eases the rules. Indeed, in 1983, the CORDES in the most affected departments were allowed to shorten the time periods of the various steps in the contracting process, raise the limits for carrying out certain less rigorous selection procedures, and utilize certain unorthodox contracting modes. In retrospect, some of these modifications to the rules may have been useful, but overall the costs probably exceeded the benefits. For example, CORPIURA was allowed to utilize a system for contracting for bridge construction in which the same firm does both the design and the construction; the contract is awarded on a combination of price and preliminary design. This system opens itself up not only to price abuses but also to technical deficiencies, as the contractor tries to skimp on materials used. USAID resisted considerable pressure from INADE to finance two major bridges contracted under this method, and indeed one of them later developed serious physical problems. In short, I would say that it is preferable to utilize the GOP's normal procedures (except that AID should continue to insist that contracts be awarded to the lowest responsible bidder), and that these procedures are appropriate for a DRR program, but only when there is a serious prequalification process and when assistance is given the CORDES to enable them to properly manage the contracts. AID should not underestimate the importance of these prequalification and management aspects.

#### 8. USAID Structure and Support

The subject of Mission structure and support is complex and somewhat delicate. It has various aspects to it.

As to location of the DRR Division within the USAID structure, and the fact that I as Division Chief was a PSC, I would say that these caused no serious problems per se, mainly because the DR Office Chiefs were always most supportive. The fact that certain documents, particularly vouchers, had to be signed by a direct hire officer rather than a PSC proved at times to be a nuisance but caused no significant delays. Where it was frustrating being at the division level was in trying to solve the myriad small problems which will be discussed later in this subsection.

When I arrived November 2, 1983, there was serious fear in Peru about a recurrence of the El Niño Phenomenon. (There are historical examples of an El Niño Phenomenon returning a second year.) The GOP

was sponsoring a conference on the El Niño, and OFDA was financing the participation of two U.S. experts. I was encouraged to attend. Thus began my involvement as de facto Mission Disaster Relief Officer. Most OFDA-financed activities in the year or so following the 1983 disasters were indeed concerned with El Niño. But the MDRO role soon took on other dimensions. I had to concern myself with sending people to disaster conferences, providing training to foresters and fishermen, helping Peruvian Civil Defense obtain information, studying proposals for assistance, and being in charge of assessment and assistance whenever natural disasters struck in Peru (which was frequently). Being burdened with these tasks while trying to manage a rehabilitation and reconstruction portfolio of some \$77 million was just too much. It raised my average workweek from perhaps 70 to 75 hours, took valuable time away from the DRR Project, and caused more demoralization and resentment on my part than any other aspect of my job. Several times I tried to bow out of this role, but the Mission always put tremendous pressure on me to remain. I cannot overstate that I think this was a serious error on the part of the Mission. The task of managing a DRR program is a full-time and intense job. I strongly recommend that in future DRR programs the project manager not be burdened with other duties, including the MDRO job.

The DRR Division was in charge of the bilateral DRR Project, except for the Health and Materials Bank subprojects, which were under the aegis of the Health and Nutrition Division (H&N) and the Housing and Urban Development Division (HUD), respectively. HUD also managed the Disaster HG. The PVO elements of Project 527-0277 were the responsibility of the Food for Development Division (FFD) (with the exception of one \$300,000 agreement with CARE, which was the responsibility of DRR), as were the Title II food donations. The Program Office was in charge of the two PL-480 agreements from negotiation through the sale of the food, while DRR was in charge of the proper expenditure of the local currency proceeds. The Disaster Assistance Program Loan was the responsibility of the Development Resources Office. Coordination among all these offices and divisions was never formalized. Informal systems of clearances and meetings were in some cases developed, but in other cases it was difficult for us in DRR to have full information of what was going on in other divisions. A recommendation on this matter will be made at the end of this subsection.

Managing the DRR Project required the support and assistance of virtually all of the rest of the USAID Mission. This support varied greatly. On the executive level, the Mission Director and Deputy Director were most supportive, which was crucial since meetings with the Chief of INADE and other high GOP officials were frequently necessary to come to decisions on important issues. This supportive

role was flawed only on a few occasions, when important documents got bogged down for several months at a time for lack of decision at the Deputy Director level. As indicated above, the two individuals who served as Chief of the DR Office were both highly supportive of the Project and generally served as a conduit to other offices/divisions and to the executive suite.

On the technical level, the Engineering Division (ENGRI) provided outstanding support, all the more noteworthy since the Chief Engineer had been in charge of the DRR Project since its beginning and lost it upon my arrival - something which might have caused rancor in a lesser person. The Engineering Division actively worked together with DRR to solve the myriad of technical problems which arose. The contracted engineers reported to ENGRI but had a comfortable relationship with DRR, meeting with us just prior to and just after each field visit. The success of the DRR Project could never have been achieved without the active support of ENGRI.

On the other hand, support from the Office of Agriculture and Rural Development (OARD) was minimal - a shame, since DRR probably had more agricultural activities going on at its peak than all of OARD. There is a great deal we could have learned from OARD and vice versa. In theory, a support mechanism was established. OARD assigned a senior FSN to be coordinator with DRR - a task which was expected to take 50% of his time. The two contracted agricultural experts were to report jointly to OARD and to DRR. In practice, the senior FSN was assigned a host of other responsibilities and probably spent no more than 2% of his time on DRR. The two agricultural experts by default received most of their guidance from DRR. There is little doubt that a more active role on the part of OARD would have enhanced the agricultural activities in the south of Peru. And I also believe that it is not too late for OARD to benefit from the experiences of the DRR Project.

The Controller's Office was slow in expanding to accommodate the needs of the DRR Project. By mid-1984, there was literally a roomful of unprocessed liquidations. Work was slow and prone to errors. The situation markedly improved by late 1984, with the arrival of a new Controller and the implementation of a new system for submitting and reviewing liquidation summaries (as recommended by the mid-term evaluation team). With the hiring of new staff and installation of a computerized financial tracking system, the Controller's Office has become a competent unit, providing good support to the Project, the financial peculiarities of which were discussed in Section H above. Occasional slowness in clearing PILs has been our only complaint.

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Support from the Executive Office (EXO) was mixed and, on the average, poor. Though I had been expected for two months, upon my arrival there was no office space for me. After a week at a table in another person's office, I was moved to a small phoneless office, which I shared with my secretary. And so it went. As we expanded, there never seemed to be enough office furniture or equipment. Certain problems never were solved. After three years we still have not found a fully satisfactory way to send mail to our advisors and the CORDES. My memos on certain matters, such as saving more than \$50,000 by modifying the per diem structure or gaining thousands of dollars in air tickets by turning in AEROPERU ticket stubs, have generally gone disregarded. The Personnel Division in particular was consistently unhelpful when we wished to create or fill positions.

The most unfortunate lack of EXO support was in word processing. The DRR Division, which by late 1984 was the Mission's largest both in terms of people and portfolio size, was producing the most paperwork of any division. Yet in spite of two years of repeated requests to the EXO, DRR was unable to obtain a Wang terminal. With the workload requiring at least one secretary full time on the Wang, and with our PC almost fully utilized for subproject monitoring and thus unavailable for word processing, our only recourse was to beg space elsewhere. Every day the senior DRR secretary had to start the day by searching for a free terminal. Since offices where a terminal is located have preference, typically it was not long before she was ousted from that terminal and forced to look for another. This often happened three or four times a day, with the day often ending in tears. The loss in morale and productivity was significant.

To be fair, some EXO divisions were helpful and supportive, especially the Procurement Division and some segments of GSO. And after a problem of secretarial attrition, the Executive Officer was helpful in establishing a system of bonuses for secretaries who were willing to remain until the end of the Project. But all too often DRR was treated as an intruder by the administrative support staff. The sudden build-up of a division of 30 individuals appeared to be an imposition on the support staff's time. This put me in an awkward position. DRR was too low in the Mission structure to be able to demand better service. The respective DR Office, Chiefs, while sympathetic, were often reluctant to push issues which would require arbitration by higher levels. And the Director and Deputy Director obviously did not want to be bothered by housekeeping details. The one time I went over heads directly to the Deputy Director to complain about the word processing issue, he obviously felt uncomfortable about getting involved in the matter.



The important thing, of course, is that the DRR Project worked. Mission support was at least adequate to the task. Nonetheless, I cannot help but thinking how much better things would have run had we not had to spend so much of our energy on relatively minor housekeeping matters which yet impacted so importantly on productivity and morale. Furthermore, as indicated earlier, better coordination among divisions would have enhanced implementation of the entire DRR Program. So, while the structure and support mechanisms basically worked, I suggest that any future DRR program of this size and complexity be structured differently to address these matters. There are different ways to do this. A DRR czar reporting directly to the Director or Deputy Director could be assigned to coordinate and oversee all the diverse aspects of the program. Or utilizing the organization we had, weekly meetings of all participating divisions could be established with the Deputy Director, at which resolution of minor, as well as major problems, would be encouraged. Whatever the form utilized, a major effort should be made in such a large program to enhance accomplishment of the main objectives and avoid distraction by lesser matters.

9. Innovation in the DRR Program

The final evaluation team, noting that the housing program in Tumbes suffered from leaky roofs and that the seismic-resistant adobe constructions in Lambayeque were not as readily accepted by the beneficiaries as traditional construction, came to the conclusion that a DRR program was no place for technical innovation. On the other hand, the team did not focus on the fact that we provided TA and encouraged the CORDES to utilize new types of river defenses - vane dikes and gabions, which were highly effective. And given the serious problems which occurred almost every time a bridge was built, perhaps it would have been worthwhile to have provided TA in that sphere and to have suggested certain innovations as to design, technique, and control. In short, I would say that innovation per se is not wrong in a DRR program, but its costs and feasibility should be carefully weighed. Convincing CORDE engineers to use vane dikes, for example, is very different from convincing uneducated community members to use new construction techniques. In retrospect, we probably should have been more aware of the risks and benefits of innovation.

10. Vehicles

USAID made a decision early in the DRR Project to procure seven vehicles - five for departmental advisors and two for INADE's home office. Little thought was given to the needs of the CORDES. When it became apparent that the CORDES did not have sufficient vehicles to carry out their monitoring and supervisory roles, INADE decided that

the best way to meet this was to procure vehicles from the PL 480 Title I fund. This would allow the CORDES to purchase vehicles assembled in Peru, for which parts and servicing were readily available, and avoid a massive importation of some 50 vehicles, which INADE felt was politically inappropriate in a time of austerity. Unfortunately, the PL 480 Title I budget authority was not obtained until November, 1984, and it was not until late December or early January, 1985 that the CORDES had their vehicles. (Even then two CORDES were unable to effect the procurement, due to bureaucratic ineptness.) While all this was taking place, a variety of means were suggested to the CORDES to solve the vehicle problem, including vehicle rental, repair of out-of-service vehicles, and detail of vehicles from other public sector entities. These suggestions were implemented with varying degrees of success.

The lack of vehicles for a whole year definitely hindered the program. In retrospect, an early analysis of CORDE vehicle needs would have been advisable, with a massive purchase from Project funds either from the U.S. or, better yet, from Peru via a waiver, justified by the urgent nature of the Project. This should be a lesson learned for the future.

Another lesson learned is that in Peru the head of an organization will always demand the use of the best available vehicle. If a field vehicle is the best, he will co-opt it, regardless of how much this might hinder project implementation. Since this rule invariably holds, sufficient vehicles should be procured to assure that both the chiefs' egos and the field needs are satisfied.

#### 11. Peruvian Customs

The seven vehicles languished in Peruvian customs for five months. The medicines procured under the DRR Project averaged four months in customs, with considerable losses. The personal effects of various U.S. contractors suffered similar delays and losses. While all these items are officially tax-exempt, Peruvian customs seems to provoke delays, so as to earn storage charges and to enable pilferage to take place. This situation is not unique to the DRR Project.

Peruvian customs officials must think USAID personnel to be fools to put up with this situation year after year. I would suggest two measures. First, in ProAgs negotiate a clause that no project-purchased items or personal effects will remain in customs longer than two weeks. If delays occur beyond that, USAID should cut off all disbursements for that project, no matter what the effect is on the project. Second, since the losses that occur to USAID projects and personnel each year in the airport customs warehouse exceed the

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cost of stationing a 24-hour a day guard there, USAID should insist to the GOP that it be allowed to do so.

## 12. GOP Salaries

It would have been impossible to have obtained adequate personnel at the GOP's normal public sector salary levels. No qualified engineer is going to take on a difficult, full-time, pressure-filled position for \$50 to \$150 a month. As indicated in Section G, this situation was addressed to some degree by INADE's having an exemption to those salary ceilings. INADE established levels which, though still modest, were high enough to attract much more qualified personnel. INADE not only staffed its GRR unit this way but also contracted personnel for the top engineering and accounting positions in each CORDE's PIRR unit - an average of five per CORDE. This situation caused some resentment within the CORDES, but on the whole was extremely effective.

By mid-1984 a situation had become apparent in three of the biggest CORDES - Piura, Tumbes, and Puno, where tremendous pressure had been put on all personnel ever since the disasters had begun a year and a half earlier. The PIRR professionals were being paid the higher INADE salaries. The lowest-level employees (e.g., drivers) were eligible for overtime. But the CORDES' regular staff was receiving no compensation for the many additional hours of work required to support the DRR effort. Some of these people, who were crucial to the DRR Program (e.g., procurement personnel, legal advisors), had begun to resent their situation and were beginning to cause delays. INADE suggested a bonus for these people, on a one or two time basis. To qualify, an individual had to be approved by the CORDE president, the AID departmental advisor, and the Chief of INADE's GRR, based on his overtime work and contribution to the DRR Program over an eight month period. While this created some additional resentments within the CORDES, on the whole it was effective and bought the support of some crucial people at a critical time.

Whether we as representatives of the USG like it or not, the host government salary situation is something we must actively concern ourselves with. The ways it was addressed in the DRR Project were effective.

## 13. Politics

Politics deserves a mention, though it is difficult to come to any conclusions. But it very much affected the Project.

There were tremendous pressures for USAID to approve politically motivated components which had little relation to the Project's

objectives. Furthermore, when the Peruvian government changed in July, 1985, all CORDE presidents were replaced, and many of the new presidents replaced the PIRR chiefs and other key personnel. This not only required us to initiate a lengthy process of orienting the new people, but we began to observe <sup>the</sup> all too common practice in Peru of new officials' expending their energies criticizing, denouncing, and trying to embarrass their predecessors instead of directing themselves toward getting things done. Similarly, there was an active campaign on the part of party activists of the new party in power to oust the Head of the GRR and his top assistants, who had been retained by the new Chief of INADE. This reached the level of the Presidential Palace, but fortunately the Chief of INADE prevailed.

There is little an AID project manager can do to keep a project free from political influences. The fact that time must be spent on such matters must be factored in as a reality of project management. A project manager must be patient and tolerant on the one hand, and firm in resisting the most serious pressures on the other. We were fortunate that politics did not play more of a negative role in the DRR Project than it did.

#### 14. Data Management

Fairly early in the Project, DRR procured a Wang PC, for maintaining essential financial, progress, and achievement data on subprojects and components. The system was based on DBaseII, and the programming was done by a contracted expert as well as by DRR's own monitoring staff, both of whom were familiar with computers. This system greatly enhanced our ability to monitor the Project. Periodic reports on Form "C" approval status, on physical progress by component (as reported by various sources), and on financial status by subproject helped us identify potential problems and quickly address them. It is hard to know how we could have effectively monitored so many project elements without this system.

Similarly, our ability to keep track of the financial aspects of the Project was greatly enhanced by the introduction of the computerized "MACS" reports by the Controller's Office. This system has proved especially useful in identifying unused balances and outstanding advances as the Project nears its end.

By mid-1984, INADE and DRR decided that it would be worthwhile to computerize the CORDES' subproject and financial control systems, with the ability to feed this information into INADE. The Integrated Regional Development Project had had success introducing computers into two CORDES (one of which - Cajamarca - was a participant in the DRR Program), with the assistance of PATCORDES, an entity within the

Prime Minister's Office (later the Ministry of the Presidency) which provided TA to the CORDES. On the physical side, USAID procured IBM PCs for INADE, PMS, and all 16 participating CORDES including Ayacucho. (Actually, the DRR Project purchased PCs for only 13 CORDES; two others utilized PL-480 Title I funds. CORDE Cajamarca already had its PC, but we purchased complementary equipment to make it identical to the others.) On the software side, upon our request PATCORDES developed some easy-to-use software for the most common control tasks, such as preparing the periodic reports on physical/financial progress by component. Training courses were held in Lima for the CORDE personnel who would be running the PCs, most of whom had no prior exposure to computers. Also, an INADE technician traveled to each CORDE to help install the machine and provide on-the-job training. While the net result of all this was not perfect, it was highly successful. All 16 CORDES utilized their PCs for the simple reports in which they had been instructed. Many went further, hiring programmers and using the computers for a variety of financial and technical tasks. INADE's GRR set up a whole data processing section, hiring technicians and purchasing other PCs with its own funds. While we opened ourselves up with this procurement to the risk of expending considerable time and money that would have had little benefit during the life of the Project, fortunately the gamble paid off. The CORDES and INADE were receptive to the new technology, and the Project lent itself to computerization. Future projects should take into account that we are in the age of computerization.

Where we could have done better is in the area of baseline data. It is difficult for us, as the Project nears its end, to know the real impact of our efforts, especially in the south. Having had better information on the impact of the drought would no doubt have enabled us to do a better job in subproject design and selection. It's easy, of course, to say all this in retrospect, forgetting the tremendous pressure we were under to get started. Nonetheless, I recommend that more attention be paid to baseline data when starting up similar projects.

#### 15. Publicity and Marking

The departmental advisors encouraged the CORDES to comply with AID's marking regulations, and we issued a special PIL with guidelines. The CORDES complied quite well, and I would say that this was an inexpensive and effective way to gain good publicity at the local level.

The rest of our publicity efforts were not well organized and were only moderately effective. INADE utilized Project funds for magazine inserts and newspaper ads explaining the DRR Program. While

informative and well laid out, I'm afraid that few people read what they know is paid publicity. INADE also prepared a booklet on the results of its first two years, with heavy emphasis on DRR, but this was not widely distributed or read.

On a few occasions, generally when works were inaugurated, DRR, with the help of USIS, prepared press releases. DRR also prepared CORDE by CORDE albums, with pictures and written descriptions of individual works, to be shown to interested parties. Their use was limited. A pamphlet or video tape explaining the entire program was talked about but never implemented.

A few CORDES had excellent public relations offices and were able to get good press coverage, especially for inaugurations. At least three CORDES produced video tapes of their DRR programs.

Should we have spent more funds and effort on publicity?. On the one hand, the DRR program was not well understood by either the public or government officials. Better knowledge may have stemmed certain criticism as well as enhanced the USG's image as a major donor. On the other hand, Peru is a hotbed of sensationalist media, and it is difficult for serious, nonurgent news to gain much attention. The benefits resulting from a stepped-up publicity campaign may not have been worth the costs.

Whether we should have done more or not, I think that the small amount of funds we did spend for this purpose was not among the most effective Project funds spent. I would say that in any future program of this type, the counterpart agency and USAID should formulate early on a publicity plan and hire the right individuals to carry it out. As the project proceeds, the plan can, of course, be modified, but at least the elements are in place. An ad hoc, piecemeal approach is not effective.

#### 16. Security

Early in the Project a decision was rightly made not to finance subprojects in Ayacucho. All funds for Ayacucho would come from the PL-480 accounts, which required less direct AID monitoring involvement. Unfortunately, terrorism grew during the life of the Project in other areas, and some incidents were reported in 14 of the 15 participating departments. The existence of the DRR Project was certainly no secret, but it appears that the terrorists found it at least more acceptable than other programs. While Project vehicles were stopped on occasion by terrorist bands, only once (in Huancavelica, early in 1987) was one blown up. The occupants (Ministry of Agriculture employees) were "tried" and released. DRR's

own staff were never personally bothered, though the Puno departmental advisor's house was bombed a few days after he moved out. The Puno PIRR chief's house was also bombed.

On the other hand, robbery was a constant problem. DRR American staff suffered from numerous car and house break-ins, plus other minor crimes like watch snatching.

I mention all this for the record, with no firm conclusions to make. We were very lucky that the terrorists did not focus in on the DRR Project. Had one of our staff been killed or several of our major works blown up, the whole Project would have taken a different turn.

#### 17. Personnel Recognition

One of the most positive aspects of the DRR Project experience was the camaraderie which developed among the staff. There definitely was a mystique in DRR. Some of this developed naturally from the nature of the work, but we also tried hard to encourage it. When the departmental advisors and most other staff were in town, evening or weekend social events would be planned. Happy hours were organized frequently to celebrate birthdays and other noteworthy events. Though such activities took time away from work, their payoff was positive. The productivity, dedication, and spirit of teamwork were extremely high among the DRR staff.

Unfortunately, this recognition barely extended beyond DRR. Departmental advisors and other contracted employees - Peruvian and American - generally departed after two or three years of dedicated work without a word of thanks from the Mission. Every time I submitted a request for a meritorious award for the FSN staff (which I only did for six individuals), the Personnel Office threw the request back for more information or reduced the monetary award to a significantly lower amount (even when the awards were paid out of Project funds). One of the most time-consuming processes I went through in this Project was to obtain certificates of recognition (with no monetary award) for two outstanding American staff members. Finally, it should be mentioned that during most of the life of the Project, there were prominent plaques in the Mission's entranceway honoring the team which had worked on the reconstruction program after the 1970 earthquake. At one point I suggested to my superiors that similar recognition of the DRR Division might bolster morale. The Mission chose not to proceed with this suggestion.

Finally, it is a shame that the Mission has shown so little interest in retaining DRR staff. Three excellent Peruvian departmental advisors and two agricultural specialists recently departed - with a

wealth of field experience as well as knowledge of AID and GOP regulations. I realize that the AID program in Peru is not growing and is burdened by uncertainties. But new staff is occasionally taken on, and some counterpart agencies must be looking for good people. I hope that the remaining staff and the still unemployed former staff are considered whenever any new opportunities arise.

K. Acknowledgments

I would like to acknowledge and thank the following for their support of the DRR effort:

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- Juan de Madalengoitia and Biaggio Arbulú, INADE Chiefs; Eduardo Guerra, GRR Chief; Juan Robles, GRR Deputy; and Gladys Gómez, Miriam Choy, Ernesto Nauth, Guillermo Hernández, Luis Atkins, Pedro Nicolás, Francisco Montenegro, Eduardo Larrea, Luis Wherrems and the many other dedicated INADE staff members.
- The presidents, general managers, PIRR Chiefs, and the numerous other dedicated professionals and staff of the 15 participating CORDES.
- The DRR team:

Keith Kline - Monitoring Coordinator (1984-86)  
Karin McFarland - Assistant Monitoring Coordinator (1985-87)  
Jeanne Maushammer - Assistant Monitoring Coordinator (1984-85)  
George Baldino - Chief of Party (1984-87)  
Tim Truitt - Departmental Advisor (1984-87)  
Elias Hill - Departmental Advisor (1984-86)  
James Graham - Departmental Advisor (1984-86)  
Robert Sparks - Departmental Advisor (1984-86)  
Michael Kaiser - Departmental Advisor (1984-87)  
Luis Pérez - Departmental Advisor (1984-86)  
Demetrio Gómez - Departmental Advisor (1985-37)  
Mateo Casaverde - Departmental Advisor (1985-87)  
Luis Sáez - Departmental Advisor (1985-87)  
Robert Tillman - Environmental Advisor (1985-87)  
Johannes Oosterkamp - Irrigation Advisor (1984-86)



Guillermo Valladares - Agricultural Specialist (in conjunction with OARD)  
(1984-86)

Jaime Palacios - Agricultural Specialist (in conjunction with OARD)  
(1984-86)

Germán Rodríguez - Civil Engineer (under the direction of ENGRI) (1984-86)

Augusto Aguilar - Civil Engineer (under the direction of ENGRI) (1985-87)

Carlos Yuta - Civil Engineer (under the direction of ENGRI) (1985-87)

Ernest Dawson - Civil Engineer (under the direction of ENGRI) (1984-87)

John Fisher - Housing Advisor (under the direction of HUD) (1984-86)

César Espino - Financial Coordinator (1983-87)

Hugo Ramírez - Financial Analyst (1984-87)

Raúl Tapia - Financial Analyst (1984-87)

Angel Livelli - Financial Analyst (1986-87)

Carlos Medrano - Financial Analyst (1984-86)

Emilio Guerra - Administrative Coordinator (1985-87)

Elvira Montero - Administrative Assistant to the Chief-of-Party (1984-87)

Ana María Llona - Senior Secretary (1983-85)

Edith Rochabrun - Senior Secretary (1985-87)

Borie Vélez - Secretary (1985-87)

Consuelo Ruiz - Secretary (1984-87)

Virginia Tocci - Secretary (1984-85)

Elfie Díaz - Secretary (1985-87)

Carla Cayo - Secretary (1985-87)

plus Arthur Mudge (leader of the final evaluation team), James Roush (leader of the mid-term evaluation team), Robert Gersony, Raymond Lynch, Dawn Kline, Stephen Rosholt, Raoul Gagne, Joshua Dickinson, Teresa Muro, Ana Cecilia Quintanilla, Robert Atha, Laura Hess, James Glover, Thaddeus Johnson, Fred Anderson, Julio Melgar, Gregory Schmidt, and many others who were with us for shorter periods of time than those listed above.

- Finally, the many thousands of workers and community-level participants who, in spite of low wages and difficult conditions, made reconstruction a reality. Also, to the hundreds of thousands of Peruvians who contributed to the effort through the purchase of Reconstruction Bonds - a major sacrifice during a difficult economic period. The DRR effort shows that when foreign assistance is combined with hard work and dedication on the part of the host country, tremendous achievements can indeed occur.

Statistical Annex

A statistical annex on all activities funded through the CORDES by AID under the DRR Project, consisting of some 125 pages, is being attached to the original USAID file copy of this report, as well as to the copies being sent to INADE, AID/W, and the USAID Engineering Division. Other interested parties may obtain copies from USAID/Peru's Development Resources Office or Engineering Division.

The annex consists of three sets of documents, all in Spanish, from the DRR Division's computerized monitoring system:

- 1) A financial status report by CY, CORDE, and subproject, indicating dollar and local currency commitments and disbursements (broken down by loan and grant funds), and local currency liquidations received and processed. The figures are from USAID official records. Those for 1984 and 1985 are complete; the figures for 1986 and 1987 are current as of the date of this report, with some minor modifications likely before the Project is closed.
- 2) A listing by CORDE of all components financed under the DRR Project, with the dollar amounts spent per year. The subproject(s) under which each component was financed is given in parentheses. Since USAID kept financial records only on a subproject basis, not by component, the information in this list is based on data supplied by the CORDES. Since certain discrepancies are inevitable between such information and USAID's (due, for example, to a CORDE counting an expense under one year and USAID counting it in the previous or subsequent year), a table is given at the bottom of each listing summarizing USAID's financial status information by subproject (from the first set of documents listed above), so that the discrepancies can be identified and taken into account.
- 3) An impact report by component. For each component, the amount spent by year in local currency is presented; as well as the number of families benefitted, the amount of employment generated during the implementation period, and the actual physical outputs achieved. All this is based on information supplied by the CORDES and carefully checked by the DRR Division. In many cases, DRR requested confirmation of data, clarification, or additional information from the CORDES. While we recognize that the information is not perfect, considerable effort went in to making it as reliable as possible, given the realities of the program.

From these documents, a complete statistical picture can be obtained of every subproject and component financed through the CORDES by the DRR Project. Additional information beyond that can be obtained in the Project files.

PRESTAMO/DONACION - 527-W-082/527-0277 - ESTADO FINANCIERO DETALLADO  
 PROGRAMA 1984  
 AL 18 DE JUNIO DE 1987

COD	SUBPROYECTOS	MONTOS		MONTOS		MONTOS		MONTOS		LIQUI.	LIQUI.
		COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	RECIB. ENV. A CONTR.	PROCE. POR CONTR.
		(MILES DE DOLARES)		(MILLONES DE DOLARES)		(MILLONES DE SOLES)					
-----											
CORDEAMAZONAS											
010	RIEGO	6	6	25	25	25	25	25	25	25	25
030	ENCAUZAMIENTO DE RIOS	9	9	38	38	38	38	38	38	38	38
040	AEROPUERTO	122	122	807	807	807	807	807	807	807	807
070	CARRETERAS	2	2	11	11	11	11	11	11	11	11
TOTAL		139	139	881	881	881	881	881	881	881	881
-----											
CORDEANCASH											
010	RIEGO	122	122	512	512	512	512	512	512	512	512
050	AGUA/ALCANTARILLADO	241	241	986	986	986	986	986	986	986	986
080	ELECTRICIDAD	90	90	300	300	300	300	300	300	300	300
TOTAL		453	453	1798	1798	1798	1798	1798	1798	1798	1798
-----											
CORDEAPURIMAC											
010	RIEGO	77	77	216	216	216	216	216	216	216	216
020	DESARROLLO RURAL	108	108	412	412	412	412	412	412	412	412
030	AGRICOLA	278	278	951	951	951	951	951	951	951	951
040	REHAB. CENTRO OVINO URIPA	38	38	150	150	150	150	150	150	150	150
050	RECUPERACION DE TERRAZAS Y ANDENES	38	38	180	180	180	180	180	180	180	180
060	SANIDAD VEGETAL	34	34	150	150	150	150	150	150	150	150
070	CARRETERAS	273	273	1202	1202	1202	1202	1202	1202	1202	1202
TOTAL		774	774	2931	2931	2931	2931	2931	2931	2931	2931
-----											
CORDEAREQUIPA											
010	RIEGO	429	429	1909	1909	1909	1909	1909	1909	1909	1909
020	AGUA RURAL	28	28	133	133	133	133	133	133	133	133
030	CARRETERAS	280	280	1214	1214	1214	1214	1214	1214	1214	1214
040	PECUARIA	12	12	55	55	55	55	55	55	55	55
TOTAL		749	749	3311	3311	3311	3311	3311	3311	3311	3311
-----											
CORDECAJAMARCA											
010	RIEGO	105	105	463	463	463	463	463	463	463	463
020	DEFENSAS	139	139	501	501	501	501	501	501	501	501
030	CAMINOS/PUENTES	144	144	580	580	580	580	580	580	580	580
050	REHABILITACION PROVINCIA CONTUMAZA	426	426	1910	1910	1910	1910	1910	1910	1910	1910
TOTAL		814	814	3454	3454	3454	3454	3454	3454	3454	3454
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PRESTAMO/DONACION - 527-W-082/527-0277 - ESTADO FINANCIERO DETALLADO  
 PROGRAMA 1984  
 AL 18 DE JUNIO DE 1987

COD	SUBPROYECTOS	MONTOS		MONTOS		MONTOS		MONTOS		LIQUI.	LIQUI.
		COMPROMETIDOS	DESEMBOLOSADOS	COMPROMETIDOS	DESEMBOLOSADOS	COMPROMETIDOS	DESEMBOLOSADOS	COMPROMETIDOS	DESEMBOLOSADOS	RECIB. ENV. A CONTR.	PROCE. POR CONTR.
		PRESTAMO DONACION		PRESTAMO DONACION		PRESTAMO DONACION		PRESTAMO DONACION			
		(MILES DE DOLARES)		(MILES DE DOLARES)		(MILLONES DE SOLES)		(MILLONES DE SOLES)			
-----											
CORDECUSCO											
010	RIEGO	793		793		3149		3149		3149	3149
020	AGRICOLA	208		208		837		837		837	837
030	PECUARIA	28		28		97		97		97	97
040	CRANJAS COMUNALES	48		48		186		186		186	186
TOTAL		1078		1078		4270		4270		4270	4270
-----											
CORDEHUANCAVELICA											
010	RIEGO	350		350		1603		1603		1603	1603
020	APOYO A LA PRODUCCION AGRICOLA		154		154		618		618		618
030	FORESTACION Y REFORESTACION		87		87		369		369		369
040	PROMOCION Y DESARROLLO PECUARIO		84		84		354		354		354
050	SEMILLEROS Y PASTOS CULTIVABLES	77		77		322		322		322	322
060	SANIDAD VEGETAL		20		20		78		78		78
070	SANIDAD ANIMAL	51		51		199		199		199	199
080	ARTESANIA		34		34		137		137		137
090	CARRETERAS	112		112		457		457		457	457
TOTAL		590	379	590	379	2582	1556	2582	1556	4138	4138
-----											
CORDEICA											
010	RIEGO	228		228		773		773		773	773
020	ENCAUZAMIENTO DE RIOS	234		234		827		827		827	827
030	FORESTACION	28		28		99		99		99	99
TOTAL		490		490		1699		1699		1699	1699
-----											
CORDELAMBAYEQUE											
010	RIEGO	421	74	421	74	1178	325	1178	325	1503	1503
100	ELECTRICIDAD	218		218		1088		1088		1088	1088
110	REHAB. CAMINOS DEPARTAMENTALES	9	46	9	46	37	198	37	198	235	235
130	AGUA POTABLE Y ALCANTARILLADO	40	238	40	238	190	979	190	979	1168	1168
140	PISTAS Y VEREDAS	482	164	482	164	2097	665	2097	665	2762	2762
150	HABILITACION PRIMARIA DE LOTES	273	104	273	104	1206	434	1206	434	1641	1641
TOTAL		1443	627	1443	627	5797	2601	5797	2601	8398	8398
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PRESTAMO/DONACION - 527-W-082/527-0277 - ESTADO FINANCIERO DETALLADO  
 PROGRAMA 1984  
 AL 18 DE JUNIO DE 1987

COD	SUBPROYECTOS	MONTOS		MONTOS		MONTOS		MONTOS		LIQUI.	LIQUI.
		COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	RECIB. ENV. A CONTR.	PROCÉ. POR CONTR.
		(MILES DE DOLARES)		(M I L L O N E S D E D O L A R E S)		(M I L L O N E S D E D O L A R E S)		(M I L L O N E S D E S O L E S)			
-----											
CORDELIBERTAD											
010	RIEGO	718		718		2196		2196		2196	2196
020	CARRETERAS	273		273		1303		1303		1303	1303
030	ELECTRICIDAD	62		62		168		168		168	168
040	AGUA/ALCANTARILLADO	61		61		269		269		269	269
070	CENTROS EDUCATIVOS	55		55		197		197		197	197
TOTAL		1169		1169		4133		4133		4133	4133
-----											
CORDEMOQUEGUA											
010	RIEGO	352		352		1326		1326		1326	1326
020	AGUAS SUBTERRANEAS PARA RIEGO	221		221		872		872		872	872
030	APOYO A LA PRODUCCION AGRICOLA	148		148		464		464		464	464
050	APOYO A LA PRODUCCION PECUARIA	22		22		69		69		69	69
060	CARRETERAS	723		723		3289		3289		3289	3289
TOTAL		1466		1466		6019		6019		6019	6019
-----											
CORPIURA											
010	RIEGO	2473		2473		7328		7328		7328	7328
070	CARRETERAS	1877	438	1877	438	7754	1900	7754	1900	9654	9654
090	ELECTRICIDAD	778		778		3187		3187		3187	3187
100	REH. LINEA TRANSMIS. PAITA-EL ARENAL	158		158		600		600		600	600
110	AGUA/ALCANTARILLADO	1236		1236		5572		5572		5572	5572
160	LOTES Y SERVICIOS	286		286		941		941		941	941
170	PUEBLO NUEVO DE COLAN	158		158		662		662		662	662
180	LA ARENA	147		147		587		587		587	587
200	ACUA RURAL	58		58		198		198		198	198
210	SALUD	64		64		200		200		200	200
240	COMEDORES	60		60		197		197		197	197
TOTAL		7294	438	7294	438	27228	1900	27228	1900	29128	29128
-----											
CORPUNO											
010	RIEGO		369		369		1356		1356		1356
030	PROGRAMA REGIONAL DE PASTOS	451		451		1885		1885		1885	1885
050	INFRAESTRUCTURA COMUNAL		135		135		507		507		507
060	APOYO AL DESARROLLO COMUNAL	422	466	422	466	965	1938	965	1938	2903	2903
070	UTILIZACION DE TIERRAS BAJO RIEGO	324	119	324	119	650	464	650	464	1114	1114
110	AGUA POTABLE										
TOTAL		1197	1089	1197	1089	3499	4266	3499	4266	7765	7765
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PRESTAMO/DONACION - 527-W-082/527-0277 - ESTADO FINANCIERO DETALLADO  
 PROGRAMA 1984  
 AL 18 DE JUNIO DE 1987

COD	SUBPROYECTOS	MONTOS		MONTOS		MONTOS		MONTOS		LIQUI.	LIQUI.
		COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	RECIB. ENV. A CONTR.	PROCE. POR CONTR.
		(MILES DE DOLARES)				(MILLONES DE SOLES)					
-----											
CORDETACNA											
010	RIEGO	452	452			1910	1910			1910	1910
020	AGRICOLA	90	90			335	335			335	335
040	PECUARIA	78	78			315	315			315	315
050	AGUAS SUBTERRANEAS	106	106			473	473			473	473
060	AGUA RURAL	7	7			21	21			21	21
TOTAL		732	732			3055	3055			3055	3055
-----											
CORTUMBES											
010	RIEGO	597	597			2143	2143			2143	2143
040	TERMINAL PESQUERO ZORRITOS	91	91			289	289			289	289
050	ELECTRICIDAD		577		577		2414		2414	2414	2414
070	AGUA/ALCANTARILLADO	235	235			923	923			923	923
080	PISTAS Y VEREDAS	84	158	84	158	365	670	365	670	1035	1035
090	AGUAS PLUVIALES	79	79			345	345			345	345
100	PROYECTOS DE EMERGENCIA	258	258			1059	1059			1059	1059
110	HAB. PRIMARIA DE LOTES Y SERVICIOS	110	110			362	362			362	352
TOTAL		1453	735	1453	735	5486	3084	5486	3084	8570	8561
-----											
TOTAL CORDES:		19839	3340	19839	3340	76145	13737	76145	13737	89882	89873
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Notas: Las cifras parciales no siempre suman los totales debido a redondeo.

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PRESTAMO/DONACION - 527-W-082/527-0277 - ESTADO FINANCIERO DETALLADO  
 P R O G R A M A 1985  
 AL 18 DE JUNIO DE 1987

COD	SUBPROYECTOS	MONTOS		MONTOS		MONTOS		MONTOS		LIQUI.	LIQUI.
		COMPROMETIDOS	DONACION	DESEMBOLSADOS	DONACION	COMPROMETIDOS	DONACION	DESEMBOLSADOS	DONACION	RECIB. ENV. A CONTR.	PROCE. POR CONTR.
		(MILES DE DOLARES)				(MILLONES DE SOLES)					
-----											
CORDEAMAZONAS											
010	RIEGO	62		62		271		271		271	271
030	REHAB. Y ENCAUZ. DE RIOS										
060	REHAB. CARRETERAS DEPARTAMENTALES	40	1	40	1	377	15	378	15	393	393
TOTAL		102	1	102	1	648	15	649	15	664	664
-----											
CORDEANCASH											
010	RIEGO	85	117	85	117	987	1748	987	1748	2734	2734
020	DEFENSAS RIBEREÑAS	180		180		1991		1991		1991	1991
040	CARRETERAS Y PREVISION EMERGENCIA	32	462	32	462	493	6634	493	6634	7126	7126
050	AGUA POTABLE Y ALCANTARILLADO	58		58		487		487		487	487
TOTAL		354	579	354	579	3958	8382	3958	8382	12300	12339
-----											
CORDEAPURIMAC											
010	IRRIGACION Y RACIONALIZACION DE AGUA	57	31	57	31	831	465	831	465	1295	1289
020	APOYO DESARR. ASENTAMIENTOS RURALES	39	28	39	28	552	432	552	432	984	854
030	APOYO A PRODUCCION AGRICOLA	28	8	28	8	313	133	313	132	445	363
040	REINST. CENTRO CRIA OVINOS URIPA	18	0	18	0	205	6	205	6	211	200
050	RECUPERACION TERRAZAS Y ANDENES		36		36		622		622	622	265
060	PROGRAMA DE SANIDAD VEGETAL		17		17		303		303	303	215
070	CONST. Y MEJOR. CARRETERAS Y PUENTES	41	58	41	58	558	969	558	969	1527	1468
100	USO INMEDIATO DE TIERRAS BAJO RIEGO		5		5		89		89	89	28
TOTAL		182	184	182	184	2459	3019	2459	3018	5478	4683
-----											
CORDEAREQUIPA											
010	RIEGO	203	59	203	59	1046	874	1046	874	1921	983
020	AGUA POTABLE RURAL	34	22	34	22	173	321	173	321	494	323
030	REPARACION CAMINOS VECINALES	33	51	33	51	168	768	168	768	936	768
TOTAL		269	132	269	132	1387	1964	1387	1964	3351	2074
-----											
CORDECAJAMARCA											
010	RIEGO	70		70		720		720		720	720
020	ENCAUZAMIENTO Y DEFENSAS RIBEREÑAS	77	49	77	49	818	805	818	805	1623	1623
030	REHAB. PUENTES Y CAMINOS VECINALES	63	15	63	15	667	263	667	263	930	930
050	REHAB. PROVINCIA DE CONTUMAZA	122	19	122	19	1485	297	1485	297	1782	1782
TOTAL		333	83	333	83	3691	1365	3691	1365	5056	5055
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PRESTAMO/DONACION - 527-W-082/527-0277 - ESTADO FINANCIERO DETALLADO  
 PROGRAMA 1985  
 AL 18 DE JUNIO DE 1987

COD	SUBPROYECTOS	MONTOS		MONTOS		MONTOS		MONTOS		LIQUI.	LIQUI.
		COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	RECIB. ENV. A CONTR.	PROCE. POR CONTR.
		(MILES DE DOLARES)				(M I L L O N E S D E S O L E S)					
CORDECUSCO											
010	RIEGO	168	179	168	179	2074	2846	2074	2650	4724	4920
020	APOYO A LA PRODUCCION AGRICOLA		65		65		958		959	959	959
040	DESARR. HUERTOS Y GRANJAS COMUNALES		12		12		176		176	176	175
070	PRACTICAS DE CONSERVACION DE SUELOS		23		23		349		326	326	349
TOTAL		168	279	168	279	2074	4330	2074	4111	6184	6403
CORDEHUANCAVELICA											
010	RIEGO	28	147	28	147	137	1917	137	1917	2054	1916
020	APOYO A LA PRODUCCION AGRICOLA		13		13		226		226	226	226
030	PROG. DE FORESTACION Y REFORESTACION		34		34		390		390	390	389
040	PROG. PROMOCION Y DESARROLLO PECUARIO		76		76		826		826	826	826
050	SEMILLEROS Y PASTOS CULTIVADOS		18		18		223		223	223	286
060	SANIDAD VEGETAL		1		1		25		25	25	25
070	SANIDAD ANIMAL		4		4		75		75	75	75
080	REHAB. CARRETERAS VECINALES		121		121		1151		1151	1151	1151
TOTAL		28	415	28	415	137	4833	137	4833	4970	4895
CORDEICA											
010	RIEGO		41		41		421		421	421	421
020	CANALIZACION Y LIMPIEZA DE RIOS	225	37	225	37	2852	589	2852	590	3442	3442
030	REFORESTACION		21		21		370		380	380	370
TOTAL		225	99	225	99	2852	1380	2852	1391	4243	4233
CORDELAMBAYEQUE											
010	RIEGO	127	48	127	48	1782	828	1782	828	2610	2394
020	ENCAUZAMIENTO Y DEFENSAS RIBEREÑAS	206	154	206	154	3236	2513	3236	2513	5749	5663
030	REHAB TINAJONES	481		481		8234		8234		8234	8203
090	CAPACITA. DISTR. HUACA DE LA CRUZ	90		90		1560		1560		1560	1598
100	REHAB. SISTEMA ELECTRICO	191		191		2373		2373		2373	2325
110	CARRETERAS DEPARTAMENTALES	445		445		7370		7370		7370	7473
130	AGUA POTABLE Y ALCANTARILLADO	140	25	140	25	1873	422	1873	422	2295	2233
140	REHAB. PISTAS Y VEREDAS	312	58	312	58	4020	849	4020	849	4869	4553
150	HABILITACION PRIMARIA DE LOTES	68	40	68	40	765	486	765	486	1251	1212
160	INFRAE. LOCALES DE SALUD	1		1		12		12		12	19
170	REHABILITACION CENTROS EDUCATIVOS	11	67	11	67	199	773	199	773	972	941
TOTAL		2070	391	2070	391	31425	5871	31425	5871	37296	36614



PRESTAMO/DONACION - 527-W-082/527-0277 - ESTADO FINANCIERO DETALLADO  
 PROGRAMA 1985  
 AL 18 DE JUNIO DE 1987

COD	SUBPROYECTOS	MONTOS		MONTOS		MONTOS		MONTOS		LIQUI.	LIQUI.
		COMPROMETIDOS	DONACION	DESEMBOLSADOS	DONACION	COMPROMETIDOS	DONACION	DESEMBOLSADOS	DONACION	RECIB. ENV. A CONTR.	PROCE. POR CONTR.
		(MILES DE DOLARES)				(M I L L O N E S D E S O L E S)					
CORDELIBERTAD											
010	RIEGO	32	125	32	125	120	2003	120	2003	2123	2191
020	REHABILITACION DE CARRETERAS	4	120	4	120	17	1704	17	1704	1721	1704
040	AGUA POTABLE Y ALCANTARILLA		29		29		410		410	410	410
070	REHAB CC. EE.		35		35		411		411	411	411
TOTAL		36	310	36	310	137	4528	137	4528	4665	4716
CORDEMOQUEGUA											
010	RIEGO	28	255	28	255	131	1937	131	1937	2068	1588
020	UTILIZACION AGUAS SUBTERR. RIEGO		87		87		1134		1134	1134	700
030	APOYO A LA PRODUCCION AGRICOLA		38		38		357		357	357	186
050	APOYO A LA PRODUCCION PECUARIA		7		7		69		69	69	17
060	RECONSTRUCCION CARRETERAS VECINALES	41	276	41	276	210	3986	210	3986	4196	2878
TOTAL		68	663	68	663	341	7483	341	7483	7824	5370
CORPIURA											
070	REHAB. CARRETERAS Y PUENTES DEPART.	2909	67	2909	67	39185	1173	39185	1173	40358	40152
110	REHAB. AGUA POTABLE Y ALCANTARILLADO	515	136	515	136	7983	2366	7983	2366	10349	10349
130	REHABILITACION DE PISTAS Y VEREDAS	3017	463	3017	463	38285	8072	38284	8072	46357	46216
150	HABILITACION PRIMARIA LOTES Y SERV.	136		136		1850		1850		1850	1121
170	REHABILITACION PUEBLO NUEVO DE COLAN	56		56		967		967		967	1388
180	REHABILITACION DE LA ARENA	55		55		966		966		966	1933
TOTAL		6688	667	6688	667	89238	11611	89237	11611	100848	101159
CORPUNO											
010	RIEGO	286	179	286	179	3410	2525	3410	2525	5935	5934
030	PROGRAMA REGIONAL DE PASTOS	57	74	57	74	750	1031	750	1031	1781	1773
050	INFRAES. COMUNAL Y OBRAS COMUNALES	51	6	51	6	892	25	892	25	917	916
060	APOYO DESARROLLO COMUNAL	79	3	79	3	1027	12	1027	12	1040	1040
090	SISTEMA DE AGUA POTABLE	272	286	272	286	2603	4982	2603	4982	7586	7585
TOTAL		745	547	745	547	8682	8575	8682	8575	17258	17249
CORDETACNA											
010	RIEGO	260	149	260	149	2208	2589	2208	2589	4796	2003
020	APOYO A LA PRODUCCION AGRICOLA	57	16	57	16	684	274	684	274	958	684
030	FORESTACION Y REFORESTACION		6		6		100		100	100	
040	APOYO A LA PRODUCCION PECUARIA	33	6	33	6	340	98	340	98	438	340
050	UTILIZACION AGUAS SUBTERRANEAS	48	7	48	7	461	130	461	130	591	290
060	SANEAMIENTO RURAL	29	46	29	46	243	806	243	806	1049	243
TOTAL		427	229	427	229	3936	3997	3936	3997	7933	3559

PRESTAMO/DONACION - 527-W-082/527-0277 - ESTADO FINANCIERO DETALLADO  
 P R O G R A M A 1985  
 AL 18 DE JUNIO DE 1987

COD	SUBPROYECTOS	MONTOS		MONTOS		MONTOS		MONTOS		LIQUI.	LIQUI.
		COMPROMETIDOS		DESEMBOLSADOS		COMPROMETIDOS		DESEMBOLSADOS		RECIB.	PROCE.
		PRESTAMO	DONACION	PRESTAMO	DONACION	PRESTAMO	DONACION	PRESTAMO	DONACION	ENV. A	CONTR.
		(MILES DE DOLARES)				(M I L L O N E S D E S O L E S)				CONTR.	CONTR.
CORTUMBES											
010	RIEGO	205	95	205	95	2800	1497	2800	1497	4297	3564
020	REHAB. CARR. VECINALES Y PANAM. SUR	230		230		4000		4000		4000	
040	REHAB. TERMINAL PESQUERO ZORRITOS	3		3		18		18		18	10
050	REH.SIST.GEN. TRANS. Y DIST.ELECTR.		283		283		2029		2029	2029	1240
060	AGUA POTABLE Y ALCANT. SUB-PROG.I	56	47	56	47	980	820	980	820	1800	1770
070	AGUA POTABLE Y ALCANT. SUB-PROG.II	104	11	104	11	1032	88	1032	88	1121	1071
080	REHAB. CALLES, PISTAS Y VEREDAS	87	212	87	212	1502	2123	1502	2123	3625	3610
090	EVACUACION DE AGUAS PLUVIALES	37		37		640		640		640	
100	PROYECTOS DE EMERGENCIA	399	216	399	216	4771	3148	4771	3148	7919	7412
110	HAB. PRIMARIA DE LOTES CON SERVICIOS	81	62	81	62	895	588	895	588	1483	1470
TOTAL		1201	927	1201	927	16638	10293	16638	10293	26931	20148
TOTAL CORDES:		12898	5505	12898	5505	167603	77648	167602	77439	245041	229161

Notas: Las cifras parciales no siempre suman los totales debido a redondeo.  
 Los niveles aprobados y comprometidos fueron reducidos a desembolsados (C.E. 177 del 26/III/86).

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PRESTAMO/DONACION - 527-W-082/527-0277 - ESTADO FINANCIERO DETALLADO  
 PROGRAMA 1986  
 AL 18 DE JUNIO DE 1987

COD	SUBPROYECTOS	MONTOS		MONTOS		MONTOS		MONTOS		LIQUI.	LIQUI.
		COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	COMPROMETIDOS	DESEMBOLSADOS	RECIB. ENV. A CONTR.	PROCE. POR CONTR.
		(MILES DE DOLARES)				(MILES DE INTIS)					
-----CORDEAMAZONAS-----											
010	RIEGO		6		6		106		106	106	36
060	REHAB. CARRETERAS DEPARTAMENTALES	49	145	49	145	551	2529	551	2529	3079	1051
TOTAL		49	151	49	151	551	2635	551	2635	3185	1087
-----CORDEANCASH-----											
010	RIEGO	29	6	29	6	497	103	497	103	600	600
020	DEFENSAS RIBEREÑAS	92	82	92	82	1549	1445	1549	1445	2931	2537
021	CARRETERAS Y PREVISION EMERGENCIA	29	55	29	55	496	953	496	953	1154	1421
022	LIQUIDACION DE OBRAS	29	0	29	0	496	3	496	3	499	428
TOTAL		178	143	178	143	3038	2504	3038	2504	5184	4986
-----CORDEAPURIMAC-----											
091	LIQUIDACION DE OBRAS	28	28	28	28	352	478	352	478	1153	
TOTAL		28	28	28	28	352	478	352	478	1153	
-----CORDEAREQUIPA-----											
010	RIEGO	2	82	2	82	13	1433	13	1433	1344	
011	LIQUIDACION DE OBRAS	33	21	33	21	511	370	511	370	153	
020	AGUA POTABLE RURAL		25		25		432		432	186	
030	REHAB. DE CAMINOS VECINALES		6		6		102		102	51	
TOTAL		36	133	36	133	524	2337	524	2337	1734	
-----CORDECAJAMARCA-----											
010	RIEGO	75	6	75	6	1306	120	1306	120	1411	736
030	REHAB. PUENTES Y CAMINOS VECINALES	146	31	146	31	2577	616	2577	616	2674	948
072	MANEJO INTEGRAL DE CUENCAS	44	11	44	11	766	211	766	211	844	263
073	LIQUIDACION DE OBRAS	42	6	42	6	740	109	740	109	650	265
TOTAL		307	54	307	54	5389	1056	5389	1056	5579	2212
-----CORDECUSCO-----											
010	RIEGO	216	16	216	16	3642	284	3642	284	2762	844
061	LIQUIDACION DE OBRAS	27		27		497		497		649	
TOTAL		244	16	244	16	4139	284	4139	284	3410	844

PRESTAMO/DONACION - 527-W-082/527-0277 - ESTADO FINANCIERO DETALLADO  
 PROGRAMA 1986  
 AL 18 DE JUNIO DE 1987

COD	SUBPROYECTOS	MONTOS COMPROMETIDOS		MONTOS DESEMBOLSADOS		MONTOS COMPROMETIDOS		MONTOS DESEMBOLSADOS		LIQUI. RECIB. ENV. A CONTR.	LIQUI. PROCE. POR CONTR.
		PRESTAMO	DONACION	PRESTAMO	DONACION	PRESTAMO	DONACION	PRESTAMO	DONACION		
		(MILES DE DOLARES)				(M I L E S D E I N T I S)					
CORDEHUANCAVELICA											
012	LIQUIDACION DE OBRAS	11	35	11	35	200	246	200	246	610	71
	TOTAL	11	35	11	35	200	246	200	246	610	71
CORDEICA											
011	LIQUIDACION DE OBRAS Y REFORESTACION	31	1	31	1	478	11	478	12	490	284
	TOTAL	31	1	31	1	478	11	478	12	490	284
CORDELAMBAYEQUE											
010	RIEGO	36	93	36	93	626	1625	626	1625	943	944
020	ENCAUZAMIENTO Y DEFENSAS RIBEREÑAS	257	106	257	106	4476	1915	4476	1915	3864	3876
090	CAPTACION Y DISTR. HUACA DE LA CRUZ	109	159	109	159	1523	2793	1523	2793	2038	2038
100	REHAB. SISTEMA ELECTRICO		19		19		332		332		
110	CARRETERAS DEPARTAMENTALES	102	165	102	165	1781	3216	1781	3216	1837	1836
130	AGUA POTABLE Y ALCANTARILLADO	71	17	71	16	1240	321	1240	290	708	708
140	REHABILITACION PISTAS Y VEREDAS		22		22		380		380	307	307
170	REHAB. CENTROS EDUCATIVOS		89		89		1566		1566	569	569
171	LIQUIDACION DE OBRAS	32	81	32	81	556	1429	556	1429	764	764
	TOTAL	607	752	607	750	10202	13578	10202	13547	11031	11043
CORDELIBERTAD											
010	RIEGO	58	157	58	157	1013	2812	1013	2812	3825	1885
020	REHABILITACION DE CARRETERAS	30	229	30	229	405	4045	405	4045	4442	2442
300	SUPERVISION Y CONTROL DE OBRAS	2	34	2	34	43	611	43	611	655	456
	TOTAL	90	420	90	420	1462	7468	1462	7468	8922	4783
CORDEMOQUEGUA											
020	UTILIZACION DE AGUAS SUBTERRANEAS		34		33		571		570	380	
060	REHAB. Y MEJORAMIENTO DE CARRETERAS		45		45		771		771	546	
080	RIEGO Y LIQUIDACION DE OBRAS	40	30	40	29	399	532	399	499	286	
	TOTAL	40	109	40	107	399	1873	399	1840	1213	
CORPIURA											
070	REHAB. CARRETERAS/PUENTES DEPART.	49	147	49	147	900	2700	900	2700	2116	1935
110	REHAB. AGUA POTABLE Y ALCANTARILLADO		228		228		4000		4000	609	790
130	REHABILITACION DE PISTAS Y VEREDAS	1312	135	1312	135	24490	2344	24490	2344	12603	12603
160	REHAB. PRIMARIA DE LOTES Y SERVICIOS	38		37		750		750		298	298
	TOTAL	1399	510	1398	510	26140	9044	26140	9044	15626	15626

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PRESTAMO/DONACION - 527-W-082/527-0277 - ESTADO FINANCIERO DETALLADO  
PROGRAMA 1986  
AL 18 DE JUNIO DE 1987

COD	SUBPROYECTOS	MONTOS COMPROMETIDOS		MONTOS DESEMBOLSADOS		MONTOS COMPROMETIDOS		MONTOS DESEMBOLSADOS		LIQUI. RECIB. ENV. A	LIQUI. PROCE. POR CONTR.
		PRESTAMO	DONACION	PRESTAMO	DONACION	PRESTAMO	DONACION	PRESTAMO	DONACION	CONTR.	CONTR.
		(MILES DE DOLARES)				(MILES DE INTIS)					
CORPUNO											
010	RIEGO	117	171	93	171	1989	2626	1546	2626	3821	420
090	SISTEMA DE AGUA POTABLE	65	66	65	66	1252	882	1252	882	1126	141
100	LIQUIDACION DE OBRAS	28		28		497		497		478	37
TOTAL		210	237	186	237	3738	3507	3295	3507	5425	598
CORDETACNA											
010	RIEGO	11	378	11	378	101	6810	101	6810	2357	
020	APOYO A LA PRODUCCION AGRICOLA		19		19		337		337	78	
030	FORESTACION Y REFORESTACION		6		6		109		109	9	
050	UTILIZACION DE AGUAS SUBTERRANEAS		49		49		866		866	74	
060	REHAB. INFRAESTR. SANEAMIENTO RURAL		43		43		784		784	619	
091	LIQUIDACION DE OBRAS	28		28		496		496		431	
TOTAL		40	496	40	496	598	8907	598	8907	3568	
CORTUMBES											
040	REHAB. TERMINAL PESQUERO ZORRITOS		28		28		516		516		
060	REHAB. AGUA POT. Y ALCAN. SUBPROG. I										
070	REHAB. AGUA POT. Y ALCANT. SUBPR. II		71		71		1116		1116		
100	PROYECTOS DE EMERGENCIA	52	16	52	16	900	271	900	271	662	
110	HABIL. URBANA DE LOTES CON SERVICIOS		57		57		1000		1000		
140	REHAB. INFRAESTRUCTURA DE SALUD		8		8		140		140		
160	REHAB. CENTROS EDUCATIVOS		247		247		4510		4510		
172	REHAB. Y MEJOR. DE INFRAESTR. RIEGO	89		89		1527		1527		1208	
173	REHAB. CARR. VECINALES Y PANAM. SUR	1510		1510		26327		26327		14874	
174	LIQUIDACION DE OBRAS	43		43		747		747		562	
TOTAL		1694	427	1694	427	29501	7553	29501	7553	17306	
TOTAL CORDES:		4962	3510	4937	3507	86711	61483	86269	61420	84436	41534

Notas: Las cifras parciales no siempre suman los totales debido a redondeo.

Las cifras reflejan el movimiento de fondos hasta la C.E. No.251 inclusive.

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PRESTAMO/DONACION - 527-W-082/527-0277 - ESTADO FINANCIERO DETALLADO  
 PROGRAMA 1987  
 AL 18 DE JUNIO DE 1987

COD	SUBPROYECTOS	MONTOS		MONTOS		MONTOS		MONTOS		LIQUI. RECIB. ENV. A CONTR.	LIQUI. PROCE. POR CONTR.
		COMPROMETIDOS PRESTAMO DONACION (MILES DE DOLARES)	DESEMBOLSADOS PRESTAMO DONACION (MILES DE DOLARES)	COMPROMETIDOS PRESTAMO DONACION (M I L E S D E I N T I S)	DESEMBOLSADOS PRESTAMO DONACION (M I L E S D E I N T I S)	COMPROMETIDOS PRESTAMO DONACION (M I L E S D E I N T I S)	DESEMBOLSADOS PRESTAMO DONACION (M I L E S D E I N T I S)				
CORDECAJAMARCA											
010	RIEGO	5	2	129	41						
030	CARRETERAS Y PUENTES	35	25	778	594						
050	REHAB. PROVINCIA DE CONTUMAZA	13	10	289	260						
	TOTAL	54	37	1196	895						
CORPIURA											
130	REHAB. DE PISTAS Y VEREDAS	58	72	1450	1829						
	TOTAL	58	72	1450	1829						
CORPUNO											
101	CIERRE Y LIQUIDACION DEL PIRR	11	11	193	193						
	TOTAL	11	11	193	193						
CORDETACNA											
010	RIEGO	20	19	400	400						
	TOTAL	20	19	400	400						
CORTUMBES											
110	HABIL. URBANA DE LOTES CON SERVICIOS	26	26	500	500						
174	LIQUIDACION DE OBRAS	16	16	300	300						
	TOTAL	42	42	800	800						
	TOTAL CORDES:	100	157	42	67	2250	3618	800	1489		

Notas: Las cifras parciales no siempre suman los totales debido a redondeo.  
 Las cifras reflejan el movimiento de fondos hasta la C.E. No.251 inclusive.

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PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
05/11/87

CORDEAMAZONAS

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
CANAL LUYA-LAMUD; ORATORIA COLPA	5757.57	(010)					5757.57
CANAL EL TIGRE			13448.27	(010)	6089.70	(010)	19537.97
CANAL LA PASCANA Y QUEBRADA USHUN			48850.57	(010)			48850.57
REHAB. RIO SHOCOL	8906.97	(030)					8906.97
AEROPUERTO CHACHAPOYAS	122102.87	(040)					122102.87
REH/MEJ CARR.MARG.QDA.HONDA-PEDRO RU			22392.89	(060)	168956.35	(060)	191349.24
ESTUDIO CARR. POMACOCNAS-VENCEREMOS			10929.98	(060)	164.45	(060)	11094.43
MEJ CARR.MARG. LA VERSALLE-QDA SECA			7732.49	(060)			7732.49
REH/MEJ CARR.MARG. JAZAN-BAGUA	1777.40	(070)					1777.40
LIQUIDACION DE OBRAS					25660.97	(060)	25660.97
	=====		=====		=====		=====
	138544.81		103354.20		200871.47		442770.48

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

1984		1985		1986	
SUBPR	MONTO	SUBPR	MONTO	SUBPR	MONTO
=====	=====	=====	=====	=====	=====
AM-010	5745.17	AM-010	62282.58	AM-010	6087.79
AM-030	8895.55	AM-030	0.00	AM-060	194590.65
AM-040	122099.31	AM-060	40984.33		
AM-070	1775.97				
=====	=====	=====	=====	=====	=====
	138516.00		103266.91		200678.44

PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
05/11/87

CORDEANCASH

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
REHAB. BOCATOMA SAN JOSE Y NEPEÑA	24940.61	(010)	66371.68	(010)			91312.29
REHAB. CANAL CERRO BLANCO	27315.91	(010)					27315.91
REH BOCATOMA LA VIBORA, RINCONADO, TAM	21377.67	(010)	130752.21	(010)	34459.77	(010)	186589.65
REHAB. PURGATORIO-ROSARIO-SAN FRANC.	20665.08	(010)	7374.63	(010)			28039.71
REHAB. CANAL EL PUEBLO 3	13776.72	(010)					13776.72
REHAB. CANAL 29.1 CASCAJAL	15439.42	(010)					15439.42
ENCAUZAMIENTO RIO SANTA			81227.43	(020)	32069.97	(020)	113297.40
ENCAUZAMIENTO RIO NEPEÑA			32490.97	(020)			32490.97
ENCAUZAMIENTO RIO LACRAMARCA			66787.00	(020)	119067.05	(020)	185854.05
REH CARR CASMA-BUENA VISTA Y QUILLO			34698.12	(040)			34698.12
REH. SAN JUAN, JIMBE, COLCAP Y S. J. MORO			45801.52	(040)	25859.68	(021)	71661.20
ALCANTARILLAS, ACCESOS CHIMBOTE I, II			435530.88	(040)			435530.88
ALETAS ALCANTARILLAS CHIMBOTE I, II					57469.81	(021)	57469.81
DESAG. VILLA MARIA	9068.62	(050)					9068.62
DESAG. 1ro. DE MAYO	7843.13	(050)					7843.13
DESAG. LA FLORIDA BAJA	4166.66	(050)					4166.66
DESAG. MIRAFLORES BAJO - ZONA I	5882.35	(050)					5882.35
DESAG. MIRAFLORES BAJO - ZONA III	4901.96	(050)					4901.96
REHAB. DE DESAGUE P. J. EL ACERO	122549.01	(050)	47562.42	(050)			170111.43
CAMARA BOMBEO CONO NORTE	58333.33	(050)					58333.33
REHAB. LIMP. POZAS ALM. AGUA POT. C. SUR	32352.94	(050)	11890.60	(050)			44243.54
DEF. LINEA A. T. HUALLANCA 4 CAISSONES	89820.35	(080)					89820.35
LIQUIDACION DE OBRAS					28734.17	(022)	28734.17
	=====		=====		=====		=====
	458433.76		960487.46		297660.45		1716581.67

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

1984		1985		1986	
SUBPR	MONTO	SUBPR	MONTO	SUBPR	MONTO
AN-010	121515.61	AN-010	201447.10	AN-010	34454.04
AN-050	241408.57	AN-020	179578.61	AN-020	174516.86
AN-080	89751.08	AN-040	494388.06	AN-021	83283.00
		AN-050	57913.36	AN-022	28703.51
	=====		=====		=====
	452675.26		933327.13		320957.41



PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
05/11/87

CORDEAPURIMAC

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	MONTO
	=====	=====	=====	=====	=====	=====	=====
MEJOR. IRRIG. ATUMPATA	8345.32	(010)					8345.32
MEJOR. IRRIG. TAMBURCO	10395.68	(010)	9069.29	(010)			19464.97
CONST. IRRIG. PACCHAPATA	4892.08	(010)	1514.94	(010)			6407.02
MEJOR. IRRIG. COTARMA	6438.84	(010)	9789.40	(010)			16228.24
MEJOR. IRRIG. Y RESERV. HUIRAHUACHO	8201.43	(010)	9177.98	(010)			17379.41
MEJOR. IRRIG. UPIRO	12050.35	(010)	9775.81	(010)			21826.16
CONST. RESERV. CAYPE	15431.65	(010)	8641.30	(010)			24072.95
CONST. RESERV. TAMBO DE CARHUACAHA	11618.70	(010)	6460.59	(010)			18079.29
CONST. RESERV. COTOHUACHO I-II			7547.55	(010)			7547.55
MEJOR. CANAL SAN MIGUEL DE SALINAS			5686.14	(010)			5686.14
CONST. RESERV. PISCOBAMBA			4728.26	(010)			4728.26
CONST. RESER. MEJ. CANAL ARGAMA BAJA			5808.42	(010)			5808.42
CONST. RESERV. OYCCOMPI I-II			7527.17	(010)			7527.17
CONST. RESERV. CALLEBAMBA			6433.42	(010)			6433.42
MEJOR. IRRIG. LEOCOCHA	6366.90	(010)					6366.90
CRianza DE ANIMALES. AVES	8560.20	(020)	5306.95	(020)			13867.15
CRianza DE ANIMALES. PORCINOS	15994.76	(020)	5150.06	(020)			21144.82
CRianza DE ANIMALES. VACUNOS	5837.69	(020)	6875.85	(020)			12713.54
CULTIVO HORTALIZ. HUERT.COMUN/FAMIL.	15052.35	(020)	7755.79	(020)			22808.14
TALLERES ARTESANALES	25994.76	(020)	20122.78	(020)			46117.54
CEN PILOTOS ANIM MENORES. CUYES, CONE	12905.75	(020)	12844.47	(020)			25750.22
CEN PILOTOS ANIM MENORES. ABEJAS	18900.52	(020)	12435.19	(020)			31335.71
SEMILLEROS Y PASTOS	25263.15	(030)					25263.15
ADQUISICION Y DISTRIB. INSUMOS	241403.50	(030)	35304.82	(030)			276708.32
FORESTACION Y REFORESTACION	14005.84	(030)					14005.84
RECONS. ADQUI. CENTRO OVINOS URIPA	37878.78	(040)	17915.25	(040)			55794.03
CONSTRUCCION DE TERRAZAS		(050)	33520.96	(050)			33520.96
RECUPERACION DE ANDENES		(050)	3342.90	(050)			3342.90
CONSTRUCCION ZANJAS DE INFILTRACION		(050)	114.87	(050)			114.87
LANGOSTA MIGRATORIA		(060)	16505.19	(060)			16505.19
CONTROL DE MOSCA DE LA FRUTA Y OTROS		(060)	17970.01	(060)			17970.01
CCNSTR. PUENTE VEHICULAR YAURIQUILLA	4363.63	(070)					4363.63
CONSTR. PUENTE PEATONAL MATAJILLA	5909.09	(070)					5909.09
CARR. CASINCHIHUA-CHALHUANI	2204.54	(070)					2204.54
CARR. PTE. PACHACHACA-PTE. SAHUINTO	1840.90	(070)					1840.90
CARR. SUNCHO CAYPE	1818.18	(070)					1818.18
CARR. HUAYLLATI-QUEQUERAY	4409.09	(070)					4409.09
CARR. TALAVERA-OCOBAMBA-ONGOY	6545.45	(070)					6545.45
CARR. TALAVERA-HUANCARAMA-TURPO	5954.54	(070)					5954.54
CARR. COLCA CUTUCTAY	16159.09	(070)					16159.09
CARR. CHUQUIBAMBILLA-ANTABAMBA	24045.45	(070)					24045.45
CARR. CACHORA-CHOCCEQUIRAO	18750.00	(070)	2932.72	(070)			21682.72
CARR. KARKATERA-RIO APURIMAC	44954.54	(070)	22050.94	(070)			67005.48
CARR. STA. ROSA-TAPAYRIHUA-ANTABAMBA	43000.00	(070)	22873.93	(070)			65873.93
CARR. CANUA-LLINQUE-HUANCBAMBA	21318.18	(070)	16779.88	(070)			38098.06
CARR. ALFAPATA-HUANCARAMA-PINCOS	21431.81	(070)	11907.25	(070)			33339.06
CARR. LAMBRAMA-PALPACACHI	33000.00	(070)	15564.99	(070)			48564.99
CARR. LLAMAYUPA-AYUMAQUI	22818.18	(070)	12854.34	(070)			35672.52
OPERAC.MANTEN. CAPACI. PARCELAS DEMOS.			5117.74	(100)			5117.74

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
LIQUIDACION DE OBRAS						(091)	
	=====	=====	=====	=====	=====	=====	=====
	784060.92		397407.15				1181468.07

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

1984		1985		1986	
SUBPR	MONTO	SUBPR	MONTO	SUBPR	MONTO
AP-010	77497.17	AP-010	87948.69	AP-091	55689.12
AP-020	107621.25	AP-020	67072.57		
AP-030	277835.69	AP-030	35219.34		
AP-040	37829.95	AP-040	17887.43		
AP-050	37667.58	AP-050	35707.88		
AP-060	34269.61	AP-060	17464.57		
AP-070	272978.45	AP-070	99651.47		
		AP-100	5117.11		
	=====		=====		=====
	845699.70		366069.06		55689.12

PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
05/41/87

CORDEAREQUIPA

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
	=====	=====	=====	=====	=====	=====	=====
MEJOR. CANAL MADRE LLUTA	3258.42	(010)	3233.28	(010)			6491.70
CASTILLA: IRR. ANDAGUA-SOPORO	6269.66	(010)					6269.66
CASTILLA: CANAL HUATIAPA	2561.79	(010)					2561.79
ESTANQUES PINCHOLLO Y CHAQUIJOCHO	5955.05	(010)	3915.41	(010)	14658.89	(010)	24529.35
CANAL COLCA-CORPORAQUE		(010)		(010)			
CANAL URATA I Y II ETAPAS	11325.84	(010)	13956.34	(010)	35527.69	(010)	60809.87
CONDESUYOS: CANAL RIO GRANDE	5191.01	(010)					5191.01
RESERVORIO DE HUAMI	17775.28	(010)	25675.30	(010)	13131.19	(010)	56581.77
AR: CANAL PRINCIPAL BAUTISTA	5617.97	(010)					5617.97
CANAL CHILCAYMARCA		(010)		(010)			
CANAL MACHA-CARAVELI	8404.49	(010)	5075.03	(010)	10635.56	(010)	24115.08
CANAL ACHANIZO-CARAMBA-ARASQUI	9752.80	(010)	13451.56	(010)			23204.36
CANALES CAHUACHO	2112.35	(010)	6984.99	(010)			9097.34
ESTANQUE SEÑORPA	7707.86	(010)	7271.48	(010)	513.11	(010)	15492.45
CANAL POMACOCCHA	15775.28	(010)	8826.73	(010)			24602.01
RESERVORIO AMPACHO	27662.92	(010)	15975.44	(010)	1947.52	(010)	45585.88
RESERVORIO ANCARO	10202.24	(010)	7626.19	(010)	5516.03	(010)	23344.46
MEJOR. BOCATOMA PAUCARPATA	18000.00	(010)	1050.47	(010)			19050.47
RESERVORIO MOSOPUQUIO	10629.21	(010)	23833.56	(010)	4758.01	(010)	39220.78
CANAL CHIGUATA	4584.26	(010)	2523.87	(010)	1877.55	(010)	8985.68
CANAL CARABAYA LA VICTORIA	6629.21	(010)	5443.38	(010)	8606.41	(010)	20679.00
ACEQUIA ALTA QUEQUEÑA	10651.68	(010)	5648.02	(010)	4518.95	(010)	20818.65
CANALES SOCONAYA	12516.85	(010)		(010)			12516.85
PLACAS PARA CANAL PAÑE-SUMBAY	202247.19	(010)		(010)			202247.19
DIQUE DE LOS ESPAÑOLES	279325.84	(010)		(010)			279325.84
SUPERVISION Y LIQUIDACION DE OBRAS			9495.22	(010)		(011)	9495.22
AGUA POTABLE CALLALLI	2500.00	(020)	5550.56	(020)	11717.86	(020)	19768.42
AGUA POTABLE MACHAGUAY	4682.20	(020)	3449.43	(020)			8131.63
ESTUD. AGUA POTABLE QUICACHA		(020)		(020)			
AGUA POTABLE LOMAS	12012.71	(020)	33449.43	(020)	1183.16	(020)	46645.30
AGUA POTABLE ANDARAY	8199.15	(020)	3898.87	(020)	3754.26	(020)	15852.28
AGUA POTABLE ISPACAS	4830.50	(020)	6887.64	(020)	3373.15	(020)	15091.29
PUENTE COLLOTA	77396.31	(030)	96994.63	(030)	5127.19	(030)	179518.13
CARAVELI: CARR. QUINCACHA-YANAMACHAY	46036.86	(030)					46036.86
CARAVELI: PUENTE CHALA	19423.96	(030)					19423.96
CARAVELI: PUENTE AGUADITA	37281.10	(030)					37281.10
CARRETERA SIQUI-SALAMANCA	56889.40	(030)	4212.88	(030)			61102.28
PUENTE PEATONAL MUNGUI-TAURISMA	10599.07	(030)	2254.02	(030)	514.41	(030)	13367.50
APOYO A LA PRODUCCION PECUARIA	12172.94	(040)					12172.94
	=====		=====		=====		=====
	976181.40		316683.73		127360.94		1420226.07

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

1984		1985		1986	
SUBPR	MONTO	SUBPR	MONTO	SUBPR	MONTO
=====	=====	=====	=====	=====	=====
AR-010	428523.74	AR-010	261673.62	AR-010	84236.06
AR-020	28237.15	AR-020	55455.60	AR-011	54323.53
AR-030	279605.50	AR-030	83665.36	AR-020	24571.00
AR-040	12169.32			AR-030	5764.15
	=====		=====		=====
	748535.71		400794.58		168894.74

PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
05/11/87

CORDECAJAMARCA

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
	=====	=====	=====	=====	=====	=====	=====
CANAL YUMAGUAL ETAPAS I Y II-REHAB.	20659.09	(010)	31452.24	(010)			52111.33
CANAL MIRAFLORES -REHAB.		(010)	9269.00	(010)		(010)	9269.00
CANAL SAN CRISTOBAL -REHAB.	9750.00	(010)	886.93	(010)			10636.93
CANAL SAN LUIS DE YAMINCHAD -REHAB.	12886.36	(010)					12886.36
CANAL POZO LA PALMA -REHAB.	5000.00	(010)					5000.00
CANAL LIVES-MIRADOR -REHAB., MEJOR.	21409.09	(010)	31461.98	(010)			52871.07
CANAL SAN BERNARDINO-REHAB.						(010)	
CANAL MOLINO VIEJO -ESTUDIO		(010)					
CANAL MONTEGRANDE -REHAB.	4545.45	(010)					4545.45
CANAL JANCOS EL PALTO-REHAB., MEJOR.	20181.81	(010)				(010)	20181.81
CANAL SOCHE -REHAB.	3973.21	(050)		(050)		(010)	3973.21
CANAL ACEQUIA ALTA -REHAB.		(050)					
CANAL ALCANTARILLA I-REHAB.			4129.74	(050)			4129.74
CANAL ACEQUIA BANDA -REHAB.		(050)					
CANAL LA CAPILLA -REHAB.	9598.21	(050)					9598.21
CANAL EL CEQUION ESPEJO -REHAB.	8459.82	(050)	2768.98	(050)			11228.80
CANAL JAGUEY -REHAB.	5066.96	(050)					5066.96
INSTAL. COMPUERTAS EN CANALES 84-85						(010)	
ENCAUZ. RIO CASCACEN		(020)	35363.77	(020)		(072)	35363.77
ENCAUZ. RIO SAN LUCAS	28310.24	(020)					28310.24
ENCAUZ. RIO SAN PABLO			16656.34	(020)			16656.34
ENCAUZ. RIO CAJAMARQUINO	11080.33	(020)					11080.33
ENOAUZ. RIO PONTE		(030)					
ENCAUZ. RIO CHONTA	16731.30	(020)				(072)	16731.30
ENCAUZ. QUEBRADA HONDA	139977.67	(050)	64833.86	(050)			204811.53
ENCAUZ. QUEBRADA HUERTAS	36093.75	(050)	9208.86	(050)			45302.61
ENCAUZ. QUEBRADA CUMBEMAYO		(020)					
CANALIZ. QUEBRADA SIMON BOLIVAR	10470.91	(020)	9767.80	(020)			20238.71
CANALIZ. QUEBRADA CALISPUQUIO	18171.74	(020)	35185.75	(020)			53357.49
CANALIZ. QUEBRADA JUAN XXIII	39390.58	(020)	24674.92	(020)			64065.50
DEFENSA PUENTE SAN LUCAS			7438.08	(020)			7438.08
PUENTE PEATONAL CHANCAY - BAÑOS	1243.78	(030)				(030)	1243.78
PUENTE PEATONAL CHANCAY - UTICYACU	1243.78	(030)				(030)	1243.78
PUENTE PEATONAL COLGANTE HUAQUILLAS	11318.40	(030)					11318.40
PUENTE PEATONAL COLGANTE VENTANILLAS	22857.14	(050)					22857.14
PUENTE PEATONAL LA SAMANA - EXP.TEC.	746.26	(030)					746.26
PUENTE NIEVES	870.64	(030)	13896.87	(030)			14767.51
PUENTE SALABAMBA -REHAB.	746.26	(030)					746.26
PUENTE PALTAMAYO	1243.78	(030)	4860.52	(030)			6104.30
PUENTE PURUAY	3407.96	(030)					3407.96
PUENTE LLACANORA, PUENTE SHAULLO	24975.12	(030)	20118.34	(030)			45093.46
PUENTE PARIAMARCA	13532.33	(030)	2781.06	(030)			16313.39
PUENTE RUPE Y ACCESOS	20558.03	(050)	7761.07	(050)			28319.10
VARIANTE DE CARRETERA LLACANORA		(030)					
PEQ.OBRAS REHAB. CARR. CAJAM. JESUS	10547.26	(030)					10547.26
CARR.ESPINAL-NIEPOS,ACCES.PTE PAPAYO	33980.09	(030)	24742.18	(030)		(030)	58722.27
CARR. JESUS-LACAS, PTE PATILISH		(030)				(030)	
CARRETERA CAJAMARCA-CAJABAMBA						(030)	
CARRETERA CHILETE-CONTUMAZA-CASCAS						(030)	

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
CARR. GUZMANGO-SAN BENITO-ALGARROBAL	34017.85	(050)	152.40	( )			34170.25
CARR. PUENTE YONAN-TRINIDAD	19843.75	(050)	22895.56	(050)			42739.31
BADEN MOROCHILLO	1473.21	(050)	1574.36	(050)			3047.57
REHAB. INF. SOCIAL 32 LOCALES EDUC.	44933.03	(050)	7943.03	(050)			52876.06
MANEJO INTEGRAL DE RECURSOS ECOLOG.		(050)	19343.35	(050)			19343.35
ESTUDIO MICROCUENCA DE CAJAMARCA					803.57	(072)	803.57
PAGOS DEVENGADOS DEL 85						(073)	
LIQUIDACION DE OBRAS						(073)	
	=====		=====		=====		=====
	669295.19		409166.99		803.57		1079265.75

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

1984		1985		1986	
SUBPR	MONTO	SUBPR	MONTO	SUBPR	MONTO
CA-010	104985.87	CA-010	70188.73	CA-010	81133.65
CA-020	138625.90	CA-020	125525.93	CA-030	176637.58
CA-030	144335.83	CA-030	78617.56	CA-072	54473.25
CA-050	426139.36	CA-050	140855.31	CA-073	48001.10
	=====		=====		=====
	814086.96		415187.53		360245.58

PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
05/11/87

CORDECUSCO

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
CONST. IRRIG. OCCORURO TOCROYOC	112090.68	(010)	36156.11	(010)			148246.79
CONST. IRRIG. PULPERA		(010)		(010)		(010)	
CONST. IRRIG. URINSAYA	105768.26	(010)	71207.65	(010)	109377.59	(010)	286353.50
MEJOR. IRRIG. YUCAY	54861.46	(010)	24963.18	(010)			79824.64
MEJOR. IRRIG. SAHUA-SAHUA	17556.67	(010)					17556.67
CONST. IRRIG. PAMPAMARCA	59193.95	(010)	34167.89	(010)	53159.45	(010)	146521.29
MEJOR. IRRIG. CROLLANA	31057.93	(010)	15390.27	(010)			46448.20
MEJOR. IRRIG. PARURO	36599.49	(010)	3755.52	(010)			40355.01
MEJOR. IRRIG. SAMBOR	45768.26	(010)	19366.71	(010)			65134.97
MEJOR. IRRIG. JULLICUNCA	47204.03	(010)	12739.32	(010)			59943.35
MEJOR. IRRIG. COLQUEPATA	52392.94	(010)	12150.22	(010)			64543.16
MEJOR. IRRIG. LIMATAMBO	33753.14	(010)	28188.51	(010)			61941.65
CONST. IRRIG. TOTORA	27657.43	(010)	24300.44	(010)			51957.87
MEJOR. IRRIG. AMPARAES	10957.17	(010)					10957.17
EXTENSION Y FOMENTO ACROPECUARIO						(010)	
APOYO AGRICOLA		(020)		(020)			
INSTALACION DE PASTOS CULTIVADOS		(020)		(020)			
TRANSFERENCIA DE TECNOLOGIA		(020)					
PROTECCION DEL CAPITAL PECUARIO	29239.76	(030)					29239.76
INSTAL. HUERTOS COMUNALES		(040)		(040)			
INSTAL. GRANJAS COMUNALES		(040)					
LIQUIDACION DE OBRAS						(061)	
CONSERVACION DE SUELOS			25546.93	(070)			25546.93
	=====		=====		=====		=====
	664101.17		307932.75		162537.04		1134570.96

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

SUBPR =====	1984		1985		1986	
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR
CU-010	793198.20	CU-010	347637.82	CU-010	232696.11	
CU-020	208060.28	CU-020	64668.14	CU-061	27458.56	
CU-030	28489.52	CU-040	11856.90			
CU-040	48064.58	CU-070	22977.71			
	=====		=====		=====	
	1077812.58		447140.57		260154.67	

PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
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CORDEHUANCAVELICA

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
IRRIGACION LIRIO CHUNCA	37024.07	(010)	16837.60	(010)			53861.67
IRRIGACION JOSE OLAYA	34201.31	(010)	18820.51	(010)			53021.82
IRRIGACION YAULI	51378.55	(010)	9324.78	(010)			60703.33
IRRIGACION ANTAYMISA	36892.77	(010)	5102.56	(010)			41995.33
IRRIG. TICRAPO (ESTUDIO DE FACTIBL.)	875.27	(010)					875.27
IRRIGACION AYAVI TAMBILLO	547.04	(010)	11213.67	(010)			11760.71
IRRIGACION AYACCOCHA	20634.57	(010)	14034.18	(010)			34668.75
IRRIGACION HUAYLLAY GRANDE	22253.82	(010)	15256.41	(010)			37510.23
IRRIGACION HUALLHUAYPATA	21903.71	(010)	17760.68	(010)			39664.39
REHAB. IRRIG. STA. CRUZ DE INYACC	18161.92	(010)	7880.34	(010)			26042.26
IRRIGACION SAN PEDRO DE CORIS	34398.24	(010)	11162.39	(010)			45560.63
IRRIGACION CALLQUI GRANDE	4332.60	(010)					4332.60
RESERVORIO MOYA	40459.51	(010)	19213.67	(010)			59673.18
RESERVORIO VIÑAS PAMPAS	13129.10	(010)	17034.18	(010)			30163.28
CONST. RESERVORIO GALLANMARCA	12713.34	(010)					12713.34
CONST. RESERVORIO JABONILLO			9829.05	(010)			9829.05
MEJOR. RESERVORIO RANTAY	11466.08	(010)					11466.08
PRODUCCION AGRICOLA 84	154400.00	(020)					154400.00
PRODUCCION AGRICOLA 85			13249.26	(020)			13249.26
FORESTACION Y REFORESTACION	87146.22	(030)	33719.72	(030)			120865.94
IMPULSO PECUARIO CALLQUI GRANDE	84156.76	(040)	76438.48	(040)			160595.24
SEMILLEROS Y PASTOS CULTIVADOS 84	76666.66	(050)					76666.66
SEMILLEROS Y PASTOS CULTIVADOS 85			18054.88	(050)			18054.88
SANIDAD VEGETAL 84	20232.55	(060)					20232.55
SANIDAD VEGETAL 85			1435.13	(060)			1435.13
SANIDAD ANIMAL 84	51208.22	(070)					51208.22
SANIDAD ANIMAL 85			4305.39	(070)			4305.39
CARRET. MANTACRA-VIÑAS PAMPAS			31374.60	(080)			31374.60
CARRET. PALCA OCCOROPUQUIO	55980.39	(090)					55980.39
CARR. PILCHACA-TELLERIA-EST. RECONS.	2230.39	(090)	38016.78	(080)			40247.17
CARR. CHINCHIHUASI-PACHAMARCA-EST. REC	955.88	(090)	19695.69	(080)			20651.57
CARRET. CHECCO CRUZ - LA MEJORADA			24669.46	(080)			24669.46
CARRET. HUANCAYO-PAMPA ALTOPONGO	56691.17	(090)					56691.17
CENTROS DE CERAMICA-MARMOLERIA	4739.45	(080)					4739.45
MADERA, CUEROS Y CESTERIA	11389.57	(080)					11389.57
ARTES, TEXTIL RURAL	21066.99	(080)					21066.99
SUPERV. IMPREV. Y LIQUIDACION DE OBRAS				(010)	46426.36	(012)	46426.36
=====	987236.15		434429.41		46426.36		1468091.92

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

SUBPR =====	1984		1985		1986	
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR
HU-010	350333.68	HU-010	175409.57	HU-012	45867.70	
HU-020	154184.37	HU-020	13247.74			
HU-030	87057.99	HU-030	33718.48			



1984		1985		1986	
SUBPR	MONTO	SUBPR	MONTO	SUBPR	MONTO
=====	=====	=====	=====	=====	=====
HU-040	84123.65	HU-040	76434.77		
HU-050	76591.13	HU-050	17997.38		
HU-060	20210.16	HU-060	1435.00		
HU-070	51159.81	HU-070	4305.00		
HU-080	33828.92	HU-080	120740.96		
HU-090	111822.45				
	=====		=====		=====
	969312.16		443288.90		45867.70

PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
05/11/87

CORDEICA

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
CHINCHA: REHAB. 7 CANALES	30973.45	(010)					30973.45
PISCO: REHAB. 11 CANALES	17109.14	(010)					17109.14
PISCO: CONST. DESAREN. CANAL EL CONDOR	60737.46	(010)					60737.46
ICA: REHAB. 5 CANALES	78318.58	(010)					78318.58
ICA: CONST. BOCATOMA LA PORUMA	24719.76	(010)					24719.76
PALPA: ESTUDIO INFRAESTR. DE RIEGO	10501.47	(010)					10501.47
PALPA: BOCAT. EL MOLINO			11453.65	(010)			11453.65
PALPA: BOCAT. LA COMUNIDAD			18400.00	(010)			18400.00
PALPA: BOCAT. JAURANCA			11219.51	(010)			11219.51
NAZCA: ESTUD. PREL. INFRA. DE RIEGO	5781.71	(010)					5781.71
LIQUIDACION DE OBRAS					23642.17	(011)	23642.17
CHINCHA: LIMP. DEFEN. EN 2 RIOS	23541.07	(020)					23541.07
CHINCHA: PARTIDOR CONTA			98377.76	(020)			98377.76
PISCO: ENCAUZ. DEFEN. EN 8 SECTORES	14107.64	(020)					14107.64
PISCO: DEFENSA VENTUROSA-FIGUEROA	16515.58	(020)	57029.70	(020)			73545.28
ICA: ENCAUZ. DEFEN. EN 14 SECTORES	116742.20	(020)					116742.20
PALPA: ENCAUZ. DEFEN. EN 4 RIOS	53286.11	(020)					53286.11
NAZCA: ENCAUZ. DEFEN. EN RIOS	10113.31	(020)					10113.31
NAZCA: DEFENSAS RIO AJA			106732.67	(020)			106732.67
REFOR. CUENCAS BAJAS CHINCHA	6147.30	(030)					6147.30
REFOR. CUENCAS BAJAS PISCO	5014.16	(030)					5014.16
REFOR. CUENCAS BAJAS ICA	8130.31	(030)					8130.31
REFOR. CUENCAS BAJAS PALPA	3909.34	(030)					3909.34
REFOR. CUENCAS BAJAS NAZCA	4759.20	(030)					4759.20
REFOR. CUENCAS ALTAS CHINCHA			6148.68	(030)	1546.32	(011)	7695.00
REFOR. CUENCAS ALTAS PISCO			2124.09	(030)	1444.08	(011)	3568.17
REFOR. CUENCAS ALTAS ICA			6875.34	(030)	2402.55	(011)	9277.89
REFOR. CUENCAS ALTAS PALPA			4024.59	(030)	1520.76	(011)	5545.35
REFOR. CUENCAS ALTAS NAZCA			2068.19	(030)	753.99	(011)	2822.18
	=====		=====		=====		=====
	490407.79		324454.18		31309.87		846171.84

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

SUBPR =====	1984		1985		1986	
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR
IC-010	228055.63	IC-010	41073.17	IC-011	31290.39	
IC-020	234234.15	IC-020	261931.28			
IC-030	27936.03	IC-030	21233.46			
	=====		=====		=====	
	490225.81		324237.91		31290.39	

PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
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CORDELAMBAYEQUE

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
SECTOR HUACA DE LA CRUZ	69470.19	(010)					69470.19
SECTOR MAGDALENA	7417.21	(010)					7417.21
SECTOR SALAS	331.12	(010)					331.12
SECTOR REQUE	463.57	(010)					463.57
SECTOR CACHINCHE-DISTR. RIEGO MOTUPE	257615.89	(010)					257615.89
BOCATOMA LAS ANITAS	13807.94	(010)	20.04	(010)			13827.98
MEJORAM. CAPTACION CANAL PRADA	43543.04	(010)	26.72	(010)			43569.76
TOMA CANAL EL PUEBLO	43609.27	(010)	26.72	(010)			43635.99
TOMA CANAL ZAPATERO	61523.17	(010)	213.76	(010)			61736.93
ELAB. EXP.TEC. OBRAS INCL. EN 500010			2672.01	(010)			2672.01
RESERVORIO LA PILCA			5557.78	(010)			5557.78
COLOCHE RAMA TEMPON QUEBRADA VEGA			8897.79	(010)			8897.79
REHABILIT. CAUCE GENERAL SAN BARTOLO			7327.98	(010)			7327.98
CAUCE GENERAL POZO DE PATO			3279.89	(010)			3279.89
PARTIDOR ALITA Y CORTE			3206.41	(010)			3206.41
ALCANTARILLA EN CALLEJON ALITA			1997.32	(010)			1997.32
BADEN ALITAS Y HUMEDADES			180.36	(010)			180.36
CONSTR. E INST. COMPUERTA TOMA PRADA			494.32	(010)			494.32
REMODELACION OBRAS SECTOR ZAÑA			180.36	(010)			180.36
REM.D.SIST.IZAJE COMP.DESAREN.MOSEFU			1543.08	(010)			1543.08
TOMA TORTOLITA			19291.91	(010)	3550.97	(010)	22842.88
TOMA CHONTO			24028.05	(010)	3699.88	(010)	27727.93
TOMA TRAPICHE, TOMA HUABAL			25851.70	(010)	3075.60	(010)	28927.30
TOMA HORCONES			14729.45	(010)	3373.42	(010)	18102.87
TOMA OTRA BANDA (MORROPE)			17221.10	(010)	4175.25	(010)	21396.35
TOMA OTRA BANDA (ZAÑA)			37595.19	(010)	12525.77	(010)	50120.96
TOMA LA FLORIDA - EL PALTO					41397.47	(010)	41397.47
TOMAS GARRIZAL, ACNAPE Y CHIRRAN					59627.72	(010)	59627.72
ELABORACION DE EXPED. TECNICOS.			5125.31	(020)			5125.31
ENCAUZAMIENTO DEL RIO INSCULAS			22005.01	(020)			22005.01
ENCAUZAMIENTO RIO OLOS			1723.05	(020)			1723.05
ENCAUZ. RIO MOTUPE SECT.LAS ANITAS			18026.31	(020)			18026.31
ENCAUZ.RIO MOTUP.PUENT.PAN.JAYANCA			18345.86	(020)			18345.86
ENCAUZ. RIO LA LECHE-TOMA MAGDALENA			18157.89	(020)			18157.89
ENCAUZ.R.CHANCAY TRAMO CARNICHE-VEGA			29686.71	(020)			29686.71
ENCAUZ. R. CHANCAY TRAMO CUCULI-PUNT			6885.96	(020)			6885.96
ENCAUZ. RIO ZAÑA SECTOR CULPON			14812.03	(020)			14812.03
ENCAU R ZAÑA SEC. LA LEONERA S.PEDRO			48377.19	(020)			48377.19
ENCAUZ.R.CHANCAY BOC.MONSEFU AL MAR			177073.93	(020)	8371.16	(020)	185445.09
ENCAUZ.R.CHANCAY CALLANCA-PTE.REQUE					110085.13	(020)	110085.13
PROTECCION PUENTE INSCULAS					34727.58	(020)	34727.58
PROTEC. TOMA ZAPATERO RIO CASCAJAL					9489.21	(020)	9489.21
R. LA LECHE PROT.ZANJON BATAN GRANDE					16276.95	(020)	16276.95
PROTECCION DE VARIOS GAVIONES					68013.62	(020)	68013.62
PROTEC. LAGUNA ESTABILIZA. PACORA					29795.68	(020)	29795.68
PROTEC. TOMA HUACA DE LA CRUZ					82673.09	(020)	82673.09
DREN. D-1000 PAQUETE III			480671.33	(030)			480671.33
HUACA DE LA CRUZ			89764.09	(090)	268407.96	(090)	358172.05
CHICLAYO-PIMENTEL-SANTA ROSA (ESTUD)	901.80	(100)					901.80

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
	=====	=====	=====	=====	=====	=====	=====
ESTUDIO S.D. CHICLAYO	15631.26	(100)	19115.04	(100)			34746.30
C.T. LAMBAYEQUE (PEQ. PLANTA)	9238.47	(100)	8439.25	(100)			17677.72
C.T. MOCUPE (PEQ. PLANTA)	5130.26	(100)	1158.48	(100)			6288.74
C.T. OYOTUN (PEQ. PLANTA)	16432.86	(100)	3000.80	(100)			19433.66
C.T. ZAÑA (PEQ. PLANTA)	6472.94	(100)	1818.18	(100)			8291.12
LINEA CHICLAYO-MONSEFU	31162.32	(100)			19109.19	(100)	50271.51
S.D. CHICLAYO I ETAPA	23867.73	(100)	3893.80	(100)			27761.53
S.D. MORROPE	22665.33	(100)	35293.64	(100)			57958.97
S.D. TUCUME	8356.71	(100)	9308.12	(100)			17664.83
S.D. ZAÑA	7635.27	(100)	8833.46	(100)			16468.73
S.D. NUEVA ARICA	5330.66	(100)					5330.66
S.D. SAN JOSE	1442.88	(100)					1442.88
S.D. SANTA ROSA	3687.37	(100)					3687.37
S.D. PACORA	9058.11	(100)					9058.11
S.D. OYOTUN	32625.25	(100)	71021.72	(100)			103646.97
S.D. CHOCHOPE	14829.65	(100)	25543.04	(100)			40372.69
S.D. PIGSI	3647.29	(100)					3647.29
CARR. ZAÑA-CAYALI-NVA ARICA	55258.21	(110)	6473.42	(110)			61731.63
CARR. PANAM. DESVIO PIURA PTE ANCHOV			148357.48	(110)	3057.18	(110)	151414.66
CARR. CHICLAYO-CHONGOYAPE			282506.03	(110)	160464.99	(110)	442971.02
ESTUDIO PUENTE ETEN			1201.69	(110)			1201.69
PUENTE ZANJON BATANCRANDE			66358.69	(110)	111683.59	(110)	178042.28
REHAB. ALCANTARILLADO DIST. TUCUME	66754.17	(130)	95032.30	(130)	60529.01	(130)	222315.48
REHAB. LINEA IMPULS. DESAGUE PACORA	3866.34	(130)	19597.98	(130)			23464.32
ESTUD. Y REHAB. AGUA POTABLE MORROPE	4272.07	(130)	29899.49	(130)	28230.94	(130)	62402.50
L. REBOSE QUEBR. CHOTOQUE-MOTUPE	52147.97	(130)	4307.25	(130)			56455.22
LINEA IMPULSION DESAGUE JAYANCA	5966.58	(130)	753.76	(130)			6720.34
DESARENA. CANAL ALIMENT. LAGUNA BORO	7494.03	(130)					7494.03
REHAB. AGUA POTABLE OYOTUN			1816.22	(130)			1816.22
LINEA IMPUL. Y CONduc. PUERTO ETEN	48902.14	(130)	2024.40	(130)			50926.54
EMISOR DE DESCARGA PUERTO ETEN	2649.16	(130)	14.35	(130)			2663.51
REHAB. ALCANTAR. CIUDAD ETEN	33293.55	(130)	1421.39	(130)			34714.94
COLECTORES CALLE IZAGA-MONSEFU	2100.23	(130)	14.35	(130)			2114.58
EMISOR DESCARGA MONSEFU	46300.71	(130)	1521.89	(130)			47822.60
POZO AGUA POTABLE DE REQUE	5059.66	(130)	3187.36	(130)			8247.02
REHAB. AV. LA MARINA	98427.23	(140)					98427.23
REHAB. AV. MARISCAL NIETO	37136.15	(140)	7.58	(140)			37143.73
REHAB. AV. CHINCHAYSUYO	70234.74	(140)	22.76	(140)			70257.50
REHAB AV CHINCHAYSUYO-CALLE OLLANTAY	28427.23	(140)	30.34	(140)			28457.57
REHAB. AV. JOSE BALTA	22065.72	(140)	83.45	(140)			22149.17
REHAB. AV. SAENZ PEÑA	22981.22	(140)	660.09	(140)			23641.31
REHAB. AV. SANTA VICTORIA	241525.82	(140)	8990.89	(140)			250516.71
REHAB. CALLE HIPOLITO UNANUE			3786.03	(140)			3786.03
REHAB. AV ELVIRA GARCIA Y GARCIA			18095.59	(140)			18095.59
REHAB. PISTAS Y VEREDAS CIUDAD ETEN			36820.94	(140)			36820.94
REHAB. AV. BOLIVAR	46854.46	(140)	4613.05	(140)			51467.51
REHAB. AV. MEJICO	57629.10	(140)	45.52	(140)			57674.62
REHAB. PISTAS LA VICTORIA-MOSHOQUEQUE			193861.91	(140)	21839.08	(140)	215700.99
REHAB. PLAZA DE ARMAS DE CHONGOYAPE			28528.07	(140)			28528.07
REHAB. PISTAS Y VEREDAS EN TUCUME			38990.89	(140)			38990.89
REHAB. PISTAS Y VEREDAS EN MORROPE			33596.35	(140)			33596.35
REHAB. AV. LIBERTAD-LAMBAYEQUE	23145.53	(140)	1949.92	(140)			25095.45
REHAB. PRIM. URBANA P.J. TUPAC AMARU	46866.35	(150)	15839.86	(150)			62706.21
HABIL. PRIM. LOTES DE CANASLOCHE	82557.60	(150)	17206.26	(150)			99763.86
HABIL. PRIM. CHOCHOPE	72926.26	(150)	1975.63	(150)			74901.89

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
	=====	=====	=====	=====	=====	=====	
HABIL. VIVIEN. TUPAC AMARU	41129.03	(150)	139.25	(150)			41268.28
HABIL. VIVIEN. LAGUNAS CANASLOCHE	37304.14	(150)	60.92	(150)			37365.06
REHAB. VIVIENDAS EN CHOCHOPE	27004.60	(150)	15796.34	(150)			42800.94
REHAB. VIVIENDAS EN TUCUME	17626.72	(150)	30478.67	(150)			48105.39
REHAB. VIVIENDAS EN MORROPE	24239.63	(150)	26205.39	(150)			50445.02
HABIL. VIVIEN. CIUDAD ETEN	23548.38	(150)		(150)			23548.38
REHAB. SUBPREFECTURA LAMBAYEQUE	4884.79	(150)	52.21	(150)			4937.00
REC. POZO SEPTICO PTO. SANI. CANSLOCHE				(160)			
RECONSTR. POSTA MEDICA INSCULAS			599.07	(160)			599.07
RECONS. POSTA MEDICA P.J. ATUSPARIAS			92.16	(160)			92.16
C.E. 10159 CARACUCHO			5866.77	(170)			5866.77
C.E. 10162 TRANCA FANUPE			5722.31	(170)	5128.49	(170)	10850.80
C.E. 10972 PUPLAN			5947.03	(170)			5947.03
C.E. 10137 LA PAVA			5874.79	(170)	5231.29	(170)	11106.08
C.E. 10719 ZAPOTAL			6292.13	(170)			6292.13
C.E. 10232 LOS BANCES			5882.82	(170)	8001.14	(170)	13883.96
C.E. 10848 SAPAME			3306.58	(170)			3306.58
C.E. 10800 EL HORCON			2977.52	(170)			2977.52
C.E. 10231 LA RAYA			5545.74	(170)			5545.74
C.E. OCUPACIONAL PACORA			5906.90	(170)			5906.90
C.E. 10998 PUENTE MACHUCA			6155.69	(170)			6155.69
C.E. 10216 EL BANCO			3338.68	(170)			3338.68
C.E. 10782 PASABAR ASERRADERO			2881.21	(170)			2881.21
C.E. 10816 SENQUELO			2889.24	(170)			2889.24
C.E. 10197 SAN CRISTOBAL			2736.75	(170)			2736.75
C.E. 10029 MOCUPE			6701.44	(170)			6701.44
C.E. 10940 PAREDONES-MORROPE					5305.53	(170)	5305.53
C.E. 11078 ACNAPE-MORROPE					8994.86	(170)	8994.86
C.E. 10132 MOCRUMI					5739.57	(170)	5739.57
C.E. 10122 CHIRIMOYO-ILLINO					4026.27	(170)	4026.27
C.E. 10927 CERRO-ASCUTE-PACORA					5254.14	(170)	5254.14
C.E. 10129 PAMPA EL LINO-JAYANCA					3952.02	(170)	3952.02
C.E. 10131 LA TOMASITA-JAYANCA					4785.83	(170)	4785.83
C.E. 10148 CHOLOCAL-MOTUPE					9194.74	(170)	9194.74
C.E. 10221 SUCCHA ALTA SALAS					3243.86	(170)	3243.86
C.E. 10196 LA PILCA-OLMOS					4877.21	(170)	4877.21
C.E. 10957 ANCOL GRANDE-OLMOS					4380.35	(170)	4380.35
C.E. ANTONIO RAYMONDI-SALTUR-CHICLAY					8400.91	(170)	8400.91
C.E. 10977 PAMPA RUME-SALAS					1370.64	(170)	1370.64
ITS ENRIQUE LOPEZ ALBUJAR-FERRAÑAFE					1536.26	(170)	1536.26
LIQUIDACION DE OBRAS					113358.08	(171)	113358.08
	=====		=====		=====		=====
	2076477.08		2513464.93		1366961.63		5956903.64

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

1984		1985		1986	
SUBPR	MONTO	SUBPR	MONTO	SUBPR	MONTO
=====	=====	=====	=====	=====	=====
LA-010	495477.62	LA-010	174218.09	LA-010	128867.07
LA-100	217892.27	LA-020	359895.34	LA-020	362570.44
LA-110	55155.80	LA-030	480620.78	LA-090	268192.96
LA-130	277758.35	LA-090	89733.93	LA-100	19109.19
LA-140	646526.67	LA-100	190871.50	LA-110	266846.76

1984		1985		1986	
SUBPR	MONTO	SUBPR	MONTO	SUBPR	MONTO
=====	=====	=====	=====	=====	=====
LA-150	377000.76	LA-110	444917.62	LA-130	87008.80
		LA-130	164727.87	LA-140	21839.08
		LA-140	369166.58	LA-170	89387.05
		LA-150	108761.73	LA-171	113327.38
		LA-160	691.08		
		LA-170	77977.72		
	=====		=====		=====
	2069811.47		2461582.24		1357148.73

PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
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CORDELIBERTAD

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
=====	=====	=====	=====	=====	=====	=====	=====
ENCAUZAM. DEFENSA VALLE JEQUETEPEQUE	97377.04	(010)					97377.04
ENROCADO DE CERRO BLANCO	14524.59	(010)	17096.29	(010)	37362.51	(010)	68983.39
CANAL Y BOCATOMA VALLE CHICAMA	258032.78	(010)					258032.78
CANAL Y BOCATOMA VALLE MOCHE	155770.49	(010)					155770.49
CANAL Y BOCATOMA VALLE VIRU	42360.65	(010)					42360.65
CANAL SAUSAL-QUEMAZON			136229.62	(010)	177312.00	(010)	313541.62
CRUCE QUEBRADA RIO CHAMAN	105868.85	(010)					105868.85
REH. BOCAT. Y CONS. BARRAJE STA. ROSA	22622.95	(010)					22622.95
MUROS CONCRETO SANTO DOMINGO	5606.55	(010)					5606.55
CARR. SAUSAL-SALINAR Y OBRAS COMPL.	61362.68	(020)	75014.45	(020)	138225.05	(020)	274602.18
CARR. COINA-CHUQUIZONGO-HUARANCHAL	10461.21	(020)					10461.21
CONST. PUENTE CEPEDA	24989.51	(020)	3526.01	(020)			28515.52
CARR. PICHANDAY-LUCMA-HUARANCHAL	24171.90	(020)					24171.90
CARR. CACHICADAN-HUAMACHUCO	28155.13	(020)	5310.69	(020)			33465.82
CARR. SIMBAL-SINSICAP-PARANDAY	42872.11	(020)	11799.13	(020)			54671.24
PUENTE ZANGAL (POROTO)			4335.26	(020)			4335.26
PUENTE BAÑOS CHIMU			5202.31	(020)	44709.97	(020)	49912.28
CARR. SALPO-PLAZAPAMPA	15366.87	(020)					15366.87
PTE. GILDEMEISTER-TAMBO	4675.05	(020)					4675.05
CARR. HUANCAY-COMPIN	7169.81	(020)					7169.81
CARR. COCHABAMBA-CHUGAY-CONSUSO	5744.23	(020)					5744.23
MEJORAM. PUENTE CHAGUAL	1446.54	(020)					1446.54
CARR. HUAMACHUCO-MARCABELITO	4654.08	(020)					4654.08
CARR. SIMBAL-LA CUESTA	11740.04	(020)					11740.04
CARR. LONGOTEA-TRES CRUCES	29161.42	(020)					29161.42
AFIRMADO URBANA SANTA ISABEL					17795.82	(020)	17795.82
ACCESOS PUENTE MACABI	1153.03	(020)			6322.50	(020)	7475.53
RECONSTRUCCION DE BERMAS					50614.84	(020)	50614.84
LINEA A.T. SALAVERRY	62333.33	(030)					62333.33
A.P. LAREDO	6605.92	(040)	201.43	(040)			6807.35
A.P. Y ALCANT. CHEPEN	7357.63	(040)	1323.74	(040)			8681.37
A.P. SIMBAL	6036.44	(040)					6036.44
A.P. Y ALCANT. GUADALUPE	5102.50	(040)	2007.19	(040)			7109.69
A.P. Y ALCANT. PACASMAYO	2779.04	(040)					2779.04
A.P. Y ALCANT. SAN PEDRO DE LLOC	3599.08	(040)					3599.08
A.P. Y ALCANT. PUERTO CHIMACA	4373.57	(040)	2194.24	(040)			6567.81
A.P. Y ALCANT. MOCHE	5056.94	(040)	6525.17	(040)			11582.11
A.P. Y ALCANT. VIRU	1867.88	(040)	4827.33	(040)			6695.21
A.P. Y ALCANT. JEQUETEPEQUE	2824.60	(040)					2824.60
A.P. Y ALCANT. CHICAMA	2596.81	(040)					2596.81
A.P. Y ALCANT. POROTO	1412.30	(040)	1683.45	(040)			3095.75
ALCANT. TRUJILLO	11708.42	(040)	10733.81	(040)			22442.23
C.E. ANDRES RAZURI	21253.48	(070)					21253.48
C.E. SR. DE LOS MILAGROS-LA ESPERANZA			3446.80	(070)			3446.80
C.E. 80077 FRANCISCO DE ZELA-TRUJILL	6601.67	(070)					6601.67
C.E. 80012 PEDRO RIVADENEYRA-TRUJILL			1285.10	(070)			1285.10
C.E. 80824 PORVENIR	7883.00	(070)					7883.00
C.E. 80414 S. MARTIN DE PORRAS-PACASM	5571.03	(070)					5571.03
C.E. 80044 LAREDO-TRUJILLO	13481.89	(070)	7497.87	(070)			20979.76

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
9 OBRAS EN SANCHEZ CARRION			6638.29	(070)			6638.29
4 OBRAS EN PACASMAYO			6638.29	(070)			6638.29
3 OBRAS EN CHEPEN			4936.17	(070)			4936.17
3 OBRAS EN ASCOPE			4578.72	(070)			4578.72
SUPERVISION, CONTROL, LIQUID. DE OBRAS	17901.63	(010)	22998.55	(020)	36490.25	(300)	77390.43
	=====		=====		=====		=====
	1171634.67		346029.91		508832.94		2026497.52

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

SUBPR =====	1984		1985		1986	
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR
LI-010	717768.57	LI-010	157079.98	LI-010	214488.36	
LI-020	272828.36	LI-020	124315.13	LI-020	258383.00	
LI-030	62225.24	LI-040	29494.87	LI-300	36727.00	
LI-040	61245.44	LI-070	34996.83			
LI-070	54669.33					
	=====		=====		=====	
	1168736.94		345886.81		509598.36	



PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
05/11/87

CORDEMOQUEGUA

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
CONSTR. RESERVOIRIO ESTUQUIÑA	92792.55	(010)	63488.37	(010)	15897.04	(080)	172177.96
CONSTR. RESERVOIRIO ESCAPALAUQUE	26382.97	(010)					26382.97
CONSTR. RESERV. STA. ROSA - PUQUINA	88856.38	(010)					88856.38
CONSTR. RESERVOIRIO CATA-CATAS	19920.21	(010)	14637.48	(010)	15700.22	(080)	50257.91
CONSTR. CANAL LA PASCANA - TORATA	25239.36	(010)					25239.36
CONSTR. CANAL URINAY	66037.23	(010)					66037.23
CONSTR. CANAL CARUMAS	33723.40	(010)	126347.46	(010)	5329.29	(080)	165400.15
ESTUDIO Y REHAB. CANAL TASSATA	2313.82	(010)	31545.82	(010)	62.90	( )	33922.54
CHACRAS PILOTO RIEGO TECN. (4)	50452.12	(010)	1381.66	(010)	6729.75	(080)	58563.53
PERF.EQUIP.ELECT. POZO CHIMBA ALTA 1	29746.19	(020)	4869.63	(020)	10329.02	(020)	44944.84
PERF.EQUIP.ELECT. POZO CHIMBA ALTA 2	54670.05	(020)	13657.97	(020)	6886.01	(020)	75214.03
PERF. POZO TUB. CORPANTO 1	12436.54	(020)					12436.54
REHAB.EQUIP.POZO CRUZ VERDE	15228.42	(020)	10973.92	(020)			26202.34
REHAB.EQUIP.ELECT. POZO MONTALVO	10329.94	(020)	5728.52	(020)	2479.43	(020)	18537.89
PERF.EQUIP.ELECT. POZO SAMEGUA 1	27157.36	(020)	9884.96	(020)	16368.97	(020)	53411.29
PERF. POZO TUB. SAMEGUA 2	18883.24	(020)	452.45	(020)			19335.69
REHAB.EQUIP.ELECT. POZO SENAPA 1	10329.94	(020)	835.88	(020)	1962.39	(020)	13128.21
REHAB.EQUIP.ELECT. POZO SENAPA 3	12233.50	(020)	920.24	(020)	14353.70	(020)	27507.44
REHAB.EQUIP. POZO VIVERO 1	12411.16	(020)					12411.16
PERF.EQUIP.ELECT. POZO VIVERO 2	21243.65	(020)	13573.61	(020)	7397.17	(020)	42214.43
SEMILLEROS Y PLANTONES FRUTICOLAS	99076.43	(030)	1721.22	(030)			100797.65
PROGRAMA DE SANIDAD VEGETAL	43789.80	(030)	34762.40	(030)			78552.20
ABASTECIMIENTO DE INSUMOS AGRICOLAS	15923.56	(030)					15923.56
ABASTEC. INSUMOS PRODUC. PECUARIA	22806.45	(050)	1640.04	(050)			24446.49
SANIDAD ANIMAL			5750.79	(050)			5750.79
CARR. ACCESO A LOMAS DE ILO	10374.44	(060)					10374.44
CARR. CRUCE CUAJONE-YACANGO-TORATA	105506.60	(060)	113154.31	(060)	62466.15	(060)	281127.06
CARR. CORALAUQUE-ICHUÑA	65660.79	(060)					65660.79
CARR. MOQUEGUA-OMATE	217114.53	(060)	30642.96	(060)			247757.49
CARR. MOQUEGUA-PUNO AV. INT.MONTALVO	267731.27	(060)	25408.47	(060)			293139.74
CARR. CARUMAS-CHILLICUA	98920.70	(060)	107723.14	(060)	9629.19	(060)	216273.03
LIQUIDACION DE OBRAS					40915.97	(080)	40915.97
	=====		=====		=====		=====
	1577292.60		619101.30		216507.20		2412901.10

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SECUN AID \*

SUBPR =====	1984		1985		1986	
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR
MO-010	352190.54	MO-010	282371.81	MO-020	33489.50	
MO-020	220881.63	MO-020	86901.12	MO-060	45374.42	
MO-030	147646.67	MO-030	37713.85	MO-080	68513.85	
MO-050	22293.66	MO-050	7353.20			
MO-060	723267.81	MO-060	317168.03			
	=====		=====		=====	
	1466280.31		731508.06		147377.77	

PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
05/11/87

CORPIURA

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL MONTOS =====
	MONTOS	SUBPR	MONTOS	SUBPR	MONTOS	SUBPR	
VALLE DEL CHIRA	515878.37	(010)					515878.37
VALLE SAN LORENZO	567905.40	(010)					567905.40
VALLE ALTO PIURA	454391.89	(010)					454391.89
VALLE MEDIO PIURA	64527.02	(010)					64527.02
VALLE BAJO PIURA	320945.94	(010)					320945.94
CARR. PIURA-CATACAOS	320961.53	(070)					320961.53
CARR. CHUSIS-PTE. INDEPENDENCIA	30240.38	(070)					30240.38
CARR. LOBITOS-TALARA	68269.23	(070)					68269.23
CARR. ACCESO A CALETAS	46129.80	(070)					46129.80
CARR. SULLANA-PAITA	810625.00	(070)	73825.70	(070)			884450.70
CARR. SULLANA-TAMBOGRANDE	110576.92	(070)	36912.85	(070)			147489.77
CARR. TALARA-NEGRITOS	106947.11	(070)	501011.81	(070)			607958.92
CARR. MARCAVELICA-POECHOS	204086.53	(070)	100317.57	(070)			304404.10
REHAB. CARR. PIURA-PAITA TRAMOS I,II			1764106.35	(070)			1764106.35
REHAB. CARRET. PIURA-SULLANA TRAMO 2			119202.36	(070)			119202.36
CARR. CATACAOS-PUENTE INDEPENDENCIA			372178.72	(070)	108401.08	(070)	480579.80
PUENTE CARRASQUILLO	49399.03	(070)					49399.03
PUENTE CHIPILILICO	94567.30	(070)					94567.30
PUENTE SANTA ANA	29423.07	(070)					29423.07
PUENTE NEGRITOS					86720.86	(070)	86720.86
SISTEMA ELEC. PIURA-SULLANA-CATACAOS	91833.74	(090)					91833.74
RED DISTR. ELEC. PRIM. TALARA	71393.64	(090)					71393.64
RED DISTR. ELEC. PRIM. Y SEC. PAITA	62347.18	(090)					62347.18
RED ELE.PRIM.MANCORA-ORGANOS-NEGRITO	38386.30	(090)					38386.30
GEN. Y DISTR. ELECT. CHULUCANAS	34229.82	(090)					34229.82
SIS. ELECTRNICO 13 POBLADOS	219559.90	(090)					219559.90
LINEA TRANSMISION PAITA-TALARA	190220.04	(090)					190220.04
SISTEMA ELECT. CASA FUERZA SULLANA	90464.54	(090)					90464.54
REH. LINEA TRANSMIS. PAITA-EL ARENAL	158311.34	(100)					158311.34
EJE PAITA-TALARA: CRUCE RIO CHIRA	334000.00	(110)					334000.00
REH. EJE PAITA-TALARA:RAMAL NEGRITOS			223410.95	(110)			223410.95
REHAB. AGUA POTABLE Y ALCAN. SULLANA	775777.77	(110)	280044.05	(110)	228310.50	(110)	1284132.32
AGUA POTABLE Y ALCANTARILL. AV. GRAU	119777.77	(110)					119777.77
AVDAS. PANAMER. SAN RAMON, SULLANA			802157.89	(130)			802157.89
AVDAS. GULLMAN, SAN MARTIN, VALLEJO			622451.12	(130)			622451.12
AVDAS. LORETO Y SANCHEZ CERRO			582413.53	(130)			582413.53
CASTILLA I (PROGRESO, CORPAC, JUNIM)			64007.51	(130)			64007.51
CASTILLA III(IRAZOLA,MONTERO,OTRAS)			526962.40	(130)			526962.40
CERCADO DE SULLANA Y BELLAVISTA			172142.85	(130)			172142.85
AV. F Y G			225248.12	(130)			225248.12
JIRONES BOLOGNESI Y ALFONSO UGARTE			235541.35	(130)			235541.35
JIRONES ICA Y CUSCO DE CHULUCANAS			68255.63	(130)			68255.63
AV. GRAU EN PIURA			124541.35	(130)	316612.72	(130)	441154.07
AVDAS. GULLMAN Y SULLANA					110571.73	(130)	110571.73
AVENIDA GRAU EN CASTILLA					181930.96	(130)	181930.96
AVENIDA FERMIN MALAGA					274541.53	(130)	274541.53
AVENIDA RAMON CASTILLA					164509.16	(130)	164509.16
AV. CAYETANO HEREDIA EN CASTILLA					134843.58	(130)	134843.58
AVENIDA BOLOÑESI					115587.91	(130)	115587.91

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
AVENIDA LIMA					65399.13	(130)	65399.13
AVENIDA EL ZANJON EN PAITA					70658.03	(130)	70658.03
AVENIDA FORTUNATO CHIRICHIGNO					12713.05	(130)	12713.05
HAB. URBANA DE VICE: 400 LOTES	69908.81	(160)					69908.81
HAB. URBANA POZO DE LOS RAMOS:400 L.	216109.42	(160)					216109.42
HAB. URBANA "13 DE ABRIL": 572 LOTES	78446.11	(180)					78446.11
HAB.PRIM.202 LOTES EN CHULLIYACHI			32281.73	(160)			32281.73
HAB.PRIM.214 LOTES CON SERV.BERNAL			42259.72	(160)			42259.72
HAB.PRIM.166 LOT.CON SERV.PARACHIQUE			41085.84	(160)			41085.84
HAB.PRIM.286 LOTES SERV. SAN CRISTO			31107.85	(160)			31107.85
REHAB. CASAS Y CALLES P. NUEVO COLAN	158373.20	(170)	57013.21	(170)			215386.41
INFRAESTRUCTURA COMUNAL 13 DE ABRIL	69974.93	(180)	28627.22	(180)			98602.15
REHAB. CASAS EN BAJO PIURA						(160)	
CASAS C. PESCADOR: 60 CONS. 5 REHAB.						(160)	
CASAS CRULLIYACHI: 5 CONS. 6 REHAB.					3901.62	(160)	3901.62
CASAS POZO RAMOS: 79 CONS.						(160)	
CASAS BELLAVISTA : 2 CONS. 4 REHAB.						(160)	
CASAS LA ARENA : 30 CONS.87 REHAB.			36683.78	(160)	3661.26	(160)	40345.04
A.P. SAN CRISTO	5539.35	(200)					5539.35
A.P. SERRAN	4664.72	(200)					4664.72
A.P. RINCONADA LLICUAR	7580.17	(200)					7580.17
A.P. SAN CLEMENTE	4664.72	(200)					4664.72
A.P. YAPATERA-CRUZ PAMPA	6997.08	(200)					6997.08
A.P. MALACASI	13119.53	(200)					13119.53
A.P. CASAGRANDE-CHAQUIRA	6851.31	(200)					6851.31
A.P. PAMBARUMBE	8454.81	(200)					8454.81
HOSPITAL GENERAL DE SULLANA	19488.81	(210)					19488.81
CENTRO SALUD CATACAOS	10862.61	(210)					10862.61
CENTRO SALUD CASTILLA	21405.75	(210)					21405.75
CENTRO SALUD DE MORROPON	12140.57	(210)					12140.57
COMEDORES INFANTILES	59878.41	(240)					59878.41
	=====		=====		=====		=====
	6775636.87		7163791.46		1878363.12		15817791.45

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

1984		1985		1986	
SUBPR	MONTO	SUBPR	MONTO	SUBPR	MONTO
PI-010	2473295.92	PI-070	2976674.19	PI-070	196378.35
PI-070	2314742.93	PI-110	651137.33	PI-110	228177.99
PI-090	777637.15	PI-130	3480318.03	PI-130	1446266.81
PI-100	157921.53	PI-160	135683.94	PI-160	37357.40
PI-110	1236027.10	PI-170	55535.22		
PI-160	285646.86	PI-180	55472.61		
PI-170	158101.31				
PI-180	147095.60				
PI-200	57542.36				
PI-210	63773.46				
PI-240	59821.23				
	=====		=====		=====
	7731605.45		7354821.32		1908180.55

PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
05/11/87

CORPUNO

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	MONTO
=====	=====	=====	=====	=====	=====	=====	=====
CONSTR. IRRIGACION LLAQUEPA	40760.86	(010)	7672.41	(010)			48433.27
CONSTR. IRRIGACION QUEÑUANI	20380.43	(010)	5862.06	(010)			26242.49
CONSTR. IRRIGACION CARACANI	20380.43	(010)	5438.87	(010)			25819.30
CONSTR. IRRIGACION TUPALA	47554.34	(010)	6473.35	(010)			54027.69
CONSTR. IRRIGACION ROSARIO	47554.34	(010)	15932.60	(010)			63486.94
CONSTR. IRRIGACION MAÑAZO	27173.91	(010)	10760.18	(010)	17587.93	(010)	55522.02
CONSTR. IRRIGACION ESMERALDA	13586.95	(010)	4804.07	(010)	10678.39	(010)	29069.41
CONSTR. IRRIGACION CHIMPA JALLAPISI	20380.43	(010)	13769.59	(010)			34150.02
CONSTR. IRRIGACION HANAJQUIA	21739.13	(010)	27272.72	(010)	35037.68	(010)	84049.53
REPRESE DE LAGUNILLAS - OBRAS	35516.30	(010)	58589.34	(010)	43084.17	(010)	137189.81
REPRESA DE LAGUNILLAS - ESTUDIO						(010)	
CAPACITACION			6802.50	(010)	29773.86	(010)	36576.36
ESTUDIO PARA 12 PEQ. IRRIGACIONES			3863.63	(010)			3863.63
REPRESA DE CHIHUANE, TOTORANI-OBRAS			73291.53	(010)			73291.53
REPRESA DE CHIHUANE, TOTORANI-ESTUDIO			63205.32	(010)	55339.19	(010)	118544.51
PARCELAS DEMOSTRATIVAS BAJO RIEGO			33087.77	(010)	41268.84	(010)	74356.61
CONSTR. 320 POZOS A TAJO ABIERTO	67744.56	(010)	27147.33	(010)			94891.89
CONSTR Y EQUIP. DE 3 POZOS TUBULARES		(010)	113456.11	(010)	27010.05	(010)	140466.16
INSTAL. Y MANEJO CULTIVOS FORRAJEROS	475467.62	(030)	75481.97	(030)			550949.59
SANIDAD ANIMAL		(030)	26026.49	(030)			26026.49
CONSTR 2 MODULOS PRODUCC. DE ALPACAS			35209.71	(030)			35209.71
REFACCION DE 1 ATRACADERO DE TRUCHAS			2848.25	(050)			2848.25
CONSTRUCCION DE 17 MINIRESERVORIOS			8519.90	(050)			8519.90
CONSTRUCCION DE 16 BAÑADEROS	107364.13	(010)	57960.19	(050)			165324.32
REFACCION DE 82 AULAS	107364.13	(010)	57960.19	(050)			165324.32
CONSTRUCCION 15 COMPLEJOS COMUNALES	52293.33	(050)	57960.19	(050)			110253.52
CONSTRUCCION DE 125 MINI-RESERVORIOS		(060)	85540.64	(060)			85540.64
CONST. Y EQUIP. POZOS CON BOMBA MANUAL	681165.64	(060)	1083.80	( )			682249.44
APOYO AGRICOLA	681165.64	(060)	85540.64	(060)			766706.28
CANALES DE RIEGO	681165.64	(060)	1083.80	( )			682249.44
HUERTOS COMUNALES Y FAMILIARES	843865.03	(060)	85540.64	(060)			929405.67
GRANJAS COMUNALES	843865.03	(060)	85540.64	(060)			929405.67
MANTENIMIENTO DE CARRETERAS	843865.03	(060)	85540.64	(060)			929405.67
INFRAESTRUCTURA COMUNAL	235521.47	(060)	85540.64	(060)			321062.11
EQUIPO COMEDORES COMUNALES	235521.47	(060)	1083.80	( )			236605.27
EQUIPO ARTESANIA	235521.47	(060)	1083.80	( )			236605.27
OPERACION DE RIEGO-	491080.00	(070)					491080.00
EXTENSION AGRICOLA	491080.00	(070)					491080.00
AGUA POTABLE PUNO: PRODUCCION			355832.10	(090)	16697.36	(090)	372529.46
AGUA POTABLE PUNO: TRANSMISION			241627.39	(090)	165991.40	(090)	407618.79
LIQUIDACION DE OBRAS						(100)	
=====	=====	=====	=====	=====	=====	=====	=====
	7369077.31		1914434.80		442468.87		9725980.98

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

1984		1985		1986	
SUBPR	MONTO	SUBPR	MONTO	SUBPR	MONTO
=====	=====	=====	=====	=====	=====
PU-010	368545.48	PU-010	464763.78	PU-010	263630.26
PU-030	451018.44	PU-030	130919.70	PU-090	130878.87
PU-050	134875.48	PU-050	56995.14	PU-100	28079.10
PU-060	888604.72	PU-060	81977.45		
PU-070	442896.17	PU-090	558003.86		
PU-110	0.00				
	=====		=====		=====
	2285940.29		1292659.93		422588.23

PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
05/11/87

CORDETACNA

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
	=====	=====	=====	=====	=====	=====	=====
CAN. LATERALES TARATA: CHACAVIRA	34397.16	(010)					34397.16
CAN. LATERALES TARATA: CHALIHUAYA	49030.73	(010)					49030.73
CAN. LATERALES TARATA: SITAJARA	36430.26	(010)					36430.26
CAN. TARATA-CHOJA, RESERV. CORAHUASINI	3073.28	(010)	123393.00	(010)			126466.28
CANAL CANDARAVE (ESTUDIOS)	35177.30	(010)			1746.47	(010)	36923.77
DISEÑO Y CONST. RESERV. PUTINOSO	2245.86	(010)	54032.39	(010)	92957.74	(010)	149235.99
DISEÑO CONSTR. RESERVORIOS CHIVATERIA			10622.33	(010)	30985.91	(010)	41608.24
DISEÑO CONSTR. RESER. CHUÑAVE-CAIRANI			52412.61	(010)	48507.04	(010)	100919.65
CANAL LATERAL LOCUMBA-ITE: ALFARILLO	25910.16	(010)					25910.16
CANAL LATERAL LOCUMBA-ITE: I-H	21276.59	(010)					21276.59
CANAL CHAUCALANA	23404.25	(010)			30929.57	(010)	54333.82
CANAL SOLABAYA-BANEGAS					26816.90	(010)	26816.90
CANAL LATERAL SAMA: CUYLONA	35200.94	(010)					35200.94
CANAL LATERAL SAMA: CATAMBU EL MEDIO	32293.14	(010)					32293.14
CANAL LATERAL SAMA: LA BANDA	26406.61	(010)					26406.61
CANAL PRINCIPAL EL ALTO	24680.85	(010)		(010)	31774.64	(010)	56455.49
CANAL EL HUAYCO					38422.53	(010)	38422.53
SIST. CONTROL MEDICION TACNA PALCA	15295.50	(010)					15295.50
SIST. CONTROL MEDICION SAMA TARATA	11560.28	(010)					11560.28
SIST. CONTROL MEDICION LOCUMBA	9739.95	(010)					9739.95
CONS. CAN. CAPLINA: CHALLATA CALIENTES	51725.76	(010)					51725.76
DEFENSA OBRAS CAPTACION, MATERIALES	11938.53	(010)					11938.53
PONTONES ILABAYA, CANAL EULALA	5650.11	(010)	81687.97	(010)			87338.08
BOCATOMA CALIENTES			5566.92	(010)			5566.92
BOCATOMA CHUSCHUCO			7289.00	(010)			7289.00
PROTECCION SIFON CAPLINA EL PELIGRO			1815.85	(010)	23323.94	(010)	25139.79
DEFENSA CALANA			3213.98	(010)	13352.11	(010)	16566.09
SIFON UCHUSUMA SOBROYA			3324.80	(010)			3324.80
CANALES BARROSO (2)			6871.27	(010)			6871.27
CANAL UCHUSUMA			7996.58	(010)			7996.58
CANAL LA BANDA (TACNA)			2710.99	(010)	35380.28	(010)	38091.27
BOCATOMA LA TRANCA (SAMA)			3981.24	(010)			3981.24
CANALES SUB-DIST. RIEGO TARATA (4)			14407.50	(010)			14407.50
REHABILITACION ACCESO PUENTE VIEJO			6436.48	(010)			6436.48
REHABILITACION CARR. LOCUMBA-ILABAYA			40605.28	(010)			40605.28
ADQUIS. Y MEJORAM. SEMILLAS 84 Y 85	19623.65	(020)	15427.70	(020)			35051.35
SANIDAD VEGETAL 84 Y 85	27284.94	(020)	26676.76	(020)			53961.70
ESTUDIO DEFINIT. DE RIEGO TECN. SAMA	14274.19	(020)	9894.01	(020)	4540.29	(020)	28708.49
CENTRO PILOTO RIEG. PRESION-LA YARADA	32741.93	(020)	8357.30	(020)			41099.23
LOCALIZ. ACUAS SUBTERRANEAS (ESTUDIO)	5779.56	(020)					5779.56
CONST. ALMACENES PRODUC. INSUM. AGROP	5376.34	(020)	8849.35	(020)			14225.69
PRODUCC. INSECTOS BENEFICOS			3754.73	(020)	14245.17	(020)	17999.90
FOREST. Y REFOREST. TACNA Y TARATA			5743.82	(030)	6264.36	(030)	12008.18
SANIDAD Y PROMOCION ANIMAL 84 Y 85	7862.40	(040)	23775.41	(040)			31637.81
CREDITO SUPERVISADO	37936.11	(040)					37936.11
AMPL. PLANTA DE ALIMEN. BALANCEADOS	17690.41	(040)	1741.82	(040)			19432.23
PROMOCION DE SILOS Y FORRAJES	11277.64	(040)	13280.28	(040)			24557.92
CONSR. ABREVADERO-RESERVORIO (1)	5282.55	(040)					5282.55
PERF. EQUIP. Y ELECTRIF. DE POZOS	33191.01	(050)	25228.75	(050)			58419.76

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
INSTALACION CUATRO EQUIPOS DE BOMBEO	10921.34	(050)					10921.34
MANTENIMIENTO DE POZOS	40247.19	(050)					40247.19
REHAB. Y LIMPIEZA DE POZOS LA YARADA	28224.71	(050)	36881.41	(050)	50085.66	(050)	115191.78
AGUA POTABLE ANCOMARCA	6134.96	(060)	4300.07	(060)			10435.03
AGUA POTABLE INCLAN	460.12	(060)	60452.26	(060)	7801.41	(060)	68713.79
AGUA POTABLE BUENA VISTA			29978.46	(060)	26513.91	(060)	56492.37
LIQUIDACION DE OBRAS					28465.06	(091)	28465.06
	=====		=====		=====		=====
	759746.31		700710.32		512112.99		1972569.62

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

SUBPR =====	1984		1985		1986	
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR
TA-010	451511.42	TA-010	408692.55	TA-010	389187.86	
TA-020	90105.02	TA-020	72443.04	TA-020	19138.80	
TA-040	77509.05	TA-030	5740.53	TA-030	6258.15	
TA-050	106244.01	TA-040	38763.23	TA-050	49448.20	
TA-060	6583.52	TA-050	55189.85	TA-060	42803.70	
		TA-060	75206.84	TA-091	28437.37	
	=====		=====		=====	
	731953.02		656036.04		535274.08	

PROGRAMA DRR - MONTOS EJECUTADOS EN DOLARES  
05/11/87

CORTUMBES

\* RESUMEN DE EJECUTADO POR COMPONENTE \*

NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
=====	=====	=====	=====	=====	=====	=====	=====
R.TUMBES.OBRA DE ARTE MANEJO CUENCAS	310863.50	(010)					310863.50
DRENAJE MARGEN IZQ. RIO TUMBES	40111.42	(010)					40111.42
ENCAUZ R.TUMBES ESTUDIOS	91643.45	(010)	13510.11	(010)			105153.56
ENCAUZ R.TUMBES PROT. CAUCE EL PIOJO			58011.16	(010)			58011.16
ENCAUZ R.TUMBES DEFENSA DIQUE			213063.50	(010)		(172)	213063.50
ENCAUZ R.TUMBES PROT. LA VARIANTE			15338.45	(010)		(172)	15338.45
REH. CANAL INTERNACIONAL	111420.61	(010)					111420.61
REH. POZOS TUBULARES Y ANILLADOS	42896.93	(010)					42896.93
TRAMO II CANCAS-TUMBES-AGUAS VERDES			229621.12	(020)		(173)	229621.12
REHAB. TERMINAL PESQUERO ZORRITOS	42830.18	(040)	2607.31	(040)		(040)	45437.49
REHAB. EQUIPO DE FRIO TERM.PESQUERO	48018.86	(040)	206.67	(040)		(040)	48225.53
LIN A.T. TUMBES-AGUAS VERDES-CANCAS	22799.04	(050)	27650.34	(050)			50449.38
ALUMBRADO PUBL.TUMBES,ZARUM.C.VILLAR	8684.21	(050)					8684.21
ALUMB.PUB. AV.TNTE.VASQUEZ-MAL.BENAV	32344.49	(050)	10433.56	(050)			42778.05
SISTEMA ELECTRICO CORRALES	189497.60	(050)	85062.93	(050)			274560.53
SISTEMA ELECTRICO ZORRITOS	167655.50	(050)	97188.81	(050)			264844.31
SISTEMA ELECTRICO ZARUMILLA	106913.87	(050)	20307.69	(050)			127221.56
RED PRIM. 9 CASER:EJE S.JACIN-R.PLA.	49641.14	(050)	13076.92	(050)			62718.06
REDES ELECTRICAS LOMA DEL VIENTO			30000.00	(050)			30000.00
REHAB. AGUA POTABLE TUMBES			74669.73	(060)			74669.73
REHAB. AGUA POTABLE LOMA DEL VIENTO			17231.47	(060)			17231.47
REH. CONEX. DOM. AGUA POTABLE TUMBES	68117.04	(070)					68117.04
AGUA POTABLE CERRO. BLANCO Y TACURAL	70661.57	(070)	47724.48	(070)			118386.05
SIST.BOMBEO A.P.PAMP.HOSP.Y S.JACIN.	33333.33	(070)	10581.63	(070)			43914.96
AGUA POTABLE LA CRUZ - ZORRITOS	45877.86	(070)	45846.93	(070)		(070)	91724.79
AGUA POTABLE HABILITACIONES URBANAS	16793.89	(070)	10244.89	(070)			27038.78
PAVIMENTACION AV. TENIENTE VASQUEZ	242981.22	(080)	299504.95	(080)			542486.17
DRENAJE PLUVIAL AV. TANTE. VASQUEZ	79562.21	(090)			10037.64	(070)	89599.85
REHAB. ESTACION BOMBEO DESAGUE			36760.48	(090)			36760.48
DEFENSA SAN JUAN DE LA VIRGEN		(100)	154152.41	(100)		(100)	154152.41
DEFENSA PUERTO PIZARRO	58341.46	(100)					58341.46
DEFENSA DE ZORRITOS	90634.14	(100)	75645.41	(100)			166279.55
DEFENSA LA CRUZ	59731.70	(100)	72099.53	(100)			131831.23
MALECON BENAVIDES	49658.53	(100)					49658.53
PROTE.MARG. IZQ.R.TUMBES, SECT.R.VIEJO			290108.86	(100)			290108.86
DIQUES GUIAS COMPLEMENTARIOS			24027.99	(100)		(100)	24027.99
PROTEC.MARGEN IZQ.R.TU ESPIG.13/14						(100)	
LOTES CON SERV.SAN JUAN DE LA VIRGEN	30727.27	(110)					30727.27
LOTES CON SERVICIOS ZARUMILLA	24545.45	(110)					24545.45
LOTES CON SERV. PAMPAS DE HOSPITAL	25212.12	(110)					25212.12
LOTES CON SERVICIOS SAN ISIDRO	5242.42	(110)	10649.85	(110)			15892.27
LOTES CON SERVICIOS ZORRITOS	6424.24	(110)	12715.80	(110)			19140.04
LOTES CON SERVICIOS CORRALES	8606.06	(110)	13297.76	(110)			21903.82
EDIFICACION DE LOTES HABILITADOS	6060.60	(110)	107109.60	(110)		(110)	113170.20
CASAS SAN JUAN DE LA VIRGEN: 50				(110)		(110)	
CASAS PAMPAS DE HOSPITAL : 48				(110)		(110)	
CASAS CORRALES : 22				(110)		(110)	
CASAS SAN ISIDRO : 54				(110)		(110)	
CASAS ZORRITOS : 46				(110)		(110)	



NOMBRE =====	1984		1985		1986		TOTAL MONTO =====
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR	
=====	=====	=====	=====	=====	=====	=====	=====
CENTRO DE SALUD ZORRITOS					7508.47	(140)	7508.47
CNM DE CONTRALMIRANTE VILLAR, ZORRITO					46586.30	(160)	46586.30
C.N. INMACULADA CONCEPCION					37786.30	(160)	37786.30
COLECIO NACIONAL EL TRIUNFO					89873.97	(160)	89873.97
C.B. TUPAC AMARU					67227.39	(160)	67227.39
ESCUELA PRIMARIA No 01 - TUMBES					10252.05	(160)	10252.05
LIQUIDACION DE OBRAS						(174)	
					=====	=====	=====
	2187831.91		2118450.34		269272.12		4575554.37

\* RESUMEN DE EJECUTADO POR SUBPROYECTO SEGUN AID \*

SUBPR =====	1984		1985		1986	
	MONTO	SUBPR	MONTO	SUBPR	MONTO	SUBPR
=====	=====	=====	=====	=====	=====	=====
TU-010	596606.59	TU-010	299643.29	TU-040	27628.42	
TU-040	90628.38	TU-020	229620.74	TU-060	0.00	
TU-050	577050.49	TU-040	2811.26	TU-070	71241.30	
TU-070	234624.48	TU-050	283436.20	TU-100	67120.56	
TU-080	242138.08	TU-060	103329.00	TU-110	57276.45	
TU-090	79476.52	TU-070	114262.42	TU-140	7909.60	
TU-100	257947.75	TU-080	298652.50	TU-160	247055.01	
TU-110	109518.71	TU-090	36741.76	TU-172	89112.49	
		TU-100	615513.44	TU-173	1509545.49	
		TU-110	143694.24	TU-174	43351.44	
		=====	=====	=====	=====	
	2187991.00		2127704.85		2120240.76	

REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES

PROGRAMA DRR

07/07/87

CORDEAMAZONAS

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
***** SECTOR AGRICULTURA *****							
CANAL LUYA-LAMUD: ORATORIA COLPA	24.7			25	7 x 16	1.62 Km canal limpiado/mejorado/rehab.	1.50 M3/s caudal de canales 260.00 Has mejorad./rehab. regadas
CANAL EL TIGRE		58.5	105.9	197	15 x 2	0.10 Km canal limpiado/mejorado/rehab.	2.00 M3/s caudal de canales 1360.00 Has mejorad./rehab. regadas 0.10 Km canal revestido/reconstruido
CANAL LA PASCANA Y QUEBRADA USHUN		212.5		50	25 x 4	0.31 Km canal revestido/reconstruido	1.50 M3/s caudal de canales 1.00 # de principales obras de arte 250.00 Has mejorad./rehab. regadas 150.00 Has no regadas previamente
REHAB. RIO SHOCOL	38.3			410	14 x 1	7.00 Km canal limpiado/mejorado/rehab.	1.00 # de estudios
** NOTAS: **							
CANAL EL TIGRE	EvSE: Comité de Regentes terminará revestimiento de canal. Costo estimado I/.330,000. Fecha de inicio Agosto 20, 86, fecha de terminación Dic. 31, 87 estimadas.						
***** SECTOR TRANSPORTE *****							
AEROPUERTO CHACHAPOYAS	807.1				20 x 2	0.10 Km asfaltados (carreteras)	10679.00 M2 asfaltados (carreteras) 480.00 M1 cunetas/bermas
REH/MEJ CARR.MARG.QDA.HONDA-PEDRO RU	214.3	2671.2			30 x 6	17.79 Km afirmados (carreteras)	18000.00 M2 afirmados (carreteras) 7.00 M3 de concreto para obras de arte 18800.00 M1 cunetas/bermas 1.00 # badenes 1.00 # de muros/ diques/enrocados, etc. 120.00 M1 muros/diques/enrocados/defen.rib.
ESTUDIO CARR. POMACOCHAS-VENCEREMOS	104.6	2.6			10 x 2	1.00 # de estudios	I/. valor de obras (objeto de estud)
MEJ CARR.MARG. LA VERSALLE-QDA SECA		74.0			2 x 1	6.50 Km afirmados (carreteras)	40000.00 M2 afirmados (carreteras)
REH/MEJ CARR.MARG. JAZAN-BAGUA	10.7				6 x 1	17.20 Km carretera rehabilitada (limpieza)	

\*\* NOTAS: \*\*

REH/MEJ CARR.MARG.QDA.HONDA-PEDRO RU Tramo Km 48.7 - Km 74.5.  
 ESTUDIO CARR. POMACOCNAS-VENCEREMOS El estudio es bueno y usable.  
 MEJ CARR.MARG. LA VERSALLE-QDA SECA Tramo Km 19 - Km 25.5./EvSE: Mantenimiento a cargo de COREDEAM.  
 REH/MEJ CARR.MARG. JAZAN-BAGUA Tramo Km 25.5 - Km 42.7.

NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
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\*\*\*\*\* MULTISECTORIAL \*\*\*\*\*  
 LIQUIDACION DE OBRAS

405.7

x

REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES  
PROGRAMA DRR  
07/07/87

NOMBRE	CORDEANCASH			# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	EJEC. 1984	EJEC. 1985	EJEC. 1986			CANTIDAD	DESCRIPCION DE META
***** SECTOR AGRICULTURA *****							
REHAB. BOCATOMA SAN JOSE Y NEPEÑA	105.0	900.0		344	22 x 9	390.00	# de muros/ diques/enrocados, etc. 1.00 Ml muros/diques/enrocados/defen.rib. 1.00 # estructuras de riego protegidas 1.00 # de bocat./barajes/captac. constru. 4.50 M3/s caudal capacidad de bocatomas 1.80 Km canal nuevo construido 1.00 M3/s caudal de canal 5.00 # de principales obras de arte 3500.00 Has mejorad./rehab. regadas
REHAB. CANAL CERRO BLANCO	115.0			120	19 x 5	0.26	Km canal nuevo construido 1.00 M3/s caudal de canal 4.00 # de principales obras de arte 800.00 Has mejorad./rehab. regadas 80.00 Ml muros/diques/enrocados/defen.rib. 1.00 # estructuras de riego protegidas
REH BOCATOMA LA VIBORA, RINCONADO, TAM	90.0	1773.0	599.6	1150	20 x 12	1.00	# de bocat./baraj./capt. reha/mejor. 8.00 M3/s caudal capacidad de bocatomas 0.50 Km canal nuevo construido 8.00 M3/s caudal de canal 7.00 # de principales obras de arte 5300.00 Has mejorad./rehab. regadas
REHAB. PURGATORIO-ROSARIO-SAN FRANC.	87.0	100.0		240	14 x 8	400.00	# de muros/ diques/enrocados, etc. 1.00 Ml muros/diques/enrocados/defen.rib. 1.00 # de bocat./barajes/captac. constru. 3.50 M3/s caudal capacidad de bocatomas 0.39 Km canal nuevo construido 3.00 M3/s caudal de canal 1.00 # de principales obras de arte 1500.00 Has mejorad./rehab. regadas
REHAB. CANAL EL PUEBLO 3	58.0			80	10 x 5	1.00	# de bocat./barajes/captac. constru. 1.00 M3/s caudal capacidad de bocatomas 0.30 Km canal nuevo construido 1.00 M3/s caudal de canal 2.00 # de principales obras de arte 450.00 Has mejorad./rehab. regadas
REHAB. CANAL 29.1 CASCAJAL	65.0			200	19 x 4	4.75	Km canal limpiado/mejorado/rehab. 2.00 M3/s caudal de canal 3.00 # de principales obras de arte 1800.00 Has mejorad./rehab. regadas

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\*\* NOTAS: \*\*

REH BOCATOMA LA VIBORA, RINCONADO, TAM Además, para uso de agua potable por 4 pueblos jóvenes de Chimbote (50,000 personas).

NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
***** SECTOR VIVIENDA *****						
ENCAUZAMIENTO RIO SANTA		900.0	550.0	1000	12 x 17	2000.00 # de muros/ diques/enrocados, etc. 250.00 M1 defensas vivas (plant.riber.) 1700.00 M1 cauce de río limpiado/encauzado 41050.00 M3 material limpiado de cauces 5000.00 # de pobladores protegidos 4000.00 Has de cultivos protegidos por defen
ENCAUZAMIENTO RIO NEPEÑA		360.0		400	9 x 8	600.00 M1 cauce de río limpiado/encauzado 300.00 M1 defensas vivas (plant.riber.) 1.00 # badenes 2060.00 # de pobladores protegidos 1000.00 Has de cultivos protegidos por defen
ENCAUZAMIENTO RIO LACRAMARCA		740.0	2042.0	13000	7 x 27	2295.00 M1 cauce de río limpiado/encauzado 71000.00 M3 material limpiado de cauces 2.00 # de muros/ diques/enrocados, etc. 530.00 M1 muros/diques/enrocados/defen.rib. 65000.00 # de pobladores protegidos 3000.00 Has de cultivos protegidos por defen
DESAG. VILLA MARIA	37.0			4000	12 x 1	18.00 M1 red alcantarillado 0.02 M3/s caudal (desagüe) 23.00 # buzones construidos/rehab.
DESAG. lro. DE MAYO	32.0			2000	12 x 1	149.00 M1 red alcantarillado 0.02 M3/s caudal (desagüe) 10.00 M1 red alcantarillado 1.00 # conexión domiciliarias (desagüe)
DESAG. LA FLORIDA BAJA	17.0			3000	12 x 1	122.00 M1 red alcantarillado 0.01 M3/s caudal (desagüe) 10.00 # buzones construidos/rehab. 7.00 # conexión domiciliarias (desagüe)
DESAG. MIRAFLORES BAJO - ZONA I	24.0			1400	12 x 1	116.50 M1 red alcantarillado 0.01 M3/s caudal (desagüe) 3.00 # conexión domiciliarias (desagüe) 2.00 # buzones construidos/rehab.
DESAG. MIRAFLORES BAJO - ZONA III	20.0			1800	12 x 1	122.00 M1 red alcantarillado 0.01 M3/s caudal (desagüe) 15.00 # conexión domiciliarias (desagüe) 20.00 # buzones construidos/rehab.
REHAB. DE DESAGUE P.J. EL ACERO	500.0	400.0		1000	20 x 17	4743.60 M1 red alcantarillado 0.02 M3/s caudal (desagüe) 554.00 # conexión domiciliarias (desagüe) 77.00 # buzones construidos/rehab. 0.18 Km asfaltado (pistas) 1248.00 M2 asfaltado (pistas)

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
CAMARA BOMBEO CONO NORTE	238.0			7000	21 x 5	1.00 # estación bombeo cons/reh(agua/des) 1.00 # equipos reh/nuev (alcant.) 728.00 M1 línea principal (desagüe) 0.04 M3/s caudal (desagüe) 10.00 # buzones construidos/rehab.
REHAB.LIMP.POZAS ALM.AGUA POT.C.SUR	132.0	100.0		20000	3 x 5	2.00 # de reserv. rehabil./mejorado 25000.00 M3 volumen de reservorios
DEF.LINEA A.T. HUALLANCA 4 CAISSONES	300.0				4 x 6	4.00 # infraestr. civil rehab./constru.

\*\* NOTAS: \*\*

ENCAUZAMIENTO RIO SANTA                   Protección de áreas de cultivo y poblados en Santa, Puerto Santa, El Castillo.  
ENCAUZAMIENTO RIO NEPEÑA                Protección de poblaciones de Huambacho y Los Chimus.  
ENCAUZAMIENTO RIO LACRAMARCA        Protección de áreas de cultivo y poblados en Chimbote.  
DEF.LINEA A.T. HUALLANCA 4 CAISSONES   Infraestr. civil se refiere a 2 caissons para postes. No tiene beneficio porque no se está usando. Hidrandina no transfirió los postes a los caissons.

\*\*\*\*\* SECTOR TRANSPORTE \*\*\*\*\*

REH CARR CASMA-BUENA VISTA Y QUILLO	500.0				7 x 10	2.00 # puentes vehiculares nuevos 24.00 M1 puentes de concreto 108.00 M2 puentes de concreto 0.18 Km afirmados (carreteras) 1260.00 M2 afirmados (carreteras)
REH.SAN JUAN,JIMBE, COLCAP Y S.J.MORO	660.0	449.7			4 x 8	63.00 Km carretera rehabilitada (limpieza) 2.07 Km afirmados (carreteras) 10365.00 M2 afirmados (carreteras) 5.00 # alcantarillas (carreteras)
ALCANTARILLAS, ACCESOS CHIMBOTE I,II	6276.0				29 x 6	2.00 # puentes vehiculares nuevos 60.80 M1 puentes de concreto 614.08 M2 puentes de concreto 2.02 Km asfaltados (carreteras) 14545.00 M2 asfaltados (carreteras)
ALETAS ALCANTARILLAS CHIMBOTE I,II		999.4			24 x 2	4.00 # de muros/ diques/enrocados, etc. 40.00 M1 muros/diques/enrocados/defen.rib. 1.00 # puentes y otra infraest. protegida

\*\*\*\*\* MULTISECTORIAL \*\*\*\*\*

LIQUIDACION DE OBRAS		499.4			x	
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REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES  
PROGRAMA DRR  
07/07/87

NOMBRE	CORDEAPURIMAC			# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	EJEC. 1984	EJEC. 1985	EJEC. 1986			CANTIDAD	DESCRIPCION DE META
***** SECTOR AGRICULTURA *****							
MEJOR. IRRIG. ATUMPATA	23.2				14 x 5		
MEJOR. IRRIG. TAMBURCO	28.9	133.5		113	14 x 18	1.00 # de bocat./barajes/captac. constru.	
						0.10 M3/s caudal capacidad de bocatomas	
						11.00 # de principales obras de arte	
						1.20 Km canal nuevo construido	
						4.40 Km canal limpiado/mejorado/rehab.	
						0.14 M3/s caudal de canales	
						7.00 Has mejorad./rehab. regadas	
						139.00 Has no regadas previamente	
CONST. IRRIG. PACCHAPATA	13.6	22.3			13 x 5		
MEJOR. IRRIG. COTARMA	17.9	144.1		180	13 x 12	2.00 # de bocat./barajes/captac. constru.	
						0.08 M3/s caudal capacidad de bocatomas	
						11.30 Km canal limpiado/mejorado/rehab.	
						0.88 Km canal revestido/reconstruido	
						0.08 M3/s caudal de canales	
						3.00 # de principales obras de arte	
						Has mejorad./rehab. regadas	
						150.00 Has no regadas previamente	
MEJOR. IRRIG. Y RESERV. HUIRAHUACHO	22.8	135.1		68	12 x 16	1.00 # de bocat./barajes/captac. constru.	
						0.13 M3/s caudal capacidad de bocatomas	
						2.30 Km canal limpiado/mejorado/rehab.	
						0.62 Km canal nuevo construido	
						0.13 M3/s caudal de canales	
						12.00 # de principales obras de arte	
						1.00 # de reserv. rehabíl./mejorado	
						1200.00 M3 volumen de reservorios	
						30.00 Has mejorad./rehab. regadas	
						25.00 Has no regadas previamente	
MEJOR. IRRIG. UPIRO	33.5	143.9		70	13 x 12	1.00 # de bocat./barajes/captac. constru.	
						0.04 M3/s caudal capacidad de bocatomas	
						1.10 Km canal nuevo construido	
						0.26 Km canal revestido/reconstruido	
						0.09 Km canal limpiado/mejorado/rehab.	
						0.04 M3/s caudal de canales	
						1.00 # de principales obras de arte	
						30.00 Has mejorad./rehab. regadas	
						Has no regadas previamente	
CONST. RESERV. CAYPE	42.9	127.2		280	13 x 17	1.00 # de reservorios construidos	
						800.00 M3 volumen de reservorios	
						1.00 # de principales obras de arte	
						0.11 Km canal nuevo construido	
						0.02 M3/s caudal de canales	
						45.00 Has mejorad./rehab. regadas	
						Has no regadas previamente	

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
CONST. RESERV. TAMBO DE CARHUACAHUA	32.3	95.1		80	12 x 13	1.00	# de reservorios construidos
						440.00	M3 volumen de reservorios
						0.03	Km canal nuevo construido
						0.02	M3/s caudal de canales
						1.00	# de principales obras de arte
						40.00	Has mejorad./rehab. regadas
							Has no regadas previamente
CONST. RESERV. COTOHUACHO I-II		111.1		350	11 x 14	2.00	# de reservorios construidos
						610.00	M3 volumen de reservorios
						0.54	Km canal nuevo construido
						8.00	# de principales obras de arte
						280.00	Has mejorad./rehab. regadas
MEJOR. CANAL SAN MIGUEL DE SALINAS		83.7		180	5 x 10	1.00	# de bocat./barajes/captac. constru.
						0.39	M3/s caudal capacidad de bocatomas
						0.66	Km canal nuevo construido
						0.30	M3/s caudal de canales
						1.00	# de principales obras de arte
						52.00	Has mejorad./rehab. regadas
CONST. RESERV. PISCOBAMBA		69.6		130	x	1.00	# de bocat./barajes/captac. constru.
						0.50	M3/s caudal capacidad de bocatomas
						0.63	Km canal nuevo construido
						0.02	M3/s caudal de canales
						1.00	# de reservorios construidos
						200.00	M3 volumen de reservorios
						1.00	# de principales obras de arte
						200.00	Has mejorad./rehab. regadas
CONST. RESER. MEJ. CANAL ARGAMA BAJA		85.5		80	10 x 12	1.00	# de bocat./barajes/captac. constru.
						0.02	M3/s caudal capacidad de bocatomas
						0.45	Km canal nuevo construido
						0.04	M3/s caudal de canales
						1.00	# de principales obras de arte
						1.00	# de reservorios construidos
						360.00	M3 volumen de reservorios
						100.00	Has mejorad./rehab. regadas
CONST. RESERV. OYCCOMPI I-II		110.8		120	5 x 13	1.00	# de reserv. rehabil./mejorado
						1.00	# de reservorios construidos
						600.00	M3 volumen de reservorios
						0.17	Km canal nuevo construido
						0.01	M3/s caudal de canales
						3.00	# de bocat./barajes/captac. constru.
						0.07	M3/s caudal capacidad de bocatomas
						1.00	# de principales obras de arte
						140.00	Has mejorad./rehab. regadas
CONST. RESERV. CALLEBAMBA		94.7			13 x 10	1.00	# de bocat./barajes/captac. constru.
						0.18	Km canal nuevo construido
						1.00	# de principales obras de arte
						1.00	# de reservorios construidos

14/3



NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
MEJOR. IRRIG. LEOCOCHA	17.7				x		
CRianza DE ANIMALES. AVES	32.7	77.8		105	1 x 34	12500.00	# animales menores (distribución) 3.00 # infraestr. para animales cons/reha 1.00 # cursos organizados (capacitac.) # agricultores, etc. capacitados
CRianza DE ANIMALES. PORCINOS	61.1	75.5		68	2 x 36	0.08	Has pastos (áreas beneficiadas)
						42.00	# infraestr. para animales cons/reha
						102.00	# animales mayores (distribución)
						21350.00	Kg insumos para animales distribuid.
CRianza DE ANIMALES. VACUNOS	22.3	100.8		75	1 x 36	125.00	# vacunos inseminados (mejoramiento)
						3.00	# cursos organizados (capacitac.) # agricultores, etc. capacitados
						2705.00	Sanidad animal de vacunos (# cbzs.)
CULTIVO HORTALIZ. HUERT.COMUN/FAMIL.	57.5	113.7		64	1 x 36		# parcelas y huertas demostrativas Has parcelas y huertas demostrativas # huertas comunales # huertas familiares Has beneficiadas no demostrativas
						8.00	# cursos organizados (capacitac.) # visitas de campo (capacitación) # agricultores, etc. capacitados
TALLERES ARTESANALES	99.3	295.0			x	1.00	# edificaciones comunales nuevas
						762.00	M2 edificaciones comunales nuevas
CEN PILOTOS ANIM MENORES. CUYES, CONE	49.3	188.3		66	1 x 36	1.00	# infraestr. para animales cons/reha
						0.65	Has pastos (áreas beneficiadas)
						497.00	# animales menores (distribución)
						6250.00	Kg insumos para animales distribuid.
						1.00	# cursos organizados (capacitac.) # agricultores, etc. capacitados
CEN PILOTOS ANIM MENORES. ABEJAS	72.2	182.3		63	2 x 36	472.00	# colmenas (distribución)
						17.00	# cursos organizados (capacitac.) # agricultores, etc. capacitados
SEMILLEROS Y PASTOS	171.5				13 x 30	26.85	Has semilleros sembrados Kg semillas producidas Kg semillas distribuidas
ADQUISICION Y DISTRIB. INSUMOS	830.7	445.4		2520	7 x 34	3.00	# campañas agrícolas
						405800.00	Kg semillas distribuidas Kg fertilizantes distribuidos Kg insumos distr.(ni semill.ni fert)
						242.00	Has papas (áreas beneficiadas)
						433.00	Has granos y panllevar (areas ben.)
						2520.00	# familias benefic. con créditos
						1269.88	I/.x1000 total de créditos otorgados # cursos organizados (capacitac.)
						14540.00	# visitas de campo (capacitación) # agricultores, etc. capacitados

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
FORESTACION Y REFORESTACION	47.2				6 x 31		# viveros instalados 187500.00 # plántones producidos (forestación) 110.00 Has forestadas/reforestadas # cursos organizados (capacitac.) # visitas de campo (capacitación) # agricultores, etc. capacitados
RECONS. ADQUI. CENTRO OVINOS URIPA	150.0	211.3			x	4.00	# infraestr. para animales cons/reha # animales menores (distribución) # animales mayores (distribución) 1.60 Has pastos (áreas beneficiadas)
TERRAZAS, ANDENES, ZANJAS DE INFILT.	179.6	622.0		3592	x	117.00	Has andenes y terrazas nuevas 142.00 Has andenes y terrazas rehabilit. 6164.00 Ml zanjias de infiltración # agricultores, etc. capacitados Kg semillas distribuidas
CONT.LANGOSTA MIGRATORIA, MOSCA FRUTA	149.6	303.0		10988	65 x 20	3.00	# campañas de sanidad vegetal 2959.00 Has beneficiadas por sanidad vegetal Kg insumos distr.(ni semill.ni fert) 3.00 # campañas de sanidad vegetal 858.00 Has beneficiadas por sanidad vegetal Kg insumos distr.(ni semill.ni fert)
OPERAC.MANTEN.CAPACI.PARCELAS DEMOS.		89.1		6213	46 x 11	1827.59	Has beneficiadas no demostrativas 3.00 # cursos organizados (capacitac.) 130.00 # agricultores, etc. capacitados # visitas de campo (capacitación) 109.00 # parcelas y huertas demostrativas 13.50 Has parcelas y huertas demostrativas Kg semillas distribuidas Kg fertilizantes distribuidos Kg insumos distr.(ni semill.ni fert)

\*\* NOTAS: \*\*

MEJOR. IRRIG. ATUMPATA Se abandonó porque no se justifica económicamente. En 84 se abrió de 5 Km de plataforma.  
CONST. IRRIG. PACCHAPATA Se abandonó porque no se justifica técnica, económica ni socialmente. En 84 se abrió 0.84 Km de plataforma y caja de canal. En 85 se programó, pero sólo tuvo gastos admin.

MEJOR. IRRIG. Y RESERV. HUIRAHUACHO También, para uso doméstico.  
MEJOR. IRRIG. UPIRO K:4/87 ¿Cuántas has de las 30 corresponden a ampliación de frontera agrícola?  
CONST. RESERV. CAYPE K:4/87 ¿Cuántas has de las 35 corresponden a ampliación de frontera agrícola?  
CONST. RESERV. TAMBO DE CARHUACAHUA K:4/87 ¿Cuántas has de las 35 corresponden a ampl. de front. agr. ?/También, para uso doméstico.  
MEJOR. CANAL SAN MIGUEL DE SALINAS Además, agua para uso doméstico.  
CONST. RESERV. PISCOBAMBA K:4/87 Falta fecha de inicio de obra y empleo generado (trabajadores x meses).  
CONST. RESERV. MEJ. CANAL ARGAMA BAJA Además, se hizo un muro de contención para proteger la pared del reservorio, adyacente al río.  
CONST. RESERV. OYCCOMPI I-II Además, revestimiento de pared lateral y piso de riachuelo para encauzamiento.  
CONST. RESERV. CALLEBAMBA K:4/87 ¿Está la obra funcionando? Si no está, no tiene beneficios: caudal de agua que lleva, m<sup>3</sup> de agua almacenada, hectáreas irrigadas, ni familias beneficiadas.

MEJOR. IRRIG. LEOCOCHA Se abandonó porque no se justificaba técnica ni económicamente. Se hizo reconocimiento de terreno, compra de herramientas y hubo gastos administrativos.

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CRIANZA DE ANIMALES. AVES K:4/87 ¿El técnico (empleo generado) no tuvo a nadie ayudando? ¿El hizo todo desde refacción de local hasta asesoramiento de 232 familias?/Además, asesoramiento técnico de 232 familias.  
 CRIANZA DE ANIMALES. PORCINOS K:4/87 Aquí también, la mano de obra parece baja./Los 21350 Kg se refiere a compra, no distr. A demás, 210 ml de refacc. de agua y desagüe, 11 semovientes adquiridos.  
 CRIANZA DE ANIMALES. VACUNOS K:4/87 Empleo parece bajo./ Además, asist. técn. a 397 criadores, capac. de 17 técnicos.  
 CULTIVO HORTALIZ. HUERT.COMUN/FAMIL. K:4/87 Por favor, usar LISTA DE METAS para informar lo logrado. Mano de obra parece bajo.  
 TALLERES ARTESANALES K:4/87 Falta empleo gener.y fam. benef. ¿Se está usando el centro? ¿Cuántas personas se han capacitado en los cursos?/Además, constr. de 1 horno, equip. con 1 juego de carpint.y 1 cerámica, 5 cursos.  
 CEN PILOTOS ANIM MENORES. CUYES, CONE K:4/87 ¿No se consideran las 306 familias con asist. técn. como beneficiarios directos?/ Además , asistencia técnica a 306 familias. Los 6250 se refiere a compra, no distribución.  
 CEN PILOTOS ANIM MENORES. ABEJAS SEMILLEROS Y PASTOS Además, adquis. de 150 colmenas. Semilleros de papas, maíz y pastos. Familias beneficiadas son las mismas que para Adquisición y Distribución de Insumos.  
 ADQUISICION Y DISTRIB. INSUMOS K:5/87 Separar las 182, 30 y 55.5 TM entre fertilizantes y pesticidas.  
 FORESTACION Y REFORESTACION Forestación con tunales, eucaliptos y Pinus Radiata.  
 RECONS. ADQUI. CENTRO OVINOS URIPA K:4/87 Necesario revisar inform. de distribución de animales y de empleo generado (parece demas iado). Sólo se debe reportar trabajadores que han recibido remuneración por trabajo, no el apoyo o comunal.  
 TERRAZAS, ANDENES, ZANJAS DE INFILT. K:5/87 No coincide metas en tablas y en parte 6 para zanjás y familias ¿cuál es correct? ¿# pro motores capac?/Mano de obra gratuita, incentivo de semillas y plantones de frutales.  
 OPERAC.MANTEN.CAPACI.PARCELAS DEMOS. Bajo Operación, se elaboró padrones, hizo inventario de infraestructura de riego, organizó comités de regantes, programó mantenimiento y distribución de aguas.

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
***** SECTOR TRANSPORTE *****						
CONSTR. PUENTE VEHICULAR YAURIQUILLA	47.2				10 x 3	1.00 # puentes vehiculares nuevos M1 puentes de concreto M2 puentes de concreto
MEJORA. PUENTE PEATONAL MATALLA	21.0				11 x 5	1.00 # puentes peatonales 26.00 M1 puentes de madera 40.00 M2 puentes de madera
CARR. CASINCHIHUA-CHALHUANI	7.7				6 x 18	4.60 Km trocha abierta
CARR. PTE. PACHACHACA-PTE. SAHUINTO	7.1				x	1.00 # de estudios
CARR. SUNCHO CAYPE	5.3				3 x 5	6.00 Km trocha abierta
CARR. HUAYLLATI-QUEQUERAY	20.0				5 x 30	8.00 Km afirmados (carreteras) M2 afirmados (carreteras) # alcantarillas (carreteras) 45.00 M1 alcantarillado (carreteras) 450.00 M1 cunetas/bermas M1 muros (contensión, etc.)
CARR. TALAVERA-OCOBAMBA-ONGOY	29.6				4 x 36	25.00 Km carretera rehabilitada (limpieza) Km afirmados (carreteras) M2 afirmados (carreteras) 14000.00 M1 cunetas/bermas M1 muros (contensión, etc.) # alcantarillas (carreteras)

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
CARR. TALAVERA-HUANCARAY-TURPO	24.2				6 x 36	20.00 Km carretera rehabilitada (limpieza) Km afirmados (carreteras) M2 afirmados (carreteras) 25830.00 M1 cunetas/bermas M1 muros (contensión, etc.) # alcantarillas (carreteras) M1 alcantarillado (carreteras)
CARR. COLCA CUTUCTAY	65.1				8 x 13	4.39 Km trocha abierta M1 muros (contensión, etc.) # alcantarillas (carreteras) 20.00 M1 alcantarillado (carreteras) 2000.00 M1 cunetas/bermas
CARR. CHUQUIBAMBILLA-ANTABAMBA	69.3				9 x 9	7.16 Km carretera rehabilitada (limpieza) 213.00 Km trocha abierta
CARR. CACHORA-CHOCCEQUIRAO	73.0	44.9			8 x 30	6.40 Km afirmados (carreteras) M2 afirmados (carreteras) # alcantarillas (carreteras) M1 alcantarillado (carreteras) 5040.00 M1 cunetas/bermas M1 muros (contensión, etc.) 3.00 Km carretera rehabilitada (limpieza)
CARR. KARKATERA-RIO APURIMAC	167.6	337.6			15 x 30	Km carretera rehabilitada (limpieza) 7.30 Km trocha abierta # alcantarillas (carreteras) 126.00 M1 alcantarillado (carreteras) 2470.00 M1 cunetas/bermas
CARR. STA. ROSA-TAPAYRIHUA-ANTABAMBA	171.9	349.1			18 x 30	Km carretera rehabilitada (limpieza) Km trocha abierta # alcantarillas (carreteras) 121.00 M1 alcantarillado (carreteras) 3250.00 M1 cunetas/bermas M1 muros (contensión, etc.)
CARR. CANUA-LLINQUE-HUANCABAMBA	80.5	249.6			9 x 31	Km carretera rehabilitada (limpieza) Km trocha abierta M1 muros (contensión, etc.) # alcantarillas (carreteras) M1 alcantarillado (carreteras) 550.00 M1 cunetas/bermas
CARR. ALFAPATA-HUANCARAMA-PINCOS	84.0	182.1			10 x 31	Km carretera rehabilitada (limpieza) 1.00 Km afirmados (carreteras) M2 afirmados (carreteras) # puentes vehiculares nuevos M1 puentes de concreto M2 puentes de concreto # alcantarillas (carreteras) M1 alcantarillado (carreteras) M1 muros (contensión, etc.) 12933.00 M1 cunetas/bermas # badenes # obras de arte princip. de concreto

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
CARR. LAMBRAMA-PALPACACHI	135.5	237.8			12 x 30	14.20	Km carretera rehabilitada (limpieza) Km afirmados (carreteras) M2 afirmados (carreteras)
						10.00	# alcantarillas (carreteras) M1 alcantarillado (carreteras) M1 muros (contención, etc.)
						10800.00	M1 cunetas/bermas
						1.00	# puentes vehiculares nuevos M1 puentes de concreto M2 puentes de concreto
CARR. LLAMAYUPA-HUAQUERE	88.5	196.5			11 x 35	9.40	Km trocha abierta # alcantarillas (carreteras)
						26.00	M1 alcantarillado (carreteras)
						2100.00	M1 cunetas/bermas

\*\* NOTAS: \*\*

CARR. CASINCHIHUA-CHALHUANI K:5/87 ¿La limpieza de los 2.46 Km descrita están incluidas en los 4.6 Km de trocha abierta?/Total de la vía: 11.4 Km. Integrará el poblado de Chalhuaní con la carr. troncal de \_\_\_\_\_.

CARR. PTE. PACHACHACA-PTE. SAHUINTO Sólo se hizo estudio (AMSA), pero no debe utilizarse por su alto costo. Debe trazarse una nueva vía de acceso más estable.

CARR. SUNCHO CAYPE Total de la vía: 8.5 Km. Se hizo un sendeo en los 2.5 Km faltantes. Enlazaría Suncho con Caype.

CARR. HUAYLLATI-QUEQUERAY Total de la vía: \_\_\_ Km. Integrará el distr. de Huayllati.

CARR. TALAVERA-OCOBAMBA-ONGOY K:5/87 Indicar si el lastrado está incluido en los 25 Km rehabilitados./Sirve a los poblados de sde Talavera hasta Ongoy.

CARR. TALAVERA-HUANCARAY-TURPO K:5/87 Indicar si el lastrado es parte de los 20 Km rehabilitados./Además, 14 pontones de madera. Sirve a los poblados entre Talavera y Huancaray.

CARR. COLCA CUTUCTAY Total de la vía: \_\_\_ Km. Integrará la troncal Cotabambas-Tambobamba.

CARR. CHUQUIBAMBILLA-ANTABAMBA Total de la vía: 70 Km. Unirá prov. de Antabamba con Abancay, vía Chuquibambilla.

CARR. CACHORA-CHOCCEQUIRAO Total de la vía: \_\_\_ Km. Afirmado se refiere a lastrado. La parte de rehabilitación beneficia a acceso de Saiwite a Cachora.

CARR. KARKATERA-RIO APURIMAC Total de la vía: \_\_\_ Km. Integrará la prov. de La Convención en el dept. de Cusco con el dept. de Apurímac.

CARR. STA. ROSA-TAPAYRIHUA-ANTABAMBA Total de la vía: \_\_\_ Km. Integrará la prov. de Antabamba con Abancay.

CARR. CANUA-LLINQUE-HUANCABAMBA Total de la vía: \_\_\_ Km. Integrará la prov. de Aymaraes con Abancay y el aeropuerto con Huancabamba.

CARR. ALFAPATA-HUANCARAMA-PINCOS K:5/87 ¿La parte lastrada está incluida en los Km rehabilitados?/Total de la vía: 34 Km.

CARR. LAMBRAMA-PALPACACHI K:5/87 Indicar si la parte lastrada está incluida en los 14.2 Km./Total de la vía: 41 Km. Afirmado se refiere a lastrado. Integrará la capital del distr. (Palpacachi) con Abancay.

CARR. LLAMAYUPA-HUAQUERE Total de la vía: 22.4 Km.

\*\*\*\*\* MULTISECTORIAL  
LIQUIDACION DE OBRAS

\*\*\*\*\*

830.0

x

REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES

PROGRAMA DRR

07/07/87

NOMBRE	CORDEAREQUIPA			# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	EJEC. 1984	EJEC. 1985	EJEC. 1986			CANTIDAD	DESCRIPCION DE META
***** SECTOR AGRICULTURA *****							
MEJOR. CANAL MADRE LLUTA	14.5	23.7		48	4 x 3		0.25 Km canal nuevo construido 0.35 Km canal revestido/reconstruido 0.16 M3/s caudal de canales 4.00 # de principales obras de arte 150.00 Has mejorad./rehab. regadas 2.00 Ml muros/diques/enrocados/defen.rib.
CASTILLA: IRR. ANDAGUA-SOPORO	27.9				4 x 1		
CASTILLA: CANAL HUATIAPA	11.4			50	2 x 1		0.12 Km canal limpiado/mejorado/rehab. 0.20 M3/s caudal de canales 80.00 Has mejorad./rehab. regadas
ESTANQUES PINCHOLLO Y CHAQUIJOCHO	26.5	28.7	251.4	150	2 x 3		2.00 # de reserv. rehabil./mejorado 27000.00 M3 volumen de reservorios 0.86 Km canal nuevo construido M3/s caudal de canales 4.00 # de principales obras de arte 210.00 Has mejorad./rehab. regadas
CANAL COLCA-CORPORAQUE					x		
CANAL URATA I Y II ETAPAS	50.4	102.3	609.3	650	4 x 2		1.85 Km canal nuevo construido 0.07 M3/s caudal de canales 5.00 # de principales obras de arte 250.00 Has mejorad./rehab. regadas 1.00 # de bocat./barajes/captac. constru. 0.21 M3/s caudal capacidad de bocatomas 24.00 Ml muros (contención, etc.)
CONDESUYOS: CANAL RIO GRANDE	23.1			40	4 x 3		0.20 Km canal revestido/reconstruido 0.32 M3/s caudal de canales 1.00 # de principales obras de arte 2.00 # de muros/ diques/enrocados, etc. 60.00 Ml muros/diques/enrocados/defen.rib. 200.00 Has mejorad./rehab. regadas
RESERVORIO DE HUAMI	79.1	188.2	225.2		6 x 5		1.00 # de reservorios construidos 0.25 Km canal nuevo construido 2.00 # de principales obras de arte
AR: CANAL PRINCIPAL BAUTISTA	25.0			26	2 x 1		0.17 Km canal revestido/reconstruido 0.12 M3/s caudal de canales 110.00 Has mejorad./rehab. regadas 3.00 # de principales obras de arte
CANAL CHILCAYMARCA					x		
CANAL MACHA-CARAVELI	37.4	37.2	182.4	130	5 x 3		1.42 Km canal revestido/reconstruido 0.08 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 0.25 M3/s caudal capacidad de bocatomas # de principales obras de arte 90.00 Has mejorad./rehab. regadas 2500.00 # familias usando para agua domést.

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
CANAL ACHANIZO-CARAMBA-ARASQUI	43.4	98.6		16	5 x 3	1.54 Km canal nuevo construido 0.15 M3/s caudal de canales 27.00 Has mejorad./rehab. regadas 21.00 Ml muros (contensión, etc.) 1.00 # de principales obras de arte
CANALES CAHUACHO	9.4	51.2		60	5 x 1	1.34 Km canal revestido/reconstruido 0.08 M3/s caudal de canales 3.00 # de bocat./barajes/captac. constru. 0.12 M3/s caudal capacidad de bocatomas 1.00 # de principales obras de arte 80.00 Has mejorad./rehab. regadas 15.00 Has no regadas previamente
ESTANQUE SEÑORPA	34.3	53.3	8.8	30	4 x 2	1.00 # de reservorios construidos 490.00 M3 volumen de reservorios 0.28 Km canal nuevo construido 0.20 M3/s caudal de canales 2.00 # de principales obras de arte 30.00 Has mejorad./rehab. regadas 5.00 Has no regadas previamente
CANAL POMACOCHA	70.2	64.7			x	
RESERVORIO AMPACHO	123.1	117.1	33.4	200	4 x 2	1.00 # de reservorios construidos 4000.00 M3 volumen de reservorios 0.66 Km canal nuevo construido 0.08 M3/s caudal de canales 2.00 # de principales obras de arte 400.00 Has mejorad./rehab. regadas 10.00 Has no regadas previamente
RESERVORIO ANCARO	45.4	55.9	94.6	30	5 x 3	1.00 # de reservorios construidos 1550.00 M3 volumen de reservorios Km canal nuevo construido 0.35 M3/s caudal de canales 2.00 # de principales obras de arte 50.00 Has mejorad./rehab. regadas 10.00 Ml muros (contensión, etc.)
MEJOR. BOCATOMA PAUCARPATA	80.1	7.7		80	12 x 2	2.00 # de bocat./baraj./capt. reha/mejor. 0.29 M3/s caudal capacidad de bocatomas 65.00 Has mejorad./rehab. regadas
RESERVORIO MOSOPUQUIO	47.3	174.7	81.6	56	10 x 9	1.00 # de reservorios construidos 1400.00 M3 volumen de reservorios 0.85 Km canal nuevo construido 0.16 M3/s caudal de canales 2.00 # de principales obras de arte 40.00 Has mejorad./rehab. regadas
CANAL CHIGUATA	20.4	18.5	32.2	150	5 x 6	0.35 Km canal revestido/reconstruido 0.30 Km canal limpiado/mejorado/rehab. 0.70 M3/s caudal de canales 2.00 # de principales obras de arte 300.00 Has mejorad./rehab. regadas

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
CANAL CARABAYA LA VICTORIA	29.5	39.9	147.6	40	8 x 4	1.08 Km canal nuevo construido 0.08 M3/s caudal de canales # de principales obras de arte 40.00 Has mejorad./rehab. regadas	
ACEQUIA ALTA QUEQUEÑA	47.4	41.4	77.5	100	7 x 7	0.90 Km canal nuevo construido 0.20 M3/s caudal de canales 3.00 # de principales obras de arte 250.00 Has mejorad./rehab. regadas # familias usando para agua domést.	
CANALES SOCOBAYA	55.7			100	3 x 1	0.12 Km canal revestido/reconstruido 0.19 M3/s caudal de canales 1.00 # de principales obras de arte 40.00 Ml muros (contención, etc.) 1.00 # de muros/ diques/enrocados, etc. 44.00 Ml muros/diques/enrocados/defen.rib. 2.00 # estructuras de riego protegidas 100.00 Has mejorad./rehab. regadas	
PLACAS PARA CANAL PAÑE-SUMBAY	900.0				4 x 2		
DIQUE DE LOS ESPANCOLES	1243.0				10 x 2	2.00 # de principales obras de arte	
APOYO A LA PRODUCCION PECUARIA	54.9			250	10 x 1	3.00 Km canal nuevo construido 0.01 M3/s caudal de canales 500.00 Has mejorad./rehab. regadas 1.00 # infraestr. para animales cons/reha	

\*\* NOTAS: \*\*

MEJOR. CANAL MADRE LLUTA

No se concluyó (quedó en 70%), pero se usa a pesar de faltar 180 m de mejor./C:1/22/87 La M-r C aylloma se encargará de fin. en 87./Y:1/9/87 Presup. I/.100,000 E-12/31/87.

CASTILLA: IRR. ANDAGUA-SOPORO

No tiene benef. no se concluyó./C:1/22/87 Conti. 87, Pequeñas Irrig. Sector Agr. presup.(TP):I/.200,00 estudios, I/.1,500,000 obras. Ejecutor: M-r Castilla Alta. Se estima concl. 1.5 Km de 1 4 Km en 87

ESTANQUES PINCHOLLO Y CHAQUIJOCHO

K:4/87 No coincide información del PIRR y de Yuta. PIRR dice hay 100 has benef. Yuta dice hay 1 50 has. ¿Cuál es correcta?

CANAL COLCA-CORPORAQUE

No tiene benef. porque no se hizo nada. Se cargaron gastos adm. al componente.

CANAL URATA I Y II ETAPAS

K:4/87 Revisar # famil. benef./No se concluyó sin embargo sirve./Y:1/87 PIRR transfirió a M-r Ca stilla Alta (12/29/86) para reparación y mejoramiento.

RESERVORIO DE HUAMI

Sin benef. porque no se concluyó./Y:1/9/87 PIRR transfirió obra a M-r Castilla Alta el 12/29/87 para su terminación. M-r sólo necesitará aportar jornales y supervisión de sus fondos 87.

CANAL CHILCAYMARCA

No tiene beneficios porque no se hizo nada. Se cargaron gastos adm. al comp.

CANAL MACHA-CARAVELI

K:4/87 No coincide información de PIRR y de Yuta. PIRR dice hay 280 has beneficiadas, Yuta dice 90. ¿Cuál es correcta?

CANAL POMACCOCHA

No tiene benef., no concluyó./C:1/22/87 Considerado en Progr.Inver.87con Andagua-Sopo., presu p(TP): 200 estudios, 1,300 obra. Ejecutor: M-r La Unión. Estiman terminar 11 Km de canal y obra s de arte

RESERVORIO ANCARO

K:4/87 No coincide información del PIRR y de Yuta. PIRR dice hay 95 has benef. Yuta dice hay 60 has. ¿Cuál es correcta?

MEJOR. BOCATOMA PAUCARPATA

K:3/87 ¿Es parte de otra obra finan. por el Progr? Si es así, entonces no reportar beneficios ( has, familias) pues sería contar dos veces un mismo beneficio. De lo contrario, es necesario.

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CANAL CHIGUATA K:4/87 No coincide información PIRR y Yuta. PIRR dice hay 300 familias beneficiadas, Yuta, 150. Revisar esto y también las hectáreas beneficiadas.

CANAL CARABAYA LA VICTORIA K:4/87 Aquí, tampoco coincide la información del PIRR y de Yuta. PIRR dice 300 has. y 300 familias. Yuta dice 40 has y 40 familias. ¿Cuál es correcto?

ACEQUIA ALTA QUEQUEÑA K:4/87 Revisar hectáreas y familias beneficiadas, no coinciden con inform. de Yuta.

CANALES SOCOBAYA Se hizo pequeñas mejoras en 3 canales en uso.

PLACAS PARA CANAL PAÑE-SUMBAY Sin beneficio. No se concluyó./Y:1/22/87 Parte del Progr.de Inver.87,presup.(TP) I/.5,750,000. Ejecutor INAF. Estiman concluir la instalación de las placas en nov.87.

DIQUE DE LOS ESPAÑOLES Sin beneficio, no se concluyó/Y:1/9/87 Estudio de factib. por CHIQUIMO debe concl. en marzo de 87. Probablemente en 88 se continúe obra física.

APOYO A LA PRODUCCION PECUARIA Riego de pastos. Infraestr. corresponde a 27836 ml de cercos.

NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENE	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
***** SECTOR VIVIENDA *****						
AGUA POTABLE CALLALLI	11.8	49.4	206.0		5 x 6	1550.00 Ml línea principal (agua potable)
AGUA POTABLE MACHAGUAY	22.1	30.7		28	5 x 3	1.00 # de reservorios construidos 30.00 M3 volumen de reservorios 846.00 Ml red distribución (agua potable) 0.01 M3/s caudal (agua potable)
ESTUD. AGUA POTABLE QUICACHA					x	1.00 # de estudios I/. valor de obras (objeto de estud)
AGUA POTABLE LOMAS	56.7	297.7	20.8		4 x 4	1.00 # tanques (agua potable) 1490.00 Ml red distribución (agua potable)
AGUA POTABLE ANDARAY	38.7	34.7	66.0	80	5 x 2	2430.00 Ml red distribución (agua potable) 0.01 M3/s caudal (agua potable) 15.00 # conexión domicil/piletas(agua pot)
AGUA POTABLE ISPACAS	22.8	61.3	59.3		5 x 2	1.00 # de reservorios construidos 1.00 # de bocat./barajes/captac. constru. 5.00 # de principales obras de arte 1465.00 Ml red distribución (agua potable) 8.00 # conexión domicil/piletas(agua pot)
** NOTAS: **						
AGUA POTABLE CALLALLI						Sin benef. no se concl. por problemas con beneficiarios./Y:1/9/87 Parte del Progr.de Inver.87,p resup.(TP) I/.150,000. Ejecutor M-r Caylloma. Se estima terminar captación en set.87.
ESTUD. AGUA POTABLE QUICACHA						EvS/E: Se concluyó el estud. y se entregó a CORDE./C:1/22/87 La contin. de esta obra ha sido transferida al 88, por falta de presupuesto./Y:1/9/87 El presupuesto estimado para 87 sería de I/.3 00,000.
AGUA POTABLE LOMAS						Sin benef.,no se concluyó./Y:1/9/87 Parte del Progr.Inver.87,presup.(TP) I/.2,000,000. No es suf ic. para concl. en 87, pero se avanzará. Sería neces. 6 mill. Ejecutor: Ofic.Provincial de CORD EA en Cara
AGUA POTABLE ANDARAY						K:4/87 PIRR dice que beneficia 125 familias, Yuta, 80. ¿Qué es correcto?
AGUA POTABLE ISPACAS						Sin benef.,benefic. no usan./Y:1/9/87 3 válv. reduct. de presión fueron ofrecidas para enero 87 , dinero para el pago reservado (I/.8,000). Gerencia de Obras de la CORDEA instalará posiblemente en feb.
***** SECTOR TRANSPORTE *****						
PUENTE COLLOTA	335.9	1084.4	90.7		6 x 2	

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NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
CARAVELI: CARR. QUINCACHA-YANAMACHAY	199.8				12 x 5	0.66 Km afirmados (carreteras) 3960.00 M2 afirmados (carreteras)
CARAVELI: PUENTE CHALA	84.3				3 x 8	1.00 # puentes vehiculares nuevos M1 puentes de concreto M2 puentes de concreto
CARAVELI: PUENTE AGUADITA	161.8				5 x 2	1.00 # puentes vehiculares nuevos 6.28 M1 puentes de concreto 56.52 M2 puentes de concreto
CARRETERA SIQUI-SALAMANCA	246.9	47.1			5 x 2	1.28 Km afirmados (carreteras) 7680.00 M2 afirmados (carreteras)
PUENTE PEATONAL MUNGUI-TAURISMA	46.0	25.2	9.1		2 x 3	1.00 # puentes peatonales 12.00 M1 puentes de fierro 24.00 M2 puentes de fierro 10.00 M1 puentes de concreto 20.00 M2 puentes de concreto

\*\* NOTAS: \*\*

PUENTE COLLOTA

No tiene benef. porque no tiene carreteras de conex. Bajo PIRR se finan. estribos y puente fals o. Según información de la CORDE se terminó puente en 86.

CARRETERA SIQUI-SALAMANCA

K:4/87 EvS/E dice 0.28 Km, Yuta, 1.82 Km ¿Cuál es correcto?

PUENTE PEATONAL MUNGUI-TAURISMA

Parte del puente es de fierro, parte de concreto.

\*\*\*\*\* MULTISECTORIAL \*\*\*\*\*  
SUPERVISION Y LIQUIDACION DE OBRAS

x

REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES  
 PROGRAMA DRR  
 07/07/87

NOMBRE	CORDECAJAMARCA			# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	EJEC. 1984	EJEC. 1985	EJEC. 1986			CANTIDAD	DESCRIPCION DE META
***** SECTOR AGRICULTURA *****							
CANAL YUMAGUAL ETAPAS I Y II-REHAB.	90.9	322.7		60	20 x 7		2.20 Km canal revestido/reconstruido 15.00 Km canal limpiado/mejorado/rehab. M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. M3/s caudal capacidad de bocatomas 4.00 # de principales obras de arte 80.00 Has mejorad./rehab. regadas
CANAL MIRAFLORES -REHAB.	11.0	95.1	778.2	100	55 x 16		3.78 Km canal nuevo construido 0.05 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 0.05 M3/s caudal capacidad de bocatomas 2.00 # de principales obras de arte 600.00 Has mejorad./rehab. regadas
CANAL SAN CRISTOBAL -REHAB.	42.9	9.1		100	4 x 10		Km canal nuevo construido 10.00 Km canal limpiado/mejorado/rehab. 0.30 M3/s caudal de canales 2.00 # de bocat./barajes/captac. constru. 0.30 M3/s caudal capacidad de bocatomas 5.00 # de principales obras de arte 450.00 Has mejorad./rehab. regadas
CANAL SAN LUIS DE YAMINCHAD -REHAB.	55.7			61	15 x 2		0.15 Km canal revestido/reconstruido 9.70 Km canal limpiado/mejorado/rehab. 0.40 M3/s caudal de canales 6.00 # de principales obras de arte 200.00 Has mejorad./rehab. regadas
CANAL POZO LA PALMA -REHAB.	41.3			160	15 x 4		0.90 Km canal nuevo construido 0.15 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 2.00 # de principales obras de arte 120.00 Has mejorad./rehab. regadas
CANAL LIVES-MIRADOR -REHAB., MEJOR.	94.2	322.8		250	15 x 12		0.96 Km canal revestido/reconstruido 24.00 Km canal limpiado/mejorado/rehab. 12.20 M3/s caudal de canales 1.00 # de bocat./baraj./capt. reha/mejor. 1.20 M3/s caudal capacidad de bocatomas 3.00 # de principales obras de arte 1800.00 Has mejorad./rehab. regadas
CANAL SAN BERNARDINO-REHAB.			442.3	50	10 x 7		17.02 Km canal nuevo construido 0.49 Km canal revestido/reconstruido 0.05 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 40.00 # de principales obras de arte 120.00 Has mejorad./rehab. regadas

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NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMSES	METAS LOGRADAS	
						CANTIDAD	DESCRIPCION DE META
CANAL MOLINO VIEJO -ESTUDIO					x	1.00	# de estudios I/. valor de obras (objeto de estud)
CANAL MONTEGRANDE -REHAB.	20.0			150	4 x 1	0.34 Km canal nuevo construido 0.03 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 0.03 M3/s caudal capacidad de bocatomas 150.00 # familias usando para agua domést.	
CANAL JANCOS EL PALTO-REHAB.,MEJOR.	88.8		31.9	400	20 x 4	0.12 Km canal nuevo construido 0.45 Km canal revestido/reconstruido 5.00 Km canal limpiado/mejorado/rehab. 0.45 M3/s caudal de canales 1.00 # de bocat./baraj./capt. reha/mejor. 0.45 M3/s caudal capacidad de bocatomas 140.00 Ml muros (contención, etc.) 3.00 # de principales obras de arte 200.00 Has mejorad./rehab. regadas	
CANAL SOCICHE -REHAB.	17.8		100.9	118	5 x 1	0.07 Km canal nuevo construido 0.24 Km canal revestido/reconstruido 0.50 Km canal limpiado/mejorado/rehab. 0.45 M3/s caudal de canales 13.00 Ml muros (contención, etc.) 1.00 # de principales obras de arte 176.50 Has mejorad./rehab. regadas	
CANAL ACEQUIA ALTA -REHAB.	39.5			350	12 x 4	0.31 Km canal nuevo construido 0.40 M3/s caudal de canales 2.00 # de bocat./barajes/captac. constru. 0.60 M3/s caudal capacidad de bocatomas 9.00 # de principales obras de arte 100.00 Has mejorad./rehab. regadas	
CANAL ALCANTARILLA I-REHAB.		62.1		31	8 x 5	0.03 Km canal revestido/reconstruido 2.50 Km canal limpiado/mejorado/rehab. 0.06 M3/s caudal de canales 42.00 Has mejorad./rehab. regadas	
CANAL ACEQUIA BANDA -REHAB.	31.3			70	7 x 3	1.00 Km canal limpiado/mejorado/rehab. 0.26 Km canal revestido/reconstruido 0.60 M3/s caudal de canales 9.00 # de principales obras de arte 83.00 Has mejorad./rehab. regadas	
CANAL LA CAPILLA -REHAB.	35.8			60	9 x 3	0.23 Km canal nuevo construido 0.30 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 0.70 M3/s caudal capacidad de bocatomas 12.00 # de principales obras de arte 295.00 Has mejorad./rehab. regadas	
CANAL EL CEQUION ESPEJO -REHAB.	37.9	44.9		60	7 x 4	0.21 Km canal nuevo construido 0.45 Km canal revestido/reconstruido 3.00 Km canal limpiado/mejorado/rehab. 0.40 M3/s caudal de canales 10.00 # de principales obras de arte	

(Sigue)

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NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
						CANTIDAD	DESCRIPCION DE META
						68.50	Has mejorad./rehab. regadas
CANAL JAGUEY -REHAB.	22.7			30	4 x 1	0.05	Km canal nuevo construido
						5.00	Km canal limpiado/mejorado/rehab.
						0.40	M3/s caudal de canales
						12.00	# de principales obras de arte
						168.00	Has mejorad./rehab. regadas
INSTAL. COMPUERTAS EN CANALES 84-85			150.5		9 x 3	12.00	# de principales obras de arte
MANEJO INTEGRAL DE RECURSOS ECOLOG. ESTUDIO MICROCUENCA DE CAJAMARCA	244.5		14.4		x x		
** NOTAS: **							
CANAL YUMAGUAL ETAPAS I Y II-REHAB.							Parte del canal es tipo canal-puente, parte es cubierto.
CANAL SAN BERNARDINO-REHAB.							Instalación de 36 compuertas incluidas en obras de arte.
CANAL MONTEGRANDE -REHAB.							Para consumo humano en la localidad de Monté Grande./ Canal construido es de tierra.
INSTAL. COMPUERTAS EN CANALES 84-85							Instalación de compuertas en Canal Yumagual (1), Canal Jancos-El Palto (2), Canal Cequiñ-Espej o (9).
MANEJO INTEGRAL DE RECURSOS ECOLOG.							La CORDE no encontró información para la EvS/E. Este componente se transfirió al Programa Norma l de la Corde en enero del 86.
ESTUDIO MICROCUENCA DE CAJAMARCA							Sólo se hizo el levantamiento topográfico en el río San Lucas, y quebradas Calispuquio y Romero
* * * * * SECTOR VIVIENDA * * * * *							
ENCAUZ. RIO CASCACEN	457.5	481.4		25	x	12310.00	M1 cauce de río limpiado/encauzado # de espigones, gaviones
						332.00	M1 de riberas proteg.por espig.,gavi
						1.00	# de muros/ diques/enrocados, etc.
						257.00	M1 muros/diques/enrocados/defen.rib.
						13125.00	M1 defensas vivas (plant.riber.)
						150.00	# de pobladores protegidos
ENCAUZ. RIO SAN LUCAS	102.2				12 x 2	3.00	# de muros/ diques/enrocados, etc.
						144.00	M1 muros/diques/enrocados/defen.rib.
						1.00	# puentes y otra infraest. protegida
							# de pobladores protegidos
ENCAUZ. RIO CAJAMARQUINO	40.0				16 x 2	136.00	M1 muros/diques/enrocados/defen.rib.
						280.00	M3 concreto utilizado
						136.00	M1 cauce de río limpiado/encauzado
						490.00	M3 material limpiado de cauces
							Has de cultivos protegidos por defen
							# de pobladores protegidos
ENCAUZ. RIO CHONTA	59.4				10 x 15	134.00	M1 cauce de río limpiado/encauzado
						126.00	M1 muros/diques/enrocados/defen.rib.
						2145.00	M3 material limpiado de cauces
							# de pobladores protegidos
ENCAUZ. QUEBRADA HONDA	627.1	819.5		500	19 x 12	2.00	# puentes vehiculares nuevos
						24.00	M1 puentes de concreto
						182.50	M2 puentes de concreto
						714.00	M3 material de accesos puentes
							M1 cauce de río limpiado/encauzado
							M3 roca utilizada
						4.00	# de muros/ diques/enrocados, etc.
						510.00	M1 muros/diques/enrocados/defen.rib.

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NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
						4340.00 M3 material limpiado de cauces 3000.00 # de pobladores protegidos
ENCAUZ. QUEBRADA HUERTAS	161.7	116.4		2500	3 x 2	5875.00 M1 cauce de río limpiado/encauzado 1.00 # de muros/ diques/enrocados, etc. 70.00 M1 muros/diques/enrocados/defen.rib. 15000.00 # de pobladores protegidos
ENCAUZ. QUEBRADA CUMBEMAYO	10.3			60	4 x 1	750.00 M1 cauce de río limpiado/encauzado 1800.00 M3 material limpiado de cauces 360.00 # de pobladores protegidos
CANALIZ. QUEBRADA SIMON BOLIVAR	37.8	126.2			x	214.00 # de muros/ diques/enrocados, etc. 2.00 # de principales obras de arte 3.00 # alcantarillas (carreteras) # de pobladores protegidos
CANALIZ. QUEBRADA CALISPUQUIO	65.6	454.6			12 x 12	185.00 M1 cauce de río limpiado/encauzado 2714.00 M3 material limpiado de cauces 1.00 # de muros/ diques/enrocados, etc. 244.00 M1 muros/diques/enrocados/defen.rib. 2.00 # alcantarillas (carreteras) 31.00 M1 alcantarillado (carreteras) 808.00 M3 material de accesos puentes 220.00 M3 concreto utilizado # de pobladores protegidos
CANALIZ. QUEBRADA JUAN XXIII	142.2	318.8			20 x 12	257.00 M1 cauce de río limpiado/encauzado 3.00 # de principales obras de arte 1.00 # alcantarillas (carreteras) 32.00 M1 alcantarillado (carreteras) # de pobladores protegidos
REHAB. INF. SOCIAL 32 LOCALES EDUC.	499.9	100.4		1280	64 x 5	32.00 # CC.EE. beneficiados 28.00 # aulas nuevas 7069.00 M2 CC.EE. nuevos 10.00 # aulas rehabilitadas 10943.00 M2 CC.EE. rehabilitados

\*\* NOTAS: \*\*

ENCAUZ. RIO CASCACEN	Falta trab. x meses en EvS/E./ Protección de la ciudad de San Marcos.
ENCAUZ. RIO SAN LUCAS	Falta No. de pobl. protegidos (familias beneficiadas) en EvS/E./Prot. Ciud. Cajamarca
ENCAUZ. RIO CAJAMARQUINO	Protección de áreas agrícolas experim. de universidad de Cajamarca y viviendas aledañas.
ENCAUZ. RIO CHONTA	Protección de pobladores del distr. Baños del Inca.
ENCAUZ. QUEBRADA HONDA	Protección de pueblo de Tambladera.
ENCAUZ. QUEBRADA HUERTAS	Protección de ciudad de Chilete.
ENCAUZ. QUEBRADA CUMBEMAYO	Protección comunidad de Mollepampa Chica - Bajo Paríamarca.
CANALIZ. QUEBRADA SIMON BOLIVAR	Falta trab.x meses, familias benef. (hab. protegidos)./Protección de P.J. Simón Bolívar.
CANALIZ. QUEBRADA CALISPUQUIO	Protección de ciudad de Cajamarca.
CANALIZ. QUEBRADA JUAN XXIII	Protección de ciudad de Cajamarca. Partes del canal cubierto.

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REHAB. INF. SOCIAL 32 LOCALES EDUC. M2 incluye aulas, SS.NH. veredas, patios, etc./Además, 1681 ml de cercado.

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
***** SECTOR TRANSPORTE *****						
ENCAUZ. RIO SAN PABLO		215.2			12 x 3	2.00 # de muros/ diques/enrocados, etc. 350.00 M1 muros/diques/enrocados/defen.rib. 1.00 # badenes 1.00 # puentes y otra infraest. protegida 2.00 Has de cultivos protegidos por defen
ENOAUZ. RIO PONTE		43.2			6 x 3	80.00 M1 cauce de río limpiado/encauzado 78.00 M3 material limpiado de cauces 66.00 M1 muros (contención, etc.) 1.00 # puentes y otra infraest. protegida 2.00 Has de cultivos protegidos por defen
DEFENSA PUENTE SAN LUCAS		96.1			20 x 3	40.50 M1 muros/diques/enrocados/defen.rib. 1.00 # puentes y otra infraest. protegida 544.00 M3 material de accesos puentes
PUENTE PEATONAL CHANCAY - BAÑOS	5.0				x	1.00 # puentes peatonales 50.00 M1 puentes de madera M2 puentes de madera
PUENTE PEATONAL CHANCAY - UTICYACU	5.0				x	1.00 # puentes peatonales 33.00 M1 puentes de madera M2 puentes de madera
PUENTE PEATONAL COLGANTE HUAQUILLAS	43.5				25 x 4	1.00 # puentes peatonales 29.60 M1 puentes de madera 65.12 M2 puentes de madera
PUENTE PEATONAL COLGANTE VENTANILLAS	102.4				20 x 4	1.00 # puentes peatonales 54.80 M1 puentes de madera M2 puentes de madera
PUENTE PEATONAL LA SAMANA - EXP.TEC.	3.0				x	1.00 # de estudios I/. valor de obras (objeto de estud)
PUENTE NIEVES	3.5	160.9			4 x 8	1.00 # puentes vehiculares nuevos M1 puentes de concreto M2 puentes de concreto
PUENTE SALABAMBA -REHAB.	10.0				4 x 1	1.00 # puentes vehiculares rehabil. 16.80 M1 puentes de fierro 62.16 M2 puentes de fierro
PUENTE PALTAMAYO	5.0	59.3			11 x 4	1.00 # puentes vehiculares nuevos 7.10 M1 puentes de madera M2 puentes de madera
PUENTE PURUAY	13.7				12 x 1	1.00 # puentes vehiculares nuevos 9.00 M1 puentes de madera 36.00 M2 puentes de madera

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
PUENTE LLACANORA, PUENTE SHAULLO	100.4	238.1			17 x 9	1.00 # puentes vehiculares rehabil. 4.00 M1 puentes de madera 45.00 M2 puentes de madera 1.00 # puentes vehiculares nuevos 10.00 M1 puentes de concreto 97.50 M2 puentes de concreto 760.00 M3 material de accesos puentes 0.26 Km canal nuevo construido 33.00 M1 muros (contención, etc.)
PUENTE PARIAMARCA	54.4	325.7			23 x 8	1.00 # puentes vehiculares nuevos 7.80 M1 puentes de concreto 35.10 M2 puentes de concreto 576.00 M3 material de accesos puentes
PUENTE RUPE Y ACCESOS	92.1	98.1			29 x 4	1.00 # puentes vehiculares nuevos 11.60 M1 puentes de concreto 46.40 M2 puentes de concreto M3 material de accesos puentes 20.00 M1 muros (contención, etc.) 193.00 M1 cunetas/bermas 150.00 M1 cauce de río limpiado/encauzado 610.00 M3 material limpiado de cauces
VARIANTE DE CARRETERA LLACANORA	31.1				10 x 2	0.70 Km afirmados (carreteras) 56.00 M2 afirmados (carreteras) 140.00 M1 cunetas/bermas
PEQ.OBRAS REHAB. CARR. CAJAM. JESUS CARR.ESPINAL-NIEPOS,ACCES.PTE PAPAYO	42.4 136.6	292.7	512.9		7 x 8 x	1.00 # puentes vehiculares nuevos 20.00 M1 puentes de concreto 90.00 M2 puentes de concreto 0.48 Km afirmados (carreteras) M2 afirmados (carreteras) 220.00 M1 muros (contención, etc.) 2500.00 M1 cunetas/bermas
CARR. JESUS-LACAS, PTE PATILISH	22.8	217.3	292.6		10 x 14	30.00 M1 cauce de río limpiado/encauzado 3.00 # badenes 5.00 # puentes vehiculares rehabil. 5.00 Km carretera rehabilitada (limpieza)
CARRETERA CAJAMARCA-CAJABAMBA			326.3		x	0.72 Km afirmados (carreteras) 4400.00 M2 afirmados (carreteras) 800.00 M1 cunetas/bermas 1.00 # badenes 2.00 # alcantarillas (carreteras) 7.00 M1 alcantarillado (carreteras)
CARRETERA CHILETE-CONTUMAZA-CASCAS CARR.GUZMANGO-SAN BENITO-ALGARROBAL	152.4				x 5 x 3	500.00 Km trocha abierta
CARR. PUENTE YONAN-TRINIDAD	88.9	289.4			18 x 10	22.00 Km carretera rehabilitada (limpieza) M3 material de accesos puentes 58.00 M1 muros/diques/enrocados/defen.rib. M1 cauce de río limpiado/encauzado 9454.00 M3 material limpiado de cauces (Sigue)

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
						7570.00	Ml cunetas/bermas 2.00 # alcantarillas (carreteras) 8.00 Ml alcantarillado (carreteras)
BADEN MOROCHILLO	6.6	19.2			15 x 1	1.00	# badenes

\*\* NOTAS: \*\*

ENCAUZ. RIO SAN PABLO	Protección de carretera interdistrital.
ENCAUZ. RIO PONTE	Protección de puente.
DEFENSA PUENTE SAN LUCAS	Protección del estribo derecho del puente.
PUENTE PEATONAL CHANCAY - BAÑOS	Falta EvS/E.
PUENTE PEATONAL CHANCAY - UTICYACU	Falta EvS/E.
PUENTE PEATONAL COLGANTE VENTANILLAS	C:necesario hacer mantenimiento de la estructura de madera y protección de los estribos y aletas de acuerdo a cómo varíe el cauce del río en el futuro.
PEQ.OBRAS REHAB. CARR. CAJAM. JESUS	Reparación de 8 secciones, limpieza de derrumbes en la carr. Jesús-Lacas, y limpieza de la quebrada Calispuquio.
CARR.ESPINAL-NIEPOS,ACCES.PTE PAPAYO	Falta trab. x meses.
CARR. JESUS-LACAS, PTE PATILISH	Cada puente es de aprox. 6 ml. no se especifica ancho ni material usado en EvS/E.
CARRETERA CAJAMARCA-CAJABAMBA	Falta trab. x meses.
CARRETERA CHILETE-CONTUMAZA-CASCAS	Falta EvS/E.
CARR.GUZMANGO-SAN BENITO-ALGARROBAL	No tiene beneficios porque no se concluyó la variante de carretera.
CARR. PUENTE YONAN-TRINIDAD	Rehab. de carretera y protección del puente Yonán.
BADEN MOROCHILLO	EvS/E: Badén de 15.0 m x 8.8 m.

\*\*\*\*\* MULTISECTORIAL  
PAGOS DEVENGADOS DEL 85  
LIQUIDACION DE OBRAS

\*\*\*\*\*  
849.0 x  
x

\*\* NOTAS: \*\*

PAGOS DEVENGADOS DEL 85 K:3/5/87 En 86 se aprobó 109.5 para pagos devengados del 85, del proyecto 010. Necesitamos saber qué componentes exactamente son los afectados y por cuánto, para afectarlos y borrar este récord.

REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES  
 PROGRAMA DRR  
 07/07/87

CORDECUSCO

NOMBRE	CORDECUSCO			# FAM BENEF	EMPLEO GEN TRAB:MESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
	EJEC. 1984	EJEC. 1985	EJEC. 1986			
***** SECTOR AGRICULTURA *****						
CONST. IRRIG. OCCORURO TOCROYOC	445.0	491.0			45 x 17	0.95 # de bocat./barajes/captac. constru. 8.00 Km canal nuevo construido 5.00 Km caminos de acceso a obras
CONST. IRRIG. PULPERA	698.3	522.0	664.0	217	100 x 29	6.00 Km canal nuevo construido 1.50 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 1.50 M3/s caudal capacidad de bocatomas 23.00 # de principales obras de arte 644.00 Has mejorad./rehab. regadas
CONST. IRRIG. URINSAYA	419.9	967.0	1845.2	481	54 x 26	8.45 Km canal nuevo construido 0.58 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 0.58 M3/s caudal capacidad de bocatomas 13.00 # de principales obras de arte 15.25 Km caminos de acceso a obras 580.00 Has no regadas previamente
MEJOR. IRRIG. YUCAY	217.8	339.0			28 x 17	
MEJOR. IRRIG. SAHUA-SAHUA	69.7			100	18 x 5	5.00 Km canal limpiado/mejorado/rehab. 0.54 Km canal nuevo construido 0.24 M3/s caudal de canales 300.00 Has mejorad./rehab. regadas
CONST. IRRIG. PAMPAMARCA	235.0	464.0	896.8	200	46 x 28	9.40 Km canal nuevo construido 0.30 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 0.30 M3/s caudal capacidad de bocatomas 44.00 # de principales obras de arte 312.00 Has mejorad./rehab. regadas
MEJOR. IRRIG. COLLANA	123.3	209.0		130	35 x 24	4.20 Km canal nuevo construido 0.12 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 0.12 M3/s caudal capacidad de bocatomas 2.00 # de principales obras de arte 19.00 Km caminos de acceso a obras 56.00 Has no regadas previamente
MEJOR. IRRIG. PARURO	145.3	51.0		458	23 x 9	12.02 Km canal limpiado/mejorado/rehab. 0.49 M3/s caudal de canales 1.00 # de bocat./baraj./capt. reha/mejor. 2.00 # de bocat./barajes/captac. constru. 0.49 M3/s caudal capacidad de bocatomas 4.00 # de principales obras de arte 408.00 Has mejorad./rehab. regadas # familias usando para agua domést.

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
MEJOR. IRRIG. SAMBOR	181.7	263.0		1217	26 x 14	3.68 Km canal revestido/reconstruido 3.85 Km canal nuevo construido 0.20 M3/s caudal de canales 2.00 # de bocat./barajes/captac. constru. 0.20 M3/s caudal capacidad de bocatomas 339.00 Has mejorad./rehab. regadas 196.00 Has no regadas previamente
MEJOR. IRRIG. JULLICUNCA	187.4	173.0		90	18 x 17	2.00 Km canal nuevo construido 2.50 Km canal limpiado/mejorado/rehab. 0.60 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 0.60 M3/s caudal capacidad de bocatomas 8.00 # de principales obras de arte 120.00 Has mejorad./rehab. regadas # familias usando para agua domést.
MEJOR. IRRIG. COLQUEPATA	208.0	165.0		219	16 x 17	1.92 Km canal revestido/reconstruido 0.98 Km canal limpiado/mejorado/rehab. 0.60 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 0.60 M3/s caudal capacidad de bocatomas 2.00 # de principales obras de arte 48.00 Has mejorad./rehab. regadas
MEJOR. IRRIG. LIMATAMBO	134.0	382.8		84	33 x 23	1.72 Km canal limpiado/mejorado/rehab. 0.60 Km canal nuevo construido 0.30 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 0.30 M3/s caudal capacidad de bocatomas 51.00 # de principales obras de arte 80.00 Has mejorad./rehab. regadas
CONST. IRRIG. TOTORA	109.8	330.0		201	35 x 20	10.80 Km canal nuevo construido 0.15 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 0.15 M3/s caudal capacidad de bocatomas 36.00 # de principales obras de arte 150.00 Has no regadas previamente # familias usando para agua domést.
MEJOR. IRRIG. AMPARAES EXTENSION Y FOMENTO AGROPECUARIO	43.5		543.3		15 x 2 24 x 9	# parcelas y huertas demostrativas 124.00 Has parcelas y huertas demostrativas 2.00 # cursos organizados (capacitac.) 708.00 # visitas de campo (capacitación) # agricultores, etc. capacitados
APOYO AGRICOLA				5256	50 x 36	3.00 # campañas agrícolas 878600.00 Kg semillas distribuidas 1158900.00 Kg fertilizantes distribuidos 593000.00 Kg insumos distr.(ni semill.ni fert) 1158.50 Has papas (áreas beneficiadas) 926.00 Has granos y panllevar (areas ben.)

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
INSTALACION DE PASTOS CULTIVADOS				1132	28 x 9	41700.00	Kg semillas distribuidas 237800.00 Kg fertilizantes distribuidos 661.00 Has pastos (áreas beneficiadas)
TRANSFERENCIA DE TECNOLOGIA					28 x 9	3497.00	# cursos organizados (capacitac.) 17253.00 # visitas de campo (capacitación) 114.00 # parcelas y huertas demostrativas Has parcelas y huertas demostrativas # agricultores, etc. capacitados 6388.00 # familias benefic. con créditos 4494.90 I/.x1000 total de créditos otorgados
PROTECCION DEL CAPITAL PECUARIO	100.0			400	12 x 30	4.00	# campañas sanidad animal 68380.00 Sanidad animal de vacunos (# cbzs.) 368004.00 Sanidad animal de ovinos (# cbzs.) 37711.00 Sanidad animal de alpacas (# cbzs.)
INSTAL. HUERTOS COMUNALES		176.0		200	3 x 19	3.00	# campañas agrícolas 30.00 # huertas comunales 4.15 Has beneficiadas no demostrativas 102.00 Has beneficiadas no demostrativas Kg semillas distribuidas Kg fertilizantes distribuidos Kg insumos distr.(ni semill.ni fert) # familias benefic. con créditos I/.x1000 total de créditos otorgados
INSTAL. GRANJAS COMUNALES				100	2 x 19	2160.00	# animales menores (distribución) 57.00 # infraestr. para animales cons/reha Kg insumos para animales distribuid. # familias benefic. con créditos I/.x1000 total de créditos otorgados
CONSERVACION DE SUELOS		362.0		1300	150 x 18	3.00	Has forestadas/reforestadas 13.00 Has andenes y terrazas nuevas 8000.00 Ml zanjas de infiltración

\*\* NOTAS: \*\*

CONST. IRRIG. OCCORURO TOCROYOC  
MEJOR. IRRIG. YUCAY

Sin beneficio, no se continuó por su alto costo y poco beneficio.

Sin beneficio. No se continuó por problemas de diseño y legales. Sólo se construyó 1.2 Km de terraplén.

MEJOR. IRRIG. AMPARAES  
EXTENSION Y FOMENTO ACROPECUARIO  
TRANSFERENCIA DE TECNOLOGIA

Sin beneficio. No se continuó por no estar bien concebido técnicamente.

Mismo número de familias beneficiadas que para las irrigaciones.

Mismos beneficiarios que para los componentes de irrigación./ # de cursos organizados se refiere a Demostr.de Metod.+ Reuniones.

INSTAL. HUERTOS COMUNALES

Se ha dividido los benef. en los dos componentes de 040 y para dos años para contabilizar los incluidos con financiamiento AID solamente.

INSTAL. GRANJAS COMUNALES

Mismo comentario anterior, excepto que se toma los beneficiarios para un año./ Metas incluye sólo las de AID (año 84).

CONSERVACION DE SUELOS

En 83-84 comenzó con bonos, en 85 con fondos AID, en 86 continuó con bonos. Sólo se tomó datos para parte AID.

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NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
***** MULTISECTORIAL LIQUIDACION DE OBRAS			497.0		x	

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REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES

PROGRAMA DRR

07/07/87

CORDEHUANCAVELICA

NOMBRE	CORDEHUANCAVELICA			# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	EJEC. 1984	EJEC. 1985	EJEC. 1986			CANTIDAD	DESCRIPCION DE META
***** SECTOR AGRICULTURA *****							
IRRIGACION LIRIO CHUNCA	169.2	197.0		300	19 x 20	1.00	# de bocat./barajes/captac. constru. 0.05 M3/s caudal capacidad de bocatomas 5.10 Km canal nuevo construido 0.05 M3/s caudal de canales 11.00 # de principales obras de arte 300.00 Has mejorad./rehab. regadas
IRRIGACION JOSE OLAYA	156.3	220.2		200	15 x 12	1.00	# de bocat./baraj./capt. reha/mejor. 0.10 M3/s caudal capacidad de bocatomas 1.00 # de muros/ diques/enrocados, etc. 30.00 M1 muros/diques/enrocados/defen.rib. 4.00 # de principales obras de arte 0.14 Km canal limpiado/mejorado/rehab. 0.10 M3/s caudal de canales 400.00 Has mejorad./rehab. regadas
IRRIGACION YAULI	234.8	109.1		250	22 x 20	1.00	# de bocat./barajes/captac. constru. 0.10 M3/s caudal capacidad de bocatomas 1.00 # de muros/ diques/enrocados, etc. 20.00 M1 muros/diques/enrocados/defen.rib. 8.00 Km canal nuevo construido 0.10 M3/s caudal de canales 30.00 # de principales obras de arte 160.00 Has mejorad./rehab. regadas
IRRIGACION ANTAYMISA	168.6	59.7		200	14 x 10	1.00	# de bocat./barajes/captac. constru. 0.05 M3/s caudal capacidad de bocatomas 2.00 # de muros/ diques/enrocados, etc. 40.00 M1 muros/diques/enrocados/defen.rib. 3.73 Km canal nuevo construido 0.05 M3/s caudal de canales 80.00 M1 muros (contención, etc.) 4.00 # de principales obras de arte 145.00 Has mejorad./rehab. regadas
IRRIG. TICRAPO (ESTUDIO DE FACTIBI.)	4.0						
IRRIGACION AYAVI TAMBILLO	2.5	131.2		150	8 x 20	1.00	# de bocat./barajes/captac. constru. 0.04 M3/s caudal capacidad de bocatomas 1.00 # de muros/ diques/enrocados, etc. 3.00 M1 muros/diques/enrocados/defen.rib. 0.38 Km canal nuevo construido 0.07 M3/s caudal de canales 1.00 # de reservorios construidos 480.00 M3 volumen de reservorios 2.00 # de principales obras de arte 60.00 Has mejorad./rehab. regadas
IRRIGACION AYACCOCHA	94.3	164.2		120	14 x 27	1.00	# de bocat./barajes/captac. constru. 0.04 M3/s caudal capacidad de bocatomas 2.00 Km canal nuevo construido 0.04 M3/s caudal de canales 4.00 # de principales obras de arte

(Sigue)

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
						160.00 Has mejorad./rehab. regadas
IRRIGACION HUAYLLAY GRANDE	101.7	178.5		150	20 x 9	1.00 # de bocat./barajes/captac. constru. 0.05 M3/s caudal capacidad de bocatomas 0.08 Km canal nuevo construido 0.05 M3/s caudal de canales 1.00 # de reservorios construidos 400.00 M3 volumen de reservorios 2.00 # de principales obras de arte 60.00 Has mejorad./rehab. regadas
IRRIGACION HUALLHUAYPATA	100.1	207.8		60	10 x 15	1.00 # de bocat./barajes/captac. constru. 0.05 M3/s caudal capacidad de bocatomas 1.00 # de muros/diques/enrocados, etc. 10.00 M1 muros/diques/enrocados/defen.rib. 1.76 Km canal nuevo construido 0.03 M3/s caudal de canales 8.00 # de principales obras de arte 100.00 Has mejorad./rehab. regadas
REHAB. IRRIG. STA. CRUZ DE INYACC	83.0	92.2		150	14 x 8	1.00 # de bocat./barajes/captac. constru. 0.04 M3/s caudal capacidad de bocatomas 60.00 M1 muros (contención, etc.) 1.45 Km canal nuevo construido 0.04 M3/s caudal de canales 8.00 # de principales obras de arte 180.00 Has mejorad./rehab. regadas
IRRIGACION SAN PEDRO DE CORIS	157.2	130.6		150	15 x 20	1.00 # de bocat./barajes/captac. constru. 0.03 M3/s caudal capacidad de bocatomas 4.53 Km canal nuevo construido 0.03 M3/s caudal de canales 10.00 # de principales obras de arte 100.00 Has mejorad./rehab. regadas
IRRIGACION CALLQUI GRANDE	19.8				15 x 5	1.00 # de bocat./baraj./capt. reha/mejor. 0.05 M3/s caudal capacidad de bocatomas 1.04 Km canal nuevo construido 0.05 M3/s caudal de canales 16.00 # de principales obras de arte 54.00 Has mejorad./rehab. regadas
RESERVORIO MOYA	184.9	224.8		300	14 x 20	1.00 # de bocat./barajes/captac. constru. 0.03 M3/s caudal capacidad de bocatomas 2.33 Km canal nuevo construido 0.03 M3/s caudal de canales 4.00 # de principales obras de arte 250.00 Has mejorad./rehab. regadas
RESERVORIO VIÑAS PAMPAS	60.0	199.3		300	20 x 12	1.00 # de bocat./barajes/captac. constru. 0.03 M3/s caudal capacidad de bocatomas 1.00 # de reservorios construidos 600.00 M3 volumen de reservorios 0.08 Km canal nuevo construido 0.03 M3/s caudal de canales 3.00 # de principales obras de arte 200.00 Has mejorad./rehab. regadas

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
CONST. RESERVORIO CALLANMARCA	58.1			200	20 x 5	1.00	# de reservorios construidos
						1400.00	M3 volumen de reservorios
						3.00	# de principales obras de arte
						100.00	Has mejorad./rehab. regadas
CONST. RESERVORIO JABONILLO		115.0		40	4 x 10	1.00	# de reservorios construidos
						151.00	M3 volumen de reservorios
						0.02	Km canal nuevo construido
						0.03	M3/s caudal de canales
						1.00	# de principales obras de arte
						44.00	Has mejorad./rehab. regadas
MEJOR. RESERVORIO RANTAY	52.4			150	18 x 6	0.03	Km canal nuevo construido
						0.05	M3/s caudal de canales
						1.00	# de reserv. rehabilit./mejorado
						432.00	M3 volumen de reservorios
						2.00	# de principales obras de arte
						100.00	Has mejorad./rehab. regadas
PRODUCCION AGRICOLA 84	617.6			1038	61 x 6	1.00	# campañas agrícolas
						167995.00	Kg semillas distribuidas
						107325.00	Kg fertilizantes distribuidos
						5422.75	Kg insumos distr.(ni semill.ni fert)
						88.00	Has papas (áreas beneficiadas)
						21.50	Has granos y panllevar (areas ben.)
						1038.00	# familias benefic. con créditos
						426.89	I/.x1000 total de créditos otorgados
						15.00	# cursos organizados (capacitac.)
						510.00	# visitas de campo (capacitación)
						300.00	# agricultores, etc. capacitados
PRODUCCION AGRICOLA 85		225.9		1028	58 x 6	1.00	# campañas agrícolas
						180280.00	Kg semillas distribuidas
						84000.00	Kg fertilizantes distribuidos
						3664.35	Kg insumos distr.(ni semill.ni fert)
						93.50	Has papas (áreas beneficiadas)
						3.00	Has granos y panllevar (areas ben.)
						1028.00	# familias benefic. con créditos
						388.57	I/.x1000 total de créditos otorgados
						20.00	# cursos organizados (capacitac.)
						515.00	# visitas de campo (capacitación)
						600.00	# agricultores, etc. capacitados
FORESTACION Y REFORESTACION	369.5	389.8			12 x 25	2.00	# viveros instalados
						962805.00	# plantones producidos (forestación)
						1054.20	Has forestadas/reforestadas
IMPULSO PECUARIO CALLQUI GRANDE	354.3	826.3			18 x 17	18.00	# animales mayores (distribución)
						45.50	Has pastos (áreas beneficiadas)
						10490.00	Kg insumos para animales distribuid.
						12.00	# infraestr. para animales cons/reha
						154.00	Sanidad animal de vacunos (# cbzs.)
SEMILLEROS Y PASTOS CULTIVADOS 84	322.0			320	29 x 6	1.00	# campañas agrícolas
						78085.00	Kg semillas distribuidas
						56600.00	Kg fertilizantes distribuidos
						2302.00	Kg insumos distr.(ni semill.ni fert)

(Sigue)

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NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
						54.00 Has semilleros sembrados 408000.00 Kg semillas producidas 40.00 Has papas (áreas beneficiadas) 14.00 Has granos y panllevar (areas ben.) 320.00 # familias benefic. con créditos 202.52 I/.x1000 total de créditos otorgados 235.00 # visitas de campo (capacitación) 200.00 # agricultores, etc. capacitados
SEMILLEROS Y PASTOS CULTIVADOS 85	223.7			843	50 x 6	1.00 # campañas agrícolas 105263.00 Kg semillas distribuidas 76250.00 Kg fertilizantes distribuidos 2436.00 Kg insumos distr.(ni semill.ni fert) 95.50 Has semilleros sembrados 608110.00 Kg semillas producidas 65.00 Has papas (áreas beneficiadas) 30.50 Has granos y panllevar (areas ben.) 843.00 # familias benefic. con créditos 315372.00 I/.x1000 total de créditos otorgados 460.00 # visitas de campo (capacitación) 500.00 # agricultores, etc. capacitados
SANIDAD VEGETAL 84	78.3			405	25 x 6	1.00 # campañas de sanidad vegetal 390.86 Has beneficiadas por sanidad vegetal 7626.11 Kg insumos distr.(ni semill.ni fert) 405.00 # familias benefic. con créditos 137.06 I/.x1000 total de créditos otorgados 4.00 # cursos organizados (capacitac.) 350.00 # visitas de campo (capacitación) 405.00 # agricultores, etc. capacitados
SANIDAD VEGETAL 85	25.0			257	14 x 6	1.00 # campañas de sanidad vegetal 196.40 Has beneficiadas por sanidad vegetal 3970.40 Kg insumos distr.(ni semill.ni fert) 257.00 # familias benefic. con créditos 134.65 I/.x1000 total de créditos otorgados 4.00 # cursos organizados (capacitac.) 180.00 # visitas de campo (capacitación) 275.00 # agricultores, etc. capacitados
SANIDAD ANIMAL 84	199.2			5651	5 x 12	1.00 # campañas sanidad animal 234827.00 Sanidad animal de ovinos (# cbzs.) 27132.00 Sanidad animal de vacunos (# cbzs.) 65074.00 Sanidad animal de alpacas (# cbzs.) 5651.00 # familias benefic. con créditos 62.56 I/.x1000 total de créditos otorgados 60.00 # visitas de campo (capacitación) 5651.00 # agricultores, etc. capacitados
SANIDAD ANIMAL 85	75.0			2664	2664 x 12	1.00 # campañas sanidad animal 192057.00 Sanidad animal de ovinos (# cbzs.) 12039.00 Sanidad animal de vacunos (# cbzs.) 121306.00 Sanidad animal de alpacas (# cbzs.) 2664.00 # familias benefic. con créditos 181.94 I/.x1000 total de créditos otorgados 60.00 # visitas de campo (capacitación) 2664.00 # agricultores, etc. capacitados

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
CENTROS DE CERAMICA-MARMOLERIA	19.1				x		
MADERA, CUEROS Y CESTERIA	45.9				x		
ARTES, TEXTIL RURAL	84.9				x		

\*\* NOTAS: \*\*

IRRIGACION ANTAYMISA	K:4/27; Está funcionando a pesar de probl. ?/Bocatoma destruida por caída de roca en enero 86 por construcc. más arriba, CORDE se comprometió a repararla, sin embargo a dic. 86 todavía no se había hecho						
IRRIG. TICRAPO (ESTUDIO DE FACTIBI.)	Sólo se hizo est. de factibilidad en 84. En 86 se hizo est. definitivo con bonos, y con PL480 se comenzó la obra en agosto 86.						
IRRIGACION AYAVI TAMBILLO	En 84 se hizo estudio de factibilidad.						
IRRIGACION AYACCOCHA	K:4/87 Según información de feb. 87, esta obra no estaba terminada. Con las mets que se lograron ¿está teniendo beneficios?						
IRRIGACION CALLQUI GRANDE	K:4/87 Las familias beneficiadas deben ser las que trabajan o cuidan las 54 has./Riego de pastos.						
RESERVORIO VIÑAS PAMPAS	K:4/87 A dic. 86 faltaba el canal de salida. ¿Se ha hecho? ¿Puede beneficiar la obra sin éste?						
FORESTACION Y REFORESTACION	Hubo pérdidas del 35% en el 84 y 40% en el 85 por sequía, daños y mala protección. Beneficiados son 2584 familias a las que se distribuyeron los plantones. Esta actividad ha ido teniendo más aceptac.						
IMPULSO PECUARIO CALLQUI GRANDE	Es un centro de promoción, por lo que no hay beneficiarios directos, sino los que reciben los productos (leche y queso).						
SANIDAD VEGETAL 84	Areas de 84 comunidades campesinas.						
SANIDAD VEGETAL 85	Areas de 53 comunidades campesinas.						
CENTROS DE CERAMICA-MARMOLERIA	El subproyecto tuvo problemas, la CORDE no hizo un análisis de las metas físicas logradas, el presupuesto ejecutado y las personas beneficiadas.						

\*\*\*\*\* SECTOR TRANSPORTE \*\*\*\*\*

CARRET. MANTACRA-VIÑAS PAMPAS	299.0			35 x 6		38.00 Km carretera rehabilitada (limpieza)	
						25360.00 Ml cunetas/bermas	
						7.00 Ml alcantarillado (carreteras)	
						14.00 # alcantarillas (carreteras)	
						4.00 # badenes	
CARRET. PALCA OCCOROPUQUIO	228.4			30 x 5		7.00 Km carretera rehabilitada (limpieza)	
CARR. PILCHACA-TELLERIA-EST. RECONS.	9.1	362.3		24 x 6		12.76 Km carretera rehabilitada (limpieza)	
						11608.00 Ml cunetas/bermas	
CARR. CHINCHIHUASI-PACHAMARCA-EST.REC	3.9	187.7		18 x 6		3.40 Km carretera rehabilitada (limpieza)	
						6400.00 Ml cunetas/bermas	
						1.00 # puentes vehiculares nuevos	
						45.00 # puentes vehiculares rehabil.	
CARRET. CHECCO CRUZ - LA MEJORADA	235.1			20 x 7		12.00 Ml muros (contención, etc.)	
						6.00 # alcantarillas (carreteras)	
						36.00 Ml alcantarillado (carreteras)	
						13840.00 Ml cunetas/bermas	
						13840.00 Ml cunetas/bermas	
CARRET. HUANCAYO-PAMPA ALTOPONGO	231.3			12 x 6		10.17 Km carretera rehabilitada (limpieza)	

NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
						82.00 Ml red distribución (agua potable) # familias usando para agua domést.
A.P. CASAGRANDE-CHAQUIRA	23.5				x	945.00 Ml línea principal (agua potable) 0.01 M3/s caudal (agua potable) 1.00 # equipos reh/nuev (agua potable)
A.P. PAMBARUMBE	29.0				x	180.00 Ml línea principal (agua potable) # conexión domicil/piletas(agua pot)
HOSPITAL GENERAL DE SULLANA	61.0			41356	10 x 3	1.00 # postas o centros médicos nuev/reh 1600.00 M2 postas o centros médicas nuev/reh
CENTRO SALUD CATACAOS	34.0			6482	9 x 3	1.00 # postas o centros médicos nuev/reh 600.00 M2 postas o centros médicas nuev/reh
CENTRO SALUD CASTILLA	67.0			13095	10 x 4	1.00 # postas o centros médicos nuev/reh 1300.00 M2 postas o centros médicas nuev/reh
CENTRO SALUD DE MORROPON	38.0			3843	10 x 3	1.00 # postas o centros médicos nuev/reh 330.00 M2 postas o centros médicas nuev/reh

\*\* NOTAS: \*\*

RED DISTR. ELEC. PRIM. TALARA Además, 14 cajas terminales. Beneficia al 20% de la población urbana.

RED DISTR. ELEC. PRIM. Y SEC. PAITA Además, 4 tableros eléctricos y 348 aisladores.

RED ELE.PRIM.MANCORA-ORGANOS-NEGRITO Sirve para la generación de la fuerza de bombeo de agua potable a las localidades Máncora, Los Organos, Negritos.

GEN. Y DISTR. ELECT. CHULUCANAS Beneficiada 30% de la población urbana de la ciudad de Chulucanas.

SIS. ELECTRICO 13 POBLADOS Hay tres minicentrales hidroeléctricas que no funcionan: Sto. Domingó, Frías y Carmen de la Frontera.

LINEA TRANSMISION PAITA-TALARA Además, una torre metálica de 33.8 m.

SISTEMA ELECT. CASA FUERZA SULLANA Falta conexión de casa de fuerza con sistema de distribución que ELECTROPERU debe hacer./ Además, tanque de almacén. de 40000 galones. Beneficia 20% de población urbana.

REH. LINEA TRANSMIS. PAITA-EL ARENAL Mismos beneficiarios que A.P./Fundamental para la rehab. del sistema de agua potable en la parte de bombeo a la prov. de Talara. Depende del funcionamiento del Eje Paíta-Talara para dar beneficio.

REHAB. AGUA POTABLE Y ALCAN. SULLANA K:4/87 Fecha de conclusión indica 85, sin embargo continuó en 86. Falta # de buzones en el pto. 3.00. En el mismo pto. dice Se Instalará. Si no se hizo, no debe aparecer bajo METAS REALIZADAS

AGUA POTABLE Y ALCANTARILL. AV. GRAU Falta EvS/E.

AVDAS. PANAMER. SAN RAMON, SULLANA Además, 12826 ml de sardinelas.

AVDAS. GULLMAN, SAN MARTIN, VALLEJO Además, 6815 ml de sardinelas.

AVDAS. LORETO Y SANCHEZ CERRO Además, 1289 ml de sardinelas. / Parte de la Sánchez Cerro se dañó. Se reparará luego de concluido el Programa.

CASTILLA I (PROGRESO, CORPAC, JUNIN) Además, 2134 ml de sardinelas.

CERCADO DE SULLANA Y BELLAVISTA Además, 3221 ml de sardinelas.

AV. F Y G Además, 1102 ml de sardinelas.

AVDAS. GULLMAN Y SULLANA Falta trab. x meses.

AVENIDA GRAU EN CASTILLA Falta EvS/E.

AVENIDA FERMIN MALAGA Además, 3104 ml de sardinelas./ Para varios componentes de pistas falta trab. x meses.

AV. CAYETANO HEREDIA EN CASTILLA Falta EvS/E. Financiado vía reembolso.

AVENIDA LIMA	Falta EvS/E. Financiado vía reembolso.
AVENIDA EL ZANJON EN PAITA	Además, 1380.4 ml de sardinelas./ Financiado vía reembolso.
AVENIDA FORTUNATO CHIRICHIGNO	Financiado vía reembolso.
HAB. URBANA POZO DE LOS RAMOS:400 L.	90% Ocupación. Además, constr. de caseta de bombeo.
HAB. URBANA "13 DE ABRIL": 572 LOTES	Falta EvS/E.
HAB.PRIM.202 LOTES EN CHULLIYACHI	50% ocupación. Sistema de agua no está en funcionamiento.
HAB.PRIM.214 LOTES CON SERV.BERNAL	45% de ocupación.
HAB.PRIM.166 LOT.CON SERV.PARACHIQUE	60% ocupación.
HAB.PRIM.286 LOTES SERV. SAN CRISTO	Para los componentes de lotes con servicios, los beneficiarios son los que han ocupado los lotes sin tener casas. Los demás aparecen bajo los comp. de casas y no deben ser duplicados./ 0% ocupación.
INFRAESTRUCTURA COMUNAL 13 DE ABRIL	Además, SS.HH.
REHAB. CASAS EN BAJO PIURA	K:4/87 Falta EvS/E. Separar las metas logradas para cada localidad.
CASAS LA ARENA : 30 CONS.87 REHAB.	La 1ra información se refiere a La Arena, la 2da a Bernal, la 3ra a Vice.
A.P. SAN CRISTO	Para varios componentes de Agua Potable falta # de beneficiarios y trab. x meses.
A.P. PAMBARUMBE	Además, 1 filtro lento de concreto armado.

NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
***** SECTOR TRANSPORTE *****						
CARR. PIURA-CATACAOS	1335.5				12 x 7	9.10 Km afirmados (carreteras) 70626.00 M2 afirmados (carreteras) 6.00 # obras de arte princip. de concreto
CARR. CHUSIS-PTE. INDEPENDENCIA	125.8				19 x 5	43.30 Km asfaltados (carreteras) 42488.00 M2 asfaltados (carreteras) 1.00 # alcantarillas (carreteras) 14.00 M1 alcantarillado (carreteras) 3.00 # obras de arte princip. de concreto 1595.00 M1 cunetas/bermas 361.00 M3 de concreto para obras de arte 3.00 # badenes
CARR. LOBITOS-TALARA	284.0				12 x 5	8.34 Km afirmados (carreteras) 26220.00 M2 afirmados (carreteras) 3.00 # alcantarillas (carreteras) 46.00 M1 alcantarillado (carreteras)
CARR. ACCESO A CALETAS	191.7				10 x 2	11.12 Km afirmados (carreteras) 63000.00 M2 afirmados (carreteras) 7.60 Km carretera rehabilitada (limpieza) 1.00 # alcantarillas (carreteras) 20.00 M1 alcantarillado (carreteras)
CARR. SULLANA-PAITA	3368.9	981.3			20 x 10	58.90 Km asfaltados (carreteras) 15490.00 M2 asfaltados (carreteras) 1000.00 M1 cunetas/bermas 16.00 # obras de arte princip. de concreto
CARR. SULLANA-TAMBOGRANDE	2360.2	526.8			20 x 6	45.60 Km asfaltados (carreteras) 83238.00 M2 asfaltados (carreteras) 9314.00 M1 cunetas/bermas 1.00 # badenes 8.00 # obras de arte princip. de concreto

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
CARR. TALARA-NEGRITOS	418.2	7436.8			25 x 7	10.80 Km asfaltados (carreteras) 71547.00 M2 asfaltados (carreteras) 882.38 M1 cunetas/bermas 5.00 # obras de arte princip. de concreto 316.00 M3 de concreto para obras de arte
CARR. MARCAVELICA-POECHOS	849.0	1325.9			20 x 5	11.00 Km asfaltados (carreteras) 48464.00 M2 asfaltados (carreteras) 2.00 # alcantarillas (carreteras) M1 alcantarillado (carreteras) 586.00 M1 cunetas/bermas 3.00 # obras de arte princip. de concreto
REHAB. CARR. PIURA-PAITA TRAMOS I,II		23422.8			25 x 5	46.83 Km asfaltados (carreteras) 271188.00 M2 asfaltados (carreteras) M1 cunetas/bermas 89.00 # obras de arte princip. de concreto # alcantarillas (carreteras) 979.00 M1 alcantarillado (carreteras) 2784.00 M3 de concreto para obras de arte
REHAB. CARRET. PIURA-SULLANA TRAMO 2		1603.6			20 x 2	4.50 Km asfaltados (carreteras) 27186.00 M2 asfaltados (carreteras) M1 cunetas/bermas
CARR. CATACAOS-PUENTE INDEPENDENCIA		5060.5	2000.0		30 x 4	5.40 Km asfaltados (carreteras) 32567.00 M2 asfaltados (carreteras) 1.00 # obras de arte princip. de concreto 21.00 M3 de concreto para obras de arte 3.00 M1 muros/diques/enrocados/defen.rib.
PUENTE CARRASQUILLO	205.5				60 x 5	1.00 # puentes vehiculares nuevos 230.00 M1 puentes de concreto 1265.00 M2 puentes de concreto
PUENTE CHIPILICO	393.4				13 x 5	1.00 # puentes vehiculares nuevos 80.00 M1 puentes de fierro 576.00 M2 puentes de fierro
PUENTE SANTA ANA	122.4				20 x 4	1.00 # puentes vehiculares nuevos 37.00 M1 puentes de concreto 315.00 M2 puentes de concreto
PUENTE NEGRITOS			1600.0		15 x 3	1.00 # puentes vehiculares nuevos 15.50 M1 puentes de concreto 124.00 M2 puentes de concreto M3 material de accesos puentes Km asfaltados (carreteras) 862.00 M2 asfaltados (carreteras)

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\*\* NOTAS: \*\*

CARR. PIURA-CATACAOS

El flujo vehicular sobrepasa las 2000 unidades diarias.

CARR. CHUSIS-PTE. INDEPENDENCIA

Bermas no consideradas por estar dadas en m2 (43,075).

CARR. LOBITOS-TALARA

Se hicieron 3 alcantarillas de 12 pulgadas de diám. sobre la quebrada de Pariñas.

CARR. ACCESO A CALETAS

Caletas: Yacila, Los Cangrejos, La Islilla.

REHAB. CARR. PIURA-PAITA TRAMOS I,II

Bermas dadas en m2 (115,913).

REHAB. CARRET. PIURA-SULLANA TRAMO 2

Bermas dadas en m2 (43,152).

CARR. CATACAOS-PUENTE INDEPENDENCIA

Además, 1800 ml de zanja colectora.

PUENTE NEGRITOS

La información de carretera se refiere a los accesos.

REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES  
PROGRAMA DRR  
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NOMBRE	CORPUNO			# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	EJEC. 1984	EJEC. 1985	EJEC. 1986			CANTIDAD	DESCRIPCION DE META
***** SECTOR AGRICULTURA *****							
CONSTR. IRRIGACION LLAQUEPA	150.0	97.9		250	45 x 18	6.78	Km canal nuevo construido 1.00 # de bocat./barajes/captac. constru. 0.16 M3/s caudal de canales 33.00 # de principales obras de arte 50.00 Has mejorad./rehab. regadas 50.00 Has no regadas previamente
CONSTR. IRRIGACION QUENUANI	75.0	74.8		100	30 x 9	2.77	Km canal nuevo construido 1.00 # de bocat./barajes/captac. constru. 0.60 M3/s caudal de canales 34.00 # de principales obras de arte 10.00 Has mejorad./rehab. regadas 40.00 Has no regadas previamente
CONSTR. IRRIGACION CARACANI	75.0	69.4		66	45 x 19	3.10	Km canal nuevo construido 2.00 # de bocat./barajes/captac. constru. 0.06 M3/s caudal de canales 38.00 # de principales obras de arte 15.00 Has mejorad./rehab. regadas 35.00 Has no regadas previamente
CONSTR. IRRIGACION TUPALA	175.0	82.6		53	30 x 14	5.64	Km canal nuevo construido 1.00 # de bocat./barajes/captac. constru. 0.40 M3/s caudal de canales 28.00 # de principales obras de arte 100.00 Has mejorad./rehab. regadas 300.00 Has no regadas previamente
CONSTR. IRRIGACION ROSARIO	175.0	203.3		59	30 x 18	2.89	Km canal nuevo construido 1.00 # de bocat./barajes/captac. constru. 0.30 M3/s caudal de canales 19.00 # de principales obras de arte 100.00 Has mejorad./rehab. regadas 200.00 Has no regadas previamente
CONSTR. IRRIGACION MAÑAZO	100.0	137.3	280.0	60	25 x 18	2.32	Km canal nuevo construido 1.00 # de bocat./barajes/captac. constru. 0.01 M3/s caudal de canales 13.00 # de principales obras de arte 19.00 Has mejorad./rehab. regadas 40.00 Has no regadas previamente
CONSTR. IRRIGACION ESMERALDA	50.0	61.3	170.0	35	40 x 19	2.64	Km canal nuevo construido 1.00 # de bocat./barajes/captac. constru. 0.50 M3/s caudal de canales 14.00 # de principales obras de arte 10.00 Has mejorad./rehab. regadas 40.00 Has no regadas previamente

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
CONSTR. IRRIGACION CHIMPA JALLAPISI	75.0	175.7		46	45 x 20	4.98 Km canal nuevo construido 1.00 # de bocat./barajes/captac. constru. 0.13 M3/s caudal de canales 47.00 # de principales obras de arte 5.00 Has mejorad./rehab. regadas 100.00 Has no regadas previamente
CONSTR. IRRIGACION HANAJQUIA	80.0	348.0	55780.0	81	45 x 20	6.00 Km canal nuevo construido 1.00 # de bocat./barajes/captac. constru. 0.19 M3/s caudal de canales 8.00 # de principales obras de arte 150.00 Has no regadas previamente
REPRESA DE LAGUNILLAS - OBRAS	130.7	747.6	685.9		35 x 16	1.50 Km caminos de acceso a obras
REPRESA DE LAGUNILLAS - ESTUDIO					x	1.00 # de estudios I/. valor de obras (objeto de estud)
CAPACITACION		86.8	474.0	378	12 x 14	11.00 # cursos organizados (capacitac.) 433.00 # agricultores, etc. capacitados
ESTUDIO PARA 12 PEQ. IRRIGACIONES		49.3			x	18.00 # de estudios I/. valor de obras (objeto de estud)
REPRESA DE CHIHUANE, TOTORANI-OBRAS		935.2		208	25 x 9	3.00 Km afirmados (carreteras) 4434.00 M2 afirmados (carreteras) 33.00 # obras de arte princip. de concreto 26.40 M1 alcantarillado (carreteras) 25000.00 M1 cunetas/bermas 11.00 # badenes 25.00 Km carretera rehabilitada (limpieza)
REPRESA DE CHIHUANE, TOTORANI-ESTUDIO		806.5	881.0		x	1.00 # de estudios I/. valor de obras (objeto de estud)
PARCELAS DEMOSTRATIVAS BAJO RIEGO		422.2	657.0	254	14 x 17	# parcelas y huertas demostrativas 20.00 Has parcelas y huertas demostrativas 0.70 Km canal nuevo construido 0.15 M3/s caudal de canales 2.00 # cursos organizados (capacitac.) 100.00 # agricultores, etc. capacitados # parcelas y huertas demostrativas 14.99 Has parcelas y huertas demostrativas 0.82 Km canal nuevo construido 0.15 M3/s caudal de canales 2.00 # cursos organizados (capacitac.) 100.00 # agricultores, etc. capacitados
CONSTR. 320 POZOS A TAJO ABIERTO	249.3	346.4		3500	65 x 21	320.00 # pozos a tajo abierto 289.00 # equipos nuevos para pozos 3500.00 # familias usando para agua domést.
CONSTR Y EQUIP. DE 3 POZOS TUBULARES		1447.7	430.0	50	20 x 11	3.00 # pozos tubulares nuevos 208.00 M1 de perforación de pozos 0.75 M3/s caudal que producen los pozos 3.00 # equipos nuevos para pozos 75.00 Has beneficiadas por pozos

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
INSTAL. Y MANEJO CULTIVOS FORRAJEROS	1982.7	1025.8		2500	30 x 22	2534.10	Has pastos (áreas beneficiadas)
						107267.00	Kg semillas distribuidas
						272985.00	Kg fertilizantes distribuidos
SANIDAD ANIMAL		353.7		2891	20 x 20	9.00	# campañas sanidad animal
						5284.00	Sanidad animal de vacunos (# cbzs.)
						47375.00	Sanidad animal de ovinos (# cbzs.)
						9059.00	Sanidad animal de alpacas (# cbzs.)
						13.00	# cursos organizados (capacitac.)
						1095.00	# visitas de campo (capacitación)
							# agricultores, etc. capacitados
CONSTR 2 MODULOS PRODUCC. DE ALPACAS		478.5			5 x 12	2.00	# infraestr. para animales cons/reha
						13.00	Has pastos (áreas beneficiadas)
						4263.00	Kg insumos para animales distribuid.
REFACCION DE 1 ATRACADERO DE TRUCHAS		45.8			2 x 9	1.00	# infraestr. para animales cons/reha
CONSTRUCCION DE 17 MINIRESERVORIOS		137.0		878	x	17.00	# de reservorios construidos
						15.00	M3 volumen de reservorios
						15.00	Has mejorad./rehab. regadas
CONSTRUCCION DE 16 BAÑADEROS	395.1	932.0		1109	6 x 12	16.00	# infraestr. para animales cons/reha
CONSTRUCCION DE 125 MINI-RESERVORIOS		1083.3			46 x 24	125.00	# de reservorios construidos
						13.00	M3 volumen de reservorios
						13.00	Has mejorad./rehab. regadas
CONST.Y EQUIP.POZOS CON BOMBA MANUAL	2220.6	1083.8		13252	19 x 15	150.00	# pozos a tajo abierto
						0.70	M3/s caudal que producen los pozos
						114.00	# equipos nuevos para pozos
						0.10	Has beneficiadas por pozos
						13252.00	# familias usando para agua domést.
APOYO AGRICOLA	2220.6	1083.8		10905	14 x 19		Kg semillas distribuidas
							Kg fertilizantes distribuidos
							Kg insumos distr.(ni semill.ni fert)
						443.90	Has papas (áreas beneficiadas)
						204.97	Has granos y panllevar (areas ben.)
						1966.54	Has pastos (áreas beneficiadas)
CANALES DE RIEGO	2220.6	1083.8		4520	5 x 6	154.40	Km canal nuevo construido
						0.01	M3/s caudal de canales
						581.00	Has mejorad./rehab. regadas
HUERTOS COMUNALES Y FAMILIARES	2751.0	1083.8		23267	14 x 22	382.00	# huertas comunales
						3567.00	# huertas familiares
						100.00	Has beneficiadas no demostrativas
GRANJAS COMUNALES	2751.0	1083.8		14540	14 x 22	125.00	# infraestr. para animales cons/reha
						500.00	# animales menores (distribución)
MANTENIMIENTO DE CARRETERAS	2751.0	1083.8			14 x 20	863.20	Km carretera rehabilitada (limpieza)

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NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABXMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
OPERACION DE RIEGO	1227.7			2232	13 x 18	186.90 Km canal limpiado/mejorado/rehab. 0.13 M3/s caudal de canales 1034.46 Has mejorad./rehab. regadas
EXTENSION AGRICOLA	1227.7			2052	15 x 21	1178000.00 Kg semillas distribuidas 3261.20 Has beneficiadas no demostrativas
<b>** NOTAS: **</b>						
REPRESE DE LAGUNILLAS - OBRAS						EvS/E: además, constr. de un dique provisional, compra de 900 bolsas de cemento y otros trabajos más para la constr. de la represa.
CAPACITACION						K:2/25/87 Se establecieron parcelas demostrativas bajo este componente? Si sí, entonces informar # y has establecidas.
ESTUDIO PARA 12 PEQ. IRRIGACIONES						K:2/25/87 Necesario indicar cuánto costaría la constr. de las irrigac. objeto de los estudios (suma)./EvS/E: 6 estudios complementarios a los 12.
REPRESA DE CHIHUANE, TOTORANI-OBRAS						Tramo llave-Totorani, en uso. Tramo Totorani-Presa Chihuane no, y no se usará, se usa una vía alternativa.
PARCELAS DEMOSTRATIVAS BAJO RIEGO						EvS/E no indica problemas que existen y cómo se piensan resolver, en las parcelas de Cusini y Ancaca. Según información sólo la de Ichu funciona bien.
CONSTR. 320 POZOS A TAJO ABIERTO						En 86 cont. con bonos, no incluido en metas./ Equipos se refiere a bombas manuales, el caudal que produce cada pozo es de .70 lt por golpe.
SANIDAD ANIMAL						Además, 18 charlas para productores.
CONSTR 2 MODULOS PRODUCC. DE ALPACAS						Un módulo se destruyó por inundaciones de principios del 86.
CONSTRUCCION DE 17 MINIRESERVORIOS						EvS/E dice -Se Realizará 17 Minires.- ¿Se hicieron o no?/ Cantidad de M3 y has regadas es para cada reservorio.
CONSTRUCCION DE 125 MINI-RESERVORIOS						110 comunidades beneficiadas. Cantidades de m3 y has es para cada minireservorio.
CONST.Y EQUIP.POZOS CON BOMBA MANUAL						M3 de caudal de cada pozo.
HUERTOS COMUNALES Y FAMILIARES						K:2/26/87 ¿Qué se hizo? ¿se instaló cultivos? ¿de qué? ¿se distribuyó semillas?, etc. Las has instaladas deben clasificarse en has de papa, granos y panllevar, y pastos.
GRANJAS COMUNALES						Granjas de pollos. El clima para la crianza de pollos no es adecuada.
MANTENIMIENTO DE CARRETERAS						La presencia de lluvias ha deteriorado los tramos mejorados.
EXTENSION AGRICOLA						K:2/26/87 Según nuestra información, la capacitación de 1393 usuarios nunca se llevó a cabo. La has instaladas deben clasificarse en has de papas, granos y panllevar, y/o pastos.
<b>* * * * * SECTOR VIVIENDA * * * * *</b>						
REFACCION DE 82 AULAS	395.1	932.0			5 x 12	82.00 # aulas rehabilitadas M2 CC.EE. rehabilitados # CC.EE. beneficiados # equipos para edific. comunales
CONSTRUCCION 15 COMPLEJOS COMUNALES	196.1	932.0		8640	7 x 20	15.00 # edificaciones comunales nuevas 44639.00 M2 edificaciones comunales nuevas
INFRAESTRUCTURA COMUNAL	767.8	1083.8		1791	10 x 6	13.50 # edificaciones comunales nuevas M2 edificaciones comunales nuevas
EQUIPO COMEDORES COMUNALES	767.8	1083.8		1431	10 x 5	15.00 # edificaciones comunales nuevas M2 edificaciones comunales nuevas 15.00 # equipos para edific. comunales
EQUIPO ARTESANIA	767.8	1083.8		1371	8 x 6	15.00 # edificaciones comunales nuevas M2 edificaciones comunales nuevas # equipos para edific. comunales

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REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES

PROGRAMA DRR

07/07/87

CORDETACNA

NOMBRE	EJEC.			# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	1984	1985	1986			CANTIDAD	DESCRIPCION DE META
***** SECTOR AGRICULTURA *****							
CAN. LATERALES TARATA: CHACAVIRA	145.5			40	25 x 5		1.40 Km canal nuevo construido 0.60 M3/s caudal de canales 1.20 Km caminos de acceso a obras 90.00 Has mejorad./rehab. regadas
CAN. LATERALES TARATA: CHALIHUAYA	207.4			120	30 x 10		2.60 Km canal nuevo construido 0.25 M3/s caudal de canales 240.00 Has mejorad./rehab. regadas
CAN. LATERALES TARATA: SITAJARA	154.1			120	x		1.00 Km canal revestido/reconstruido 0.25 M3/s caudal de canales 180.00 Has mejorad./rehab. regadas
CAN. TARATA-CHOJA, RESERV. CORAHUASINI	18.8	1447.4		90	20 x 8		1.65 Km canal nuevo construido 0.32 M3/s caudal de canales 1.00 # de reservorios construidos 3600.00 M3 volumen de reservorios 14.00 # de principales obras de arte 300.00 Has mejorad./rehab. regadas
CANAL CANDARAVE (ESTUDIOS)	148.8		23.9		35 x 7		1.00 # de estudios I/. valor de obras (objeto de estud) 2.02 Km canal nuevo construido 1.50 Km caminos de acceso a obras
DISEÑO Y CONST. RESERV. PUTINOSO	9.5	633.8	1650.0		x		
DISEÑO CONSTR.RESERVORIOS CHIVATERIA		124.6	604.0	200	30 x 6		1.00 # de reserv. rehabil./mejorado 16000.00 M3 volumen de reservorios # de principales obras de arte 0.15 Km canal nuevo construido M3/s caudal de canales 375.00 Has mejorad./rehab. regadas
DISEÑO CONSTR.RESER. CHUÑAVE-CAIRANI		439.0	861.0	153	1 x 6		1.00 # de reservorios construidos 27000.00 M3 volumen de reservorios 4.00 # de principales obras de arte 1.65 Km caminos de acceso a obras 1500.00 Has mejorad./rehab. regadas
CANAL LATERAL LOCUMBA-ITE: ALFARILLO	109.6			70	22 x 9		2.05 Km canal revestido/reconstruido 0.80 M3/s caudal de canales 400.00 Has mejorad./rehab. regadas
CANAL LATERAL LOCUMBA-ITE: I-H	90.0			80	21 x 3		1.07 Km canal revestido/reconstruido 0.20 M3/s caudal de canales 4.00 # de principales obras de arte 250.00 Has mejorad./rehab. regadas
CANAL CHAUCALANA	99.0		548.8	50	28 x 12		3.45 Km canal nuevo construido 0.50 M3/s caudal de canales 1.00 # de bocar./barajes/captac. constru. 0.30 M3/s caudal capacidad de bocatomas

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	MEIAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESFS	CANTIDAD DESCRIPCION DE META
						30.00 # de principales obras de arte 130.00 Has mejorad./rehab. regadas
CANAL SOLABAYA-BANEGAS			527.1	15	32 x 3	0.82 Km canal nuevo construido 0.10 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 0.10 M3/s caudal capacidad de bocatomas 20.00 Has mejorad./rehab. regadas
CANAL LATERAL SAMA: CUYLONA	148.9			37	32 x 5	2.40 Km canal nuevo construido 0.20 M3/s caudal de canales # de principales obras de arte 92.00 Has no regadas previamente
CANAL LATERAL SAMA: CATAMBU EL MEDIO	136.6			45	30 x 4	2.20 Km canal nuevo construido 0.80 M3/s caudal de canales 14.00 # de principales obras de arte 180.00 Has no regadas previamente
CANAL LATERAL SAMA: LA BANDA	111.7			26	35 x 5	1.80 Km canal nuevo construido 0.20 M3/s caudal de canales 9.00 # de principales obras de arte 52.00 Has mejorad./rehab. regadas
CANAL PRINCIPAL EL ALTO (SAMA)	104.4	318.1	470.5	500	28 x 11	1.42 Km canal limpiado/mejorado/rehab. 2.00 M3/s caudal de canales 3.00 # de principales obras de arte 1200.00 Has mejorad./rehab. regadas 1367.00 Ml cauce de río limpiado/encauzado Ml muros (contención, etc.) 11.00 # de espigones, gaviones 1320.00 Ml de riberas proteg.por espig.,gavi
CANAL EL HUAYCO (SAMA)			681.5	30	23 x 8	3.34 Km canal nuevo construido M3/s caudal de canales 9.00 # de principales obras de arte 280.00 Has mejorad./rehab. regadas
SIST. CONTROL MEDICION TACNA PALCA	48.9				15 x 8	64.00 # de principales obras de arte 2.00 # de bocat./barajes/captac. constru. M3/s caudal capacidad de bocatomas Has mejorad./rehab. regadas
SIST. CONTROL MEDICION SAMA TARATA	64.7				15 x 8	196.00 # de principales obras de arte 1.00 # de bocat./barajes/captac. constru. M3/s caudal capacidad de bocatomas Has mejorad./rehab. regadas
SIST. CONTROL MEDICION LOCUMBA CAND.	41.2				15 x 8	129.00 # de principales obras de arte 6.00 # de bocat./barajes/captac. constru. M3/s caudal capacidad de bocatomas Has mejorad./rehab. regadas
CONS.CAN.CAPLINA: CHALLATA CALIENTES	218.8			18	36 x 8	4.90 Km canal nuevo construido 1.20 M3/s caudal de canales 2.00 # de principales obras de arte 150.00 Has mejorad./rehab. regadas

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	1984	1985	1986			CANTIDAD	DESCRIPCION DE META
DEFENSA OBRAS CAPTACION, MATERIALES	50.5			150	3 x 12	2200.00	M1 cauce de río limpiado/encauzado 2.60 Km carretera rehabilitada (limpieza) 5.00 Has mejorad./rehab. regadas
PONTONES ILABAYA, CANAL EULALA	23.9	958.2		15	45 x 7	2.00	# puentes vehiculares nuevos 16.40 M1 puentes de concreto 65.60 M2 puentes de concreto 1.08 Km canal limpiado/mejorado/rehab. 0.08 M3/s caudal de canales 15.00 # de principales obras de arte 10.00 Has mejorad./rehab. regadas
BOCATOMA CALIENTES		65.3		150	22 x 1	84.00	M1 cauce de río limpiado/encauzado 1.00 # de bocat./baraj./capt. reha/mejor. M3/s caudal capacidad de bocatomas 120.00 Has mejorad./rehab. regadas
BOCATOMA CHUSCHUCO		85.5		150	10 x 2	1.00	# de muros/ diques/enrocados, etc. 27.00 M1 muros/diques/enrocados/defen.rib. 120.00 M1 cauce de río limpiado/encauzado 1.00 # de bocat./baraj./capt. reha/mejor. 1.00 # estructuras de riego protegidas 120.00 Has mejorad./rehab. regadas
PROTECCION SIFON CAPLINA EL PELIGRO		21.3	414.1	130	30 x 4	300.00	M1 muros/diques/enrocados/defen.rib. 1.00 # estructuras de riego protegidas 1200.00 Has de cultivos protegidos por defen
DEFENSA CALANA		37.7	234.0		23 x 4	240.00	M1 muros/diques/enrocados/defen.rib. 807.00 M3 roca utilizada 5.00 # de espigones, gaviones M1 de riberas proteg.por espig.,gavi # de pobladores protegidos Has de cultivos protegidos por defen
SIFON UCHUSUMA SOBRYA		39.0		150	25 x 1	130.00	M1 muros/diques/enrocados/defen.rib. 1.00 # estructuras de riego protegidas 1400.00 Has de cultivos protegidos por defen
CANALES BARROSO (2) Y PICOTANE (1)		80.6		24000	x	13.00	Km canal limpiado/mejorado/rehab. 0.35 Km canal revestido/reconstruido 0.75 M3/s caudal de canales 16.00 # de principales obras de arte 410.50 M1 muros (contención, etc.) 10.00 Km caminos de acceso a obras Has mejorad./rehab. regadas 24000.00 # familias usando para agua domést.
MEJOR. CANALES UCHUSUMA Y PATAPUJO		93.8		1120	108 x 1	69.00	Km canal limpiado/mejorado/rehab. 1.00 Km canal revestido/reconstruido 0.75 M3/s caudal de canales 50.00 M1 muros (contención, etc.) 2.00 # de principales obras de arte 105.00 Km carretera rehabilitada (limpieza) Has mejorad./rehab. regadas

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABXMESES	CANTIDAD	DESCRIPCION DE META
CANAL LA BANDA (TACNA)		31.8	706.9	21	30 x 2		1.10 Km canal nuevo construido 0.20 M3/s caudal de canales 31.00 # de principales obras de arte 1.00 # de bocat./barajes/captac. constru. 0.20 M3/s caudal capacidad de bocatomas 60.00 Has mejorad./rehab. regadas
BOCATOMA LA TRANCA (SAMA)		46.7			20 x 2		1.00 # de bocat./baraj./capt. reha/mejor. 2.00 M3/s caudal capacidad de bocatomas Km canal limpiado/mejorado/rehab. 1.20 Km caminos de acceso a obras
BOCATOMAS RIEGO TARATA (5)		169.0		70	15 x 3		5.60 # de bocat./barajes/captac. constru. M3/s caudal capacidad de bocatomas 380.00 Has mejorad./rehab. regadas
ADQUIS. Y MEJORAM. SEMILLAS 84 Y 85	73.0	203.8		220	6 x 7		12.66 Has semilleros sembrados 94175.00 Kg semillas producidas 320280.50 Kg semillas distribuidas 148.85 Has papas (áreas beneficiadas) 209.30 Has granos y panllevar (areas ben.) 4.10 Has pastos (áreas beneficiadas)
SANIDAD VEGETAL 84 Y 85	101.5	431.2		460	65 x 6		3.00 # campañas de sanidad vegetal 7967.00 Has beneficiadas por sanidad vegetal 9.00 # cursos organizados (capacitac.) # agricultores, etc. capacitados
ESTUDIO DEFINIT. DE RIEGO TECN. SAMA	53.1	130.7	80.0		x		2.00 # de estudios 44000.00 I/. valor de obras (objeto de estud)
CENTRO PILOTO RIEG.PRESION-LA YARADA	121.8	110.4		8	2 x 12		25.00 Has riego tecnificado (demostr.) 8.00 # agricultores, etc. capacitados
LOCALIZ.AGUAS SUBTERRANEAS (ESTUDIO)	21.5				x		2.00 # de estudios
CONST. ALMACENES PRODUC.INSUM. AGROP	20.0	116.9		550	10 x 4		1.00 # infraestr. almacenam. (const/reha) 300.00 M3 capacidad almacenam. (const/reha) 40000.00 Kg capacidad almacenam. (const/reha)
PRODUCC. INSECTOS BENEFICOS 85 Y 86		49.6	257.4	252	5 x 6		2.00 # campañas de sanidad vegetal 367.40 Has beneficiadas por sanidad vegetal 1.00 # infraestr. no de almacen (cons/re)
FOREST. Y REFOREST. TACNA Y TARATA		99.8	109.0		10 x 12		353100.00 # plántones producidos (forestación) 235.39 Has forestadas/reforestadas
SANIDAD Y PROMOCION ANIMAL 84 Y 85	32.0	268.9		83	15 x 5		7.00 # cursos organizados (capacitac.) 140.00 # agricultores, etc. capacitados 15738.00 Sanidad animal de vacunos (# cbzs.) 11204.00 Sanidad animal de alpacas (# cbzs.) 311.00 Sanidad animal de ovinos (# cbzs.) 10.00 # animales mayores (distribución) 3.00 # infraestr. para animales cons/reha

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
CREDITO SUPERVISADO	154.4			212	2 x 10	212.00 # familias benefic. con créditos 140.00 I/.x1000 total de créditos otorgados 196300.00 Kg insumos para animales distribuid.
AMPL. PLANTA DE ALIMEN. BALANCEADOS	72.0	19.7		550	5 x 14	1.00 # infraestr. para animales cons/reha
PROMOCION DE SILOS Y FORRAJES	45.9	150.2		95	6 x 12	727.00 Has granos y panllevar (areas ben.) 46.00 # infraestr. almacenam. (const/reha) 2800.00 M3 capacidad almacenam. (const/reha) 116200.00 Kg capacidad almacenam. (const/reha) 23.00 # infraestr. para animales cons/reha 1.00 # cursos organizados (capacitac.) 95.00 # agricultores, etc. capacitados
CONSR. ABREVADERO-RESERVORIO (1)	21.5			6	15 x 2	1.00 # infraestr. para animales cons/reha 93.00 M3 volumen de reservorios 60.00 Has mejorad./rehab. regadas
PERF. EQUIP. Y ELECTRIF. DE POZOS	147.7	270.2			10 x 16	3.00 # pozos tubulares rehabilitados 248.00 M1 de perforación de pozos 2.00 # equipos nuevos para pozos 1.00 # de estudios
INSTALACION CUATRO EQUIPOS DE BOMBEO	48.6			65	6 x 6	2.00 # pozos tubulares rehabilitados 168.00 M1 de perforación de pozos 2.00 # equipos nuevos para pozos 0.19 M3/s caudal que producen los pozos 135.00 Has beneficiadas por pozos
MANTENIMIENTO DE POZOS	179.1			195	15 x 7	12.00 # pozos tubulares rehabilitados 0.19 M3/s caudal que producen los pozos 1.00 # equipos rehabilitados para pozos 370.00 Has beneficiadas por pozos
REHAB. Y LIMPIEZA DE POZOS LA YARADA	125.6	395.0	877.0	325	1 x 12	36.00 # pozos tubulares rehabilitados 0.03 M3/s caudal que producen los pozos 12.00 # equipos nuevos para pozos 7.00 # equipos rehabilitados para pozos 2199.00 Has beneficiadas por pozos # familias benefic. con créditos 1179.68 I/.x1000 total de créditos otorgados

\*\* NOTAS: \*\*

CAN. LATERALES TARATA: CHALIHUAYA M-r Tarata ha previsto partida de 800 en 87 para constr. de 1 Km.  
CAN. TARATA-CHOJA, RESERV. CORAHUASINI Obra se usa parcialmente.  
CANAL CANDARAVE (ESTUDIOS) No tiene beneficios, no se concluyó la obra. En 86 se elaboró el exped. técn. para la concl. de la obra que deberá realizar la M-r Tarata. Benef. serían 260 familias, 1100 has y 1.2 m3/s de caudal.  
DISEÑO Y CONST. RESERV. PUTINOSO K:5/87 No hemos recibido EvS/E.  
DISEÑO CONSTR. RESERVORIOS CHIVATERIA El reservorio tiene filtraciones. Se usa hasta el nivel donde no hay filtr. CORDE dice no tener presupuesto para arreglarlo.

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DISEÑO CONSTR.RESER. CHUÑAVE-CAIRANI K:5/87 Número de trabajadores x meses parece muy bajo.

SIST. CONTROL MEDICION TACNA PALCA 2 medidores Parshal, 62 compuertas. Levantamiento de inventario de fuentes de agua, actualiz.de padrones, del diagnóstico del distr. de riego. 1 plan de riego, 3 informes de control de dist r. de agua

SIST. CONTROL MEDICION SAMA TARATA K:5/87 Para estos 3 compon. falta # familias y has beneficiadas y caudal./20 medidores Parshal, 47 partidores, 54 compuertas. Trabajo similar al descrito en Sist. Control Medición Sama Palca

SIST. CONTROL MEDICION LOCUMBA CAND. K:5/87 15 X 8 (empleos) para los 3 compon. o c/u ? /45 medidores Parshal, 25 partidores, 59 co mpuertas. Trabajo similar al descrito en Sist. Control Medición Sama Palca.

DEFENSA OBRAS CAPTACION, MATERIALES Se apoyó a comunidades con materiales y alimentos. Restitución de carreteras, recuperación de 5 has de cultivos, 3646 bolsas de cemento para obras de interés comunal y de protección. 3930 Kg de alimen

BOCATOMA CALIENTES Informes dicen que financiamos exp.téc. para Canal Calientes (8). Se hizo el canal después?

BOCATOMA CHUSCHUCO También, para uso doméstico.

PROTECCION SIFON CAPLINA EL PELIGRO La defensa del canal permite mantener el servicio de 1200 has.

CANALES BARROSO (2) Y PICOTANE (1) Muros de contención para evitar huaycos. Junto con el canal Uchusuma, única fuente de agua pota ble del Distr. de Tacna.

MEJOR. CANALES UCHUSUMA Y PATAPUJO Familias beneficiadas por uso de agua domést. son las mismas que para el canal Barroso.

BOCATOMA LA TRANCA (SAMA) Mismos beneficiarios y beneficios que para Canal Principal El Alto.

BOCATOMAS RIEGO TARATA (5) K:5/87 Falta el caudal que dejan pasar las bocatomas.

ADQUIS. Y MEJORAM. SEMILLAS 84 Y 85 K:5/87 Hay que revisar cantidades, pues no coinciden en las diferentes tablas de la EvS/E./Se a dquirió 328266 Kg de semillas.

ESTUDIO DEFINIT. DE RIEGO TECN. SAMA Estudio de prefact. comenzó en 83, se entregó en julio 85. En febrero 87 CEPID (U. Agraria) ent regó parte del est.definit. En mayo 87 la CORDE espera entregarán el resto. Buscan financ. con BID y CEE

CENTRO PILOTO RIEG.PRESION-LA YARADA Además, compra de equipo de riego por goteo y maquinaria para experimentar en 1 ha. Instal. y o per. del sistema de riego tecn. en el Centro Piloto La Yarada.

LOCALIZ.AGUAS SUBTERRANEAS (ESTUDIO) En 83, Estudio Básico de Sondajes Eléctricos Verticales para la prospección de aguas subterráne as en el valle de Sama. En el 84, lo mismo en el valle de Ite. Se usó para perf. 3 pozos en Sam a (30 lps)

CONST. ALMACENES PRODUC.INSUM. AGROP Se terminó un almacén en Cairini. Uno en Tarata debe ser concluido en 87 por M-r de Tarata.

PRODUCC. INSECTOS BENEFICOS 85 Y 86 Además, construcción de un laboratorio entomológico.

SANIDAD Y PROMOCION ANIMAL 84 Y 85 Construcción de 3 bañaderos.

AMPL. PLANTA DE ALIMEN. BALANCEADOS Adq. de equipo para ampliar la capacidad de la planta, construcción de depósito de concentrado s, estanque de depósito de maleza, 2 SS.HH. 2 ambientes adm., instalación de agua potable.

PROMOCION DE SILOS Y FORRAJES Asesoramiento en siembra de maíz opaco, constr. de 94 hatos ganaderos.

CONSR. ABREVADERO-RESERVORIO (1) Abrevadero para 120 vacunos.

PERF. EQUIP. Y ELECTRIF. DE POZOS Sin beneficios en Sama porque no se instalaron los equipos./ Las metas corresponden a Sama./ Ad emás, construcción de 3 casetas en Sama, 2 en El Ayro. Se instalaron 2 equipos en El Ayro de ot ro compon.

INSTALACION CUATRO EQUIPOS DE BOMBEO Las metas corresponden a El Ayro. Los equipos comprados bajo este componente fueron instalados bajo el componente Perf. Equip. y Electríf. de Pozos.

MANTENIMIENTO DE POZOS Pozos en El Ayro, Magollo, Sama y Locumba. Rehab. de pozos se refiere a mantenimiento de estos y sus equipos./ Además, tendido de 311 ml de tubería.

REHAB. Y LIMPIEZA DE POZOS LA YARADA Caudal dado es el promedio de c/u. Adquisición de 7 motores, 6 bombas, 3 equipos de bombeo, 2 e lectrobombas, 2 transformadores.

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
* * * * * SECTOR VIVIENDA * * * * *						
AGUA POTABLE ANCOMARCA	20.0	59.9		25	5 x 2	1.00 # de reservorios construidos 10.00 M3 volumen de reservorios 2000.00 Ml línea principal (agua potable) 1.00 # conexión domicilio/piletas(agua pot)
AGUA POTABLE INCLAN	1.5	842.1	143.0	45	4 x 1	1.00 # de bocat./barajes/captac. constru. 0.05 M3/s caudal capacidad de bocatomas 4.00 # de principales obras de arte 2471.00 Ml línea principal (agua potable)

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
						# conexión domicil/piletas(agua pot)
AGUA POTABLE BUENA VISTA	417.6	486.0	46	9 x 1	875.00 M1 línea principal (agua potable) 2.00 # tanques (agua potable) 5.00 M3 Tanques apoyados (agua potable) 14.00 M3 tanques elevados (agua potable) 1.00 # de bocat./barajes/captac. constru. 46.00 # conexión domicil/piletas(agua pot) 2.00 # equipos reh/nuev (agua potable) 3.00 # de principales obras de arte	
** NOTAS: **						
AGUA POTABLE ANCOMARCA	Caudal de tubería es de .5 lps.					
AGUA POTABLE BUENA VISTA	Caudal de captación es de 1.8 lps.					
* * * * * SECTOR TRANSPORTE * * * * *						
REHABILITACION ACCESO PUENTE VIEJO	56.5			12 x 2	100.00 M1 cauce de río limpiado/encauzado M1 muros (contención, etc.) 1.00 # puentes y otra infraest. protegida 1.00 # puentes vehiculares rehabil.	
REHABILITACION CARR. LOCUMBA-ILABAYA	476.3			18 x 2	# puentes vehiculares rehabil. 0.32 Km carretera rehabilitada (limpieza) M3 material de accesos puentes # puentes y otra infraest. protegida M1 muros/diques/enrocados/defen.rib. M1 muros (contención, etc.) Km canal nuevo construido 0.15 M3/s caudal de canales Has mejorad./rehab. regadas	

\* \* \* \* \* MULTISECTORIAL \* \* \* \* \*

REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES  
PROGRAMA DRR  
07/07/87

NOMBRE	CORTUMBES			# FAM BENEF	EMPLEO GEN TRABXMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
	EJEC. 1984	EJEC. 1985	EJEC. 1986			
***** SECTOR AGRICULTURA *****						
R.TUMBES.OBRA DE ARTE MANEJO CUENCAS	1116.0			2000	30 x 6	11.57 Km canal nuevo construido 0.37 Km canal revestido/reconstruido 3.87 Km canal limpiado/mejorado/rehab. 4.00 M3/s caudal de canales 40.00 # de principales obras de arte 1.00 # de muros/ diques/enrocados, etc. 31.60 Ml muros/diques/enrocados/defen.rib. 2.00 # estructuras de riego protegidas 8192.00 ml de drenaje constr./rehab. 5.00 m3/s caudal de drenaje 600.00 Has de cultivos protegidos por defen 1200.00 Has mejorad./rehab. regadas
DRENAJE MARGEN IZQ. RIO TUMBES	144.0			180	10 x 4	0.06 Km caminos de acceso a obras 0.02 Km canal revestido/reconstruido 3.50 M3/s caudal de canales 1.00 # alcantarillas (carreteras) 15.00 Ml alcantarillado (carreteras) 35.00 ml de drenaje constr./rehab. 5.00 m3/s caudal de drenaje 3.00 # de muros/ diques/enrocados, etc. 29.00 Ml muros/diques/enrocados/defen.rib. 1.00 # puentes y otra infraest. protegida 1000.00 Has de cultivos protegidos por defen 1.00 # estructuras de riego protegidas
ENCAUZ R.TUMBES ESTUDIOS	329.0	193.6			x	1.00 # de estudios 12252.30 I/. valor de obras (objeto de estud)
ENCAUZ R.TUMBES PROT. CAUCE EL PIOJO	831.3			850	28 x 6	2.00 # de muros/ diques/enrocados, etc. 434.00 Ml muros/diques/enrocados/defen.rib. 2.00 # estructuras de riego protegidas 1200.00 Has de cultivos protegidos por defen 58.00 # de pobladores protegidos 2.00 # puentes y otra infraest. protegida 200.00 Has mejorad./rehab. regadas 218.50 Ml cauce de río limpiado/encauzado 4511.30 M3 roca utilizada
ENCAUZ R.TUMBES DEFENSA DIQUE	3053.2	1068.2		2580	30 x 5	1.00 # de muros/ diques/enrocados, etc. 421.60 Ml muros/diques/enrocados/defen.rib. 5551.00 M3 roca utilizada 380.00 M3 concreto utilizado 2.00 # estructuras de riego protegidas 1238.40 Has de cultivos protegidos por defen 32169.00 # de pobladores protegidos
ENCAUZ R.TUMBES PROT. LA VARIANTE	219.8	344.9			15 x 3	2.00 # de muros/ diques/enrocados, etc. 136.00 Ml muros/diques/enrocados/defen.rib. 1.00 # estructuras de riego protegidas 22.00 Ml muros (contensión, etc.) 1502.00 M3 roca utilizada

(Sigue)

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
						35.00 M3 concreto utilizado
REH. CANAL INTERNACIONAL	400.0			575	20 x 6	8.23 Km canal revestido/reconstruido 16.52 Km canal limpiado/mejorado/rehab. 3.50 M3/s caudal de canales 1.00 # de bocat./baraj./capt. reha/mejor. 4.00 M3/s caudal capacidad de bocatomas 18.00 Km caminos de acceso a obras 2.00 # badenes 2.00 # de principales obras de arte 8.00 # estructuras de riego protegidas 1.00 # de muros/ diques/enrocados, etc. 60.00 M1 muros/diques/enrocados/defen.rib. 750.00 Has mejorad./rehab. regadas
REH. POZOS TUBULARES Y ANILLADOS	154.0			280	15 x 5	9.00 # pozos a tajo abierto 4.00 # pozos tubulares rehabilitados 85.20 # pozos tubulares nuevos 0.05 M3/s caudal que producen los pozos 4.95 Km canal limpiado/mejorado/rehab. 1.15 M3/s caudal de canales 420.00 Has mejorad./rehab. regadas
REHAB. TERMINAL PESQUERO ZORRITOS	136.2	16.4	260.0		8 x 3	1.00 # de muros/ diques/enrocados, etc. 60.00 M1 de riberas proteg.por espig.,gavi # de espigones, gaviones 664.40 M3 material limpiado de cauces 2.00 # puentes y otra infraest. protegida 1.00 # de principales obras de arte 750.00 M3 roca utilizada 34.30 M3 concreto utilizado Km veredas 300.00 M2 veredas
REHAB. EQUIPO DE FRIO TERM.PESQUERO	152.7	1.3	268.0		4 x 4	1.00 # grupos electrógenos nuevos/reh.

\*\* NOTAS: \*\*

R. TUMBES. OBRA DE ARTE MANEJO CUENCAS Construcción del Acueducto Jose María.  
ENCAUZ R. TUMBES ESTUDIOS Estudio se usó para hacer obras.  
ENCAUZ R. TUMBES PROT. LA VARIANTE Beneficios son los mismos que para Prot. Cauce El Piojo (has protegidas, habitantes protegidos, has irrigadas, etc.).  
REH. CANAL INTERNACIONAL Además, construcción de 2 puentes (no se especifica si peatonales o vehiculares).  
REH. POZOS TUBULARES Y ANILLADOS M3 de caudal de pozos se refiere a cada uno./ Además, 11 pozos anillados nuevos y 10 rehabilitados.  
REHAB. TERMINAL PESQUERO ZORRITOS Línea de desagüe rota por lo que hay una laguna de aguas servidas./ Además, 40 m de muro y 45 m de cerco perimétrico rehabilitado.  
REHAB. EQUIPO DE FRIO TERM.PESQUERO No tiene beneficios porque nos se concluyó. Falta el equipo de frío.

\*\*\*\*\* SECTOR VIVIENDA \*\*\*\*\*

LIN A.T. TUMBES-AGUAS VERDES-CANCAS	95.3	197.7		15000	15 x 4	0.70 Km líneas eléctricas 33.00 KW líneas eléctricas 36.00 # postes para líneas eléct o alumbr. 4.00 # subestaciones nuevas/rehabil. 4.00 # transformadores (subestación)
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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
ALUMBRADO PUBL. TUMBES, ZARUM. C. VILLAR	36.3			8000	5 x 2	890.00 # luminarias (alumbrado público)
ALUMB. PUB. AV. TNTE. VASQUEZ-MAL. BENAVAL	135.2	74.6		500	8 x 3	22.00 # postes para líneas eléct o alumbr. 86.00 # luminarias (alumbrado público) 0.24 Km líneas eléctricas # postes para líneas eléct o alumbr.
SISTEMA ELECTRICO CORRALES	792.1	608.2		600	12 x 6	502.00 # postes para líneas eléct o alumbr. 8.00 # transformadores (subestación) 83.50 Km líneas eléctricas 10.00 KW líneas eléctricas 473.00 # luminarias (alumbrado público) 371.00 # conexiones domiciliarias
SISTEMA ELECTRICO ZORRITOS	700.8	694.9		580	10 x 11	250.00 # postes para líneas eléct o alumbr. 10.00 # transformadores (subestación) 51.72 Km líneas eléctricas 10.00 KW líneas eléctricas 267.00 # luminarias (alumbrado público) 339.00 # conexiones domiciliarias
SISTEMA ELECTRICO ZARUMILLA	446.9	145.2		600	12 x 4	158.00 # postes para líneas eléct o alumbr. 6.00 # transformadores (subestación) 53.87 Km líneas eléctricas 10.00 KW líneas eléctricas 275.00 # luminarias (alumbrado público) 417.00 # conexiones domiciliarias
RED PRIM. 9 CASER: EJE S. JACIN-R. PLA.	207.5	93.5		1200	8 x 4	33.00 # postes para líneas eléct o alumbr. 14.00 # transformadores (subestación) 6.73 Km líneas eléctricas 10.00 KW líneas eléctricas
REDES ELECTRICAS LOMA DEL VIENTO		214.5		150	8 x 2	45.00 # postes para líneas eléct o alumbr. 2.00 # transformadores (subestación) 10.10 Km líneas eléctricas 10.00 KW líneas eléctricas 46.00 # luminarias (alumbrado público)
REHAB. AGUA POTABLE TUMBES		1300.0		2100	17 x 4	2.00 # equipos reh/nuev (agua potable) 10.50 Kw estación bombeo (agua potable) 280.00 Ml línea principal (agua potable) 0.40 M3/s caudal (agua potable)
REHAB. AGUA POTABLE LOMA DEL VIENTO		300.0			17 x 4	1745.00 Ml red distribución (agua potable) 100.00 # conexión domicil/piletas (agua pot)
REH. CONEX. DOM. AGUA POTABLE TUMBES	267.7			420	26 x 3	4128.00 Ml red distribución (agua potable) 0.01 M3/s caudal (agua potable) 644.00 # conexión domicil/piletas (agua pot) 2752.00 Ml red alcantarillado 0.03 M3/s caudal (desagüe) 326.00 # conexión domiciliarias (desagüe)

NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
AGUA POTABLE CERRO BLANCO Y TACURAL	277.7	467.7		235	15 x 6	3200.00 M1 línea principal (agua potable) 2160.00 M1 red distribución (agua potable) 0.01 M3/s caudal (agua potable) 24.00 # conexión domicil/piletas(agua pot)
SIST.BOMBEO A.P.PAMP.HOSP.Y S.JACIN.	131.0	103.7		1200	8 x 3	3.10 Km líneas eléctricas 10.00 KW líneas eléctricas 23.00 # postes para líneas eléct o alumbr. 2.00 # transformadores (subestación)
AGUA POTABLE LA CRUZ - ZORRITOS	180.3	449.3	2970.2		12 x 7	
AGUA POTABLE HABILITACIONES URBANAS	66.0	100.4			8 x 3	1893.00 M1 red distribución (agua potable) 0.01 M3/s caudal (agua potable)
PAVIMENTACION AV. TENIENTE VASQUEZ	1035.1	3630.0			15 x 8	1.48 Km concreto (pistas) 24495.00 M2 concreto (pistas) 2.95 Km veredas 3609.00 M2 veredas
DRENAJE PLUVIAL AV. TNTE. VASQUEZ	345.3		160.0	670	15 x 8	1619.00 ml de drenaje constr./rehab. 10000.00 M1 limpieza de desagües 0.10 m3/s caudal de drenaje 5.00 # buzones construidos/rehab. 320.00 M1 red distribución (agua potable) 0.01 M3/s caudal (agua potable) 259.00 # conexión domicil/piletas(agua pot) 360.00 M1 red alcantarillado 0.01 # conexión domiciliarias (desagüe) 120.00 M1 muros (contención, etc.)
REHAB. ESTACION BOMBEO DESAGÜE		640.0		4500	8 x 6	1.00 # estación bombeo cons/reh(agua/des) 0.23 Km líneas eléctricas 0.22 KW líneas eléctricas 3.00 # transformadores (subestación) 80.00 M1 línea principal (desagüe) 0.55 # conexión domiciliarias (desagüe)
DEFENSA SAN JUAN DE LA VIRGEN		1982.4	193.8	400	35 x 5	419.00 ml de drenaje constr./rehab. 479.26 M3 material limpiado de cauces 3.50 m3/s caudal de drenaje 4.00 # de muros/ diques/enrocados, etc. 85.00 M1 muros/diques/enrocados/defen.rib. 7566.00 M3 roca utilizada 192.00 M3 concreto utilizado 1.00 # puentes y otra infraest. protegida 2000.00 # de pobladores protegidos
DEFENSA PUERTO PIZARRO	239.2			105	18 x 4	1.00 # de muros/ diques/enrocados, etc. 750.00 M1 muros/diques/enrocados/defen.rib. 326.00 M3 concreto utilizado 1.00 # alcantarillas (carreteras) M1 alcantarillado (carreteras) 525.00 # de pobladores protegidos

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
DEFENSA DE ZORRITOS	371.6	972.8		260	15 x 7	4.00 # de muros/ diques/enrocados, etc. 2510.00 M1 muros/diques/enrocados/defen.rib. 8344.00 M3 concreto utilizado 1.60 # badenes 1.00 # puentes y otra infraest. protegida 1325.00 # de pobladores protegidos
DEFENSA LA CRUZ	244.9	927.2		150	15 x 7	5.00 # de muros/ diques/enrocados, etc. 1277.00 M1 muros/diques/enrocados/defen.rib. 3.60 M1 alcantarillado (carreteras) 97.00 M3 roca utilizada 9486.00 M3 concreto utilizado 1.00 # puentes y otra infraest. protegida 750.00 # de pobladores protegidos
MALECON BENAVIDES	203.6			65	18 x 3	1.00 # de muros/ diques/enrocados, etc. 247.50 M1 muros/diques/enrocados/defen.rib. 97.00 M3 concreto utilizado 3250.00 # de pobladores protegidos
LOTES CON SERV. SAN JUAN DE LA VIRGEN	101.4				15 x 3	50.00 # lotes habilitados 24631.00 M2 lotes habilitados 1.79 Km veredas 2149.00 M2 veredas 1.27 Km afirmado (pistas) 9159.00 M2 afirmado (pistas)
LOTES CON SERVICIOS ZARUMILLA	81.0				15 x 4	50.00 # lotes habilitados 24926.00 M2 lotes habilitados 2.17 Km veredas 2608.00 M2 veredas 0.67 Km afirmado (pistas) 4832.00 M2 afirmado (pistas)
LOTES CON SERV. PAMPAS DE HOSPITAL	83.2				15 x 3	50.00 # lotes habilitados 23607.00 M2 lotes habilitados 3.94 Km veredas 3283.00 M2 veredas 0.76 Km afirmado (pistas) 5476.00 M2 afirmado (pistas)
LOTES CON SERVICIOS SAN ISIDRO	17.3	109.8			15 x 3	54.00 # lotes habilitados 12084.00 M2 lotes habilitados 0.74 Km veredas 893.00 M2 veredas 0.45 Km afirmado (pistas) 3223.00 M2 afirmado (pistas) 578.00 M1 línea principal (agua potable) 0.01 M2/s caudal (agua potable)
LOTES CON SERVICIOS ZORRITOS	21.2	131.1			15 x 3	48.00 # lotes habilitados 12748.00 M2 lotes habilitados 1.18 Km veredas 2416.00 M2 veredas 0.09 Km afirmado (pistas) 6493.00 M2 afirmado (pistas) 616.00 M1 línea principal (agua potable) (Sigue)

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
							0.01 M3/s caudal (agua potable)
LOTES CON SERVICIOS CORRALES	28.4	137.1			15 x 3		48.00 # lotes habilitados 6862.00 M2 lotes habilitados 1.27 Km veredas 1527.00 M2 veredas 1.05 Km afirmado (pistas) 7525.00 M2 afirmado (pistas) 739.00 M1 línea principal (agua potable) 0.01 M3/s caudal (agua potable)
EDIFICACION DE LOTES HABILITADOS	20.0	1104.3			x		
CASAS SAN JUAN DE LA VIRGEN: 50			13.3	50	25 x 8		50.00 # casas nuevas 3246.00 M2 casas de quincha
CASAS PAMPAS DE HOSPITAL : 48			12.8	48	25 x 8		48.00 # casas nuevas 3116.16 M2 casas de quincha
CASAS CORRALES : 22			220.6	22	15 x 8		22.00 # casas nuevas 1428.24 M2 casas de quincha
CASAS SAN ISIDRO : 38			371.0	38	22 x 8		38.00 # casas nuevas 2466.96 M2 casas de quincha
CASAS ZORRITOS : 46			481.3	46	25 x 8		46.00 # casas nuevas 2986.32 M2 casas de quincha
CENTRO DE SALUD ZORRITOS			132.9	200	5 x 1		1.00 # postas o centros médicos nuev/reh 497.00 M2 postas o centros médicas nuev/reh
CNM DE CONTRALMIRANTE VILLAR, ZORRITO			850.2	200	15 x 2		1.00 # CC.EE. beneficiados 8.00 # aulas rehabilitadas 429.00 M2 CC.EE. rehabilitados 8.50 M2 CC.EE. nuevos 115.00 M1 muros (contención, etc.) 62.50 M3 concreto utilizado 120.00 M1 red distribución (agua potable) 0.01 M3/s caudal (agua potable) 12.00 M1 red alcantarillado 0.08 M3/s caudal (desagüe)
C.N. INMACULADA CONCEPCIÓN			689.6	600	18 x 2		1.00 # CC.EE. beneficiados 160.00 m1 de drenaje constr./rehab. 0.32 m3/s caudal de drenaje 13.60 M3 concreto utilizado
COLEGIO NACIONAL EL TRIUNFO			1597.4	800	25 x 2		1.00 # CC.EE. beneficiados 1300.00 m1 de drenaje constr./rehab. 0.32 m3/s caudal de drenaje 0.24 Km veredas 290.00 M2 veredas 48.00 M2 CC.EE. nuevos 150.00 M1 red alcantarillado 0.02 M3/s caudal (desagüe) 110.50 M3 concreto utilizado



NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
C.B. TUPAC AMARU			1206.1	800	15 x 3	1.00 # CC.EE. beneficiados 11.00 # aulas rehabilitadas 250.00 M2 CC.EE. rehabilitados 48.00 M2 CC.EE. nuevos 160.00 M1 red alcantarillado 0.03 M3/s caudal (desagüe) 130.00 M1 red distribución (agua potable) 0.01 M3/s caudal (agua potable) 1.29 Km veredas 1550.00 M2 veredas 2.00 # buzones construidos/rehab.
ESCUELA PRIMARIA No 01 - TUMBES			179.9	250	6 x 2	1.00 # CC.EE. beneficiados 7.00 # aulas rehabilitadas 464.40 M2 CC.EE. rehabilitados
** NOTAS: **						
LIN A.T. TUMBES-AGUAS VERDES-CANCAS	¿Tiene relación con los lotes? ¿Se está contabil. beneficiarios 2 veces por el mismo beneficio?					
RED PRIM. 9 CASER.EJE S.JACIN-R.PLA.	Además, 7 estaciones aéreas.					
REHAB. AGUA POTABLE LOMA DEL VIENTO	Beneficiarios contenidos en los 2100 de Rehab. Agua Potable Tumbes.					
AGUA POTABLE LA CRUZ - ZORRITOS	No tiene beneficios porque no se concluyó. CORDE se ha comprometido a usar fondos liberados de Cauce El Piojo para terminar esta obra./ Metas serían 9450 ml red ppai, 206 ml tubería, .01 m3 caudal.					
AGUA POTABLE HABILITACIONES URBANAS	Mismos beneficiarios que para Casas San Juan de la Virgen y Pampas de Hospital.					
PAVIMENTACION AV. TENIENTE VASQUEZ	Además, 630 m2 de gradas y 4490 ml de sardinelas.					
DRENAJE PLUVIAL AV. TNTE. VASQUEZ	Además, 21 tapas de buzones y 133 rejillas de inspección.					
REHAB. ESTACION BOMBEO DESAGUE	Motores tiene vibraciones fuertes que hay que resolver./ Además, 1 tablero de distribución de 3 75 KW.					
DEFENSA LA CRUZ	Además, 5 ml de badén.					
LOTES CON SERV.SAN JUAN DE LA VIRGEN	Para todos los componentes de Lotes con Servicios, los beneficiarios son los mismos que los de las casas.					
LOTES CON SERVICIOS ZARUMILLA	No tiene beneficios, no se construyeron casas por problema de localización del terreno (se inunda). No hay lotes ocupados.					
EDIFICACION DE LOTES HABILITADOS	K:4/87 Falta EvS/E. Usar LISTA DE METAS, describir lo hecho en cada localidad.					
CNM DE CONTRALMIRANTE VILLAR,ZORRITO	Los m2 de rehab. y nuevos incluye 2 SS.HH.					
C.N. INMACULADA CONCEPCION	Además, repar. de 51.9 m y reconstr. de 153.5 m de cerco perimétrico; y relleno de campo deportivo.					
COLEGIO NACIONAL EL TRIUNFO	M2 nuevos son de 2 SS.HH./ Además, reconstr. de 24 m muro perimétrico y constr. de 1 poza séptica.					
* * * * * SECTOR TRANSPORTE * * * * *						
TRAMO II CANCAS-TUMBES-AGUAS VERDES	4000.0	22595.2		35	x 8	20.00 Km asfaltados (carreteras) 146046.00 M2 asfaltados (carreteras) 35.00 # alcantarillas (carreteras) M1 alcantarillado (carreteras) 5.00 # obras de arte princip. de concreto 1196.00 M3 de concreto para obras de arte 1.00 # badenes
PROTE.MARG. IZQ.R.TUMBES, SECT.R.VIEJO	3730.8			20	x 4	12.00 # de espigones, gaviones 1480.00 M1 de riberas proteg.por espig.,gavi 1.00 # puentes y otra infraest. protegida 150.00 Has de cultivos protegidos por defen 10936.00 M3 roca utilizada

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NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
DIQUES GUIAS COMPLEMENTARIOS		309.0	398.4		25 x 2	2.00 # de espigones, gaviones 250.00 M1 de riberas proteg.por espig.,gavi 3082.00 M3 roca utilizada
PROTEC.MARGEN IZQ.R.TU ESPIG.13/14			806.3		25 x 2	2.00 # de espigones, gaviones 350.00 M1 de riberas proteg.por espig.,gavi 5458.00 M3 roca utilizada

\*\* NOTAS: \*\*

PROTE.MARG. IZQ.R.TUMBES, SECT.R.VIEJO 498 ml de espigones./ 345 familias beneficiadas.  
 DIQUES GUIAS COMPLEMENTARIOS 175 ml de espigones./ Mismos beneficiarios que para Protec. M. Izq. R. Tumbes, Sector R. Viejo.  
 PROTEC.MARGEN IZQ.R.TU ESPIG.13/14 216 ml de espigones./ Mismos beneficiarios que para Protec. M. Izq. R. Tumbes, Sector R. Viejo.

\*\*\*\*\* MULTISECTORIAL \*\*\*\*\*

REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES  
PROGRAMA IRR  
07/07/87

NOMBRE	CORPIURA			# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	EJEC. 1984	EJEC. 1985	EJEC. 1986			CANTIDAD	DESCRIPCION DE META
***** SECTOR AGRICULTURA *****							
VALLE DEL CHIRA	15257.0			2055	5263 x 6		7.20 Km canal revestido/reconstruido 28.41 Km canal limpiado/mejorado/rehab. 20.00 M3/s caudal de canales 14.00 # de principales obras de arte 20.60 Km caminos de acceso a obras 20978.00 Has mejorad./rehab. regadas 10700.00 Ml murcs/diques/enrocados/3efen.rib. Ml cauce de río limpiado/encauzado 28000.00 M3 material limpiado de cauces
VALLE SAN LORENZO	16671.0			2170	4106 x 6		55.50 Km canal limpiado/mejorado/rehab. 33.00 M3/s caudal de canales 68.00 # de principales obras de arte 54.40 Km caminos de acceso a obras 33488.00 Has mejorad./rehab. regadas
VALLE ALTO PIURA	13415.0			876	3291 x 6		53.60 Km canal limpiado/mejorado/rehab. 13.50 M3/s caudal de canales 16.00 # de principales obras de arte 10600.00 Ml cauce de río limpiado/encauzado 15.00 # pozos tubulares rehabilitados 1.00 M3/s caudal que producen los pozos 13500.00 Has mejorad./rehab. regadas
VALLE MEDIO PIURA	191.0			714	1099 x 6		8.00 # de bocat./baraj./capt. reha/mejor. 3.00 M3/s caudal capacidad de bocatomas 13.00 # de principales obras de arte 2830.00 Has mejorad./rehab. regadas
VALLE BAJO PIURA	25910.0			920	x 6		3.00 # de bocat./baraj./capt. reha/mejor. 34.00 M3/s caudal capacidad de bocatomas 18.00 # de principales obras de arte 34000.00 Km caminos de acceso a obras 155.40 Ml cauce de río limpiado/encauzado 3500.00 M3 roca utilizada 95.00 M3 concreto utilizado
COMEDORES INFANTILES	197.2				35 x 6		150.00 # cursos organizados (capacitac.) 4500.00 # agricultores, etc. capacitados 250.00 # parcelas y huertas demostrativas 0.25 Has parcelas y huertas demostrativas

\*\* NOTAS: \*\*  
VALLE DEL CHIRA

17 cooperativas beneficiadas. Los canales rehab. son Miguel Chaca, El Arenal, Miraflores, Amotap e, Pechochos y Cieneguillo.

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
EJE PAITA-TALARA: CRUCE RIO CHIRA	1510.5			25192	30 x 2	242.00	M1 línea principal (agua potable) 0.40 M3/s caudal (agua potable)
REH. EJE PAITA-TALARA:RAMAL NEGRITOS		5915.5		2201	15 x 5	5586.00	M1 línea principal (agua potable) 0.02 M3/s caudal (agua potable)
REHAB. AGUA POTABLE Y ALCAN. SULLANA	3574.5	4433.7	4000.0		25 x 10	3487.00	M1 línea principal (agua potable) M1 red distribución (agua potable) M3/s caudal (agua potable) 365.00 # conexión domicil/piletas(agua pot) 4.00 # equipos reh/nuev (agua potable) 19620.00 M1 línea principal (desagüe) M1 red alcantarillado M3/s caudal (desagüe) 449.00 # conexión domiciliarias (desagüe) 74.00 # buzones construidos/rehab.
AGUA POTABLE Y ALCANTARILL. AV. GRAU AVDAS. PANAMER. SAN RAMON, SULLANA	512.8	10717.2			x 46 x 5	10.20	Km asfaltado (pistas) 60721.00 M2 asfaltado (pistas) 0.92 Km veredas 1658.00 M2 veredas 88.00 # conexión domicil/piletas(agua pot) 20.00 # buzones construidos/rehab.
AVDAS. GULLMAN, SAN MARTIN, VALLEJO		8553.9			37 x 5	6.35	Km asfaltado (pistas) 38097.00 M2 asfaltado (pistas) 3.97 Km veredas 7940.00 M2 veredas 37.00 # conexión domicil/piletas(agua pot) 8.00 # buzones construidos/rehab. 709.00 M1 línea principal (agua potable) M3/s caudal (agua potable)
AVDAS. LORETO Y SANCHEZ CERRO		8193.5			35 x 5	5.92	Km asfaltado (pistas) 35535.00 M2 asfaltado (pistas) 3.75 Km veredas 9396.00 M2 veredas 5100.00 M1 línea principal (agua potable) 0.17 M3/s caudal (agua potable) 939.00 M1 línea principal (desagüe) 0.03 M3/s caudal (desagüe) 701.00 # conexión domicil/piletas(agua pot) 44.00 # buzones construidos/rehab.
CASTILLA I (PROGRESO, CORPAC, JUNIN)		851.3			29 x 3	6.04	Km asfaltado (pistas) 36267.00 M2 asfaltado (pistas) 3.08 Km veredas 6163.00 M2 veredas 1656.00 M1 línea principal (agua potable) 0.17 M3/s caudal (agua potable) 257.00 # conexión domicil/piletas(agua pot)
CASTILLA III(IRAZOLA,MONTERO,OTRAS)		7008.3			35 x 5	5299.00	Km asfaltado (pistas) 31792.00 M2 asfaltado (pistas) 2.03 Km veredas 4058.00 M2 veredas

(Sigue)

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VALLE SAN LORENZO

Terrenos agrícolas recuperados en Quirez, Chipillico, Partidor, Malingas, San Isidro, Hualtaco, Somate, El Algarrobo, Valle de los Incas./ 15 cooperativas beneficiadas.

VALLE ALTO PIURA  
VALLE MEDIO PIURA

9 cooperativas beneficiadas./ Obras en las localidades de Yapatera, Carrasquillo, Sancor. Beneficia cooperativas agrarias San Andrés, Santa Ana, Giro Alegría, César Vallejos, Javier Herund, Froilan Alamo.

VALLE BAJO PIURA  
COMEDORES INFANTILES

Beneficia las localidades de Catacaos, Sechura, Chato./ 15 cooperativas beneficiadas. Falta # de familias beneficiadas.

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
* * * * * SECTOR VIVIENDA * * * * *						
SISTEMA ELEC. PIURA-SULLANA-CATACAOS	166.6			3950	15 x 4	4.67 Km líneas eléctricas KW líneas eléctricas 3.00 # subestaciones nuevas/rehabil. 95.00 # postes para líneas eléct o alumbr. 156.00 # luminarias (alumbrado público)
RED DISTR. ELEC. PRIM. TALARA	280.9			2450	20 x 3	1.71 Km líneas eléctricas KW líneas eléctricas 1.00 # transformadores (subestación)
RED DISTR. ELEC. PRIM. Y SEC. PAITA	252.5			1600	15 x 3	4.10 Km líneas eléctricas KW líneas eléctricas 1.00 # transformadores (subestación) 68.00 # postes para líneas eléct o alumbr. 48.00 # luminarias (alumbrado público)
RED ELE.PRIM.MANCORA-ORGANOS-NEGRITO	126.6			2500	16 x 6	1.65 Km líneas eléctricas 132.00 KW líneas eléctricas 8.00 # postes para líneas eléct o alumbr.
GEN. Y DISTR. ELECT. CHULUCANAS	141.1			1850	14 x 3	2.70 Km líneas eléctricas KW líneas eléctricas 9.00 # postes para líneas eléct o alumbr. 2.00 # subestaciones nuevas/rehabil.
SIS. ELECTRICO 13 POBLADOS	1051.6			14260	135 x 6	7.00 # infraestr. civil rehab./constru. 13.90 Km líneas eléctricas KW líneas eléctricas 106.00 # postes para líneas eléct o alumbr. 6.00 # subestaciones nuevas/rehabil. 9.00 # transformadores (subestación)
LINEA TRANSMISION PAITA-TALARA	361.9			4840	16 x 3	8.00 Km líneas eléctricas 13.20 KW líneas eléctricas 42.00 # postes para líneas eléct o alumbr. 3.00 # subestaciones nuevas/rehabil.
SISTEMA ELECT. CASA FUERZA SULLANA	806.1			5324	30 x 5	1.00 # infraestr. civil rehab./constru. 4.00 # grupos electrógenos nuevos/reh. 10000.00 KW grupos electrógenos nuevos/reh.
REH. LINEA TRANSMIS. PAITA-EL ARENAL	600.0				30 x 5	47.50 Km líneas eléctricas 60.00 KW líneas eléctricas 9.00 # postes para líneas eléct o alumbr.

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NOMBRE	EJEC.	EJFC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
						67.00	# conexión domicil/piletas(agua pot)
CERCADO DE SULLANA Y BELLAVISTA	2289.5				15 x 12	5.82	Km asfaltado (pistas)
						34931.00	M2 asfaltado (pistas)
						4.20	Km veredas
						8403.00	M2 veredas
						159.00	# conexión domicil/piletas(agua pot)
AV. F Y G	3123.5				23 x 4	3.38	Km asfaltado (pistas)
						20279.00	M2 asfaltado (pistas)
						52.50	M1 línea principal (agua potable)
						0.02	M3/s caudal (agua potable)
JIRONES BOLOGNESI Y ALFONSO UGARTE	3132.7				19 x 6	4.85	Km asfaltado (pistas)
						29156.00	M2 asfaltado (pistas)
						0.30	Km veredas
						646.00	M2 veredas
						87.00	M1 línea principal (desagüe)
						0.17	M3/s caudal (desagüe)
JIRONES ICA Y CUSCO DE CHULUCANAS	903.1				13 x 4	0.68	Km concreto (pistas)
						4060.00	M2 concreto (pistas)
						156.00	M1 línea principal (desagüe)
						0.17	M3/s caudal (desagüe)
						23.00	# conexión domiciliarias (desagüe)
AV. GRAU EN PIURA	1564.5	5870.0			46 x 7	5.79	Km asfaltado (pistas)
						30749.00	M2 asfaltado (pistas)
						0.66	Km concreto (pistas)
						3975.00	M2 concreto (pistas)
						2.30	Km veredas
						4675.00	M2 veredas
						263.00	# conexión domicil/piletas(agua pot)
						2695.00	M1 red alcantarillado
						0.20	M3/s caudal (desagüe)
AVDAS. GULLMAN Y SULLANA		2050.0			x	4.00	Km asfaltado (pistas)
						8063.00	M2 asfaltado (pistas)
						0.63	Km veredas
						955.00	M2 veredas
						84.00	M1 línea principal (desagüe)
							M3/s caudal (desagüe)
						290.00	M1 línea principal (agua potable)
							M3/s caudal (agua potable)
						20.00	# conexión domicil/piletas(agua pot)
						12.00	# conexión domiciliarias (desagüe)
						4.00	# buzones construidos/rehab.
AVENIDA GRAU EN CASTILLA		3373.0			x	2.57	Km asfaltado (pistas)
AVENIDA FERMIN MALAGA		5090.0			x	15435.00	M2 asfaltado (pistas)
						2.08	Km veredas
						4176.00	M2 veredas
						58.00	# conexión domicil/piletas(agua pot)
						62.00	# conexión domiciliarias (desagüe)
						15.00	# buzones construidos/rehab.
						650.50	M1 línea principal (desagüe)

(Sigüe)

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
							M3/s caudal (desagüe)
						177.00	M1 línea principal (agua potable)
							M3/s caudal (agua potable)
AVENIDA RAMON CASTILLA			3050.0		x		0.81 Km concreto (pistas)
						4849.00	M2 concreto (pistas)
							1.00 Km veredas
						2001.00	M2 veredas
						552.00	M1 línea principal (desagüe)
							M3/s caudal (desagüe)
						569.00	M1 línea principal (agua potable)
							M3/s caudal (agua potable)
						76.00	# conexión domicil/piletas(agua pot)
						71.00	# conexión domiciliarias (desagüe)
AV. CAYETANO HEREDIA EN CASTILLA			2500.0		x		
AVENIDA BOLOÑESI			2143.0		x		1.55 Km asfaltado (pistas)
						9292.00	M2 asfaltado (pistas)
							0.71 Km veredas
						1229.00	M2 veredas
						118.00	M1 línea principal (desagüe)
							M3/s caudal (desagüe)
						91.50	M3/s caudal (agua potable)
							M1 línea principal (agua potable)
						23.00	# conexión domicil/piletas(agua pot)
						179.00	# conexión domiciliarias (desagüe)
						3.00	# buzones construidos/rehab.
AVENIDA LIMA			1212.5		x		
AVENIDA EL ZANJON EN PAITA			1310.0		x		0.43 Km asfaltado (pistas)
						514.20	M2 asfaltado (pistas)
							Km veredas
						2341.30	M2 veredas
						17.00	# conexión domicil/piletas(agua pot)
						20.00	M1 línea principal (desagüe)
							M3/s caudal (desagüe)
							M1 línea principal (agua potable)
							M3/s caudal (agua potable)
AVENIDA FORTUNATO CHIRICHIGNO			235.7		x		2.71 Km asfaltado (pistas)
						16295.00	M2 asfaltado (pistas)
							1.65 Km veredas
						3300.00	M2 veredas
						1125.00	M1 línea principal (desagüe)
							M3/s caudal (desagüe)
						1017.00	M1 línea principal (agua potable)
							M3/s caudal (agua potable)
						107.00	# conexión domicil/piletas(agua pot)
						107.00	# conexión domiciliarias (desagüe)
						18.00	# buzones construidos/rehab.
HAB. URBANA DE VICE: 400 LOTES			230.0		10 x 12		400.00 # lotes habilitados
						90000.00	M2 lotes habilitados
							7.50 Km afirmado (pistas)
						71493.00	M2 afirmado (pistas)
						6674.00	M1 red distribución (agua potable)
						7.90	# conexión domicil/piletas(agua pot)
							(Sigue)

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
						1.00 # equipos reh/nuev (agua potable)
HAB. URBANA POZO DE LOS RAMOS:400 L.	711.0				20 x 10	356.00 # lotes habilitados 170880.00 M2 lotes habilitados 16.00 Km afirmado (pistas) 95833.00 M2 afirmado (pistas) 6709.00 M1 red distribución (agua potable) 1.00 # equipos reh/nuev (agua potable) 1.00 # tanques (agua potable) 1.00 # pozos (agua potable) 0.08 M3/s caudal que producen los pozos # familias usando para agua domést.
HAB. URBANA "13 DE ABRIL": 572 LOTES	313.0				x	
HAB.PRIM.202 LOTES EN CHULLIYACHI		408.8			15 x 8	202.00 # lotes habilitados 60600.00 M2 lotes habilitados 3.90 Km afirmado (pistas) 22310.00 M2 afirmado (pistas) 2760.00 M1 red distribución (agua potable) 6.00 # conexión domicil/piletas(agua pot) 1.00 # tanques (agua potable)
HAB.PRIM.214 LOTES CON SERV.BERNAL		529.7			12 x 3	214.00 # lotes habilitados 34240.00 M2 lotes habilitados 2.86 Km afirmado (pistas) 17168.00 M2 afirmado (pistas) 2611.00 M1 red distribución (agua potable) 6.00 # conexión domicil/piletas(agua pot)
HAB.PRIM.166 LOT.CON SERV.PARACHIQUE		512.3			12 x 8	166.00 # lotes habilitados 49800.00 M2 lotes habilitados 4.50 Km afirmado (pistas) 27052.00 M2 afirmado (pistas) 1889.00 M1 red distribución (agua potable) 3.00 # conexión domicil/piletas(agua pot) 1.00 # tanques (agua potable) 40.00 M3 Tanques apoyados (agua potable) 1.00 Km carretera rehabilitada (limpieza) 2.00 # alcantarillas (carreteras) 20.00 M1 alcantarillado (carreteras)
HAB.PRIM.286 LOTES SERV. SAN CRISTO		390.6			10 x 5	286.00 # lotes habilitados 45760.00 M2 lotes habilitados 4.70 Km afirmado (pistas) 28223.00 M2 afirmado (pistas) 916.00 M1 línea principal (agua potable) 3425.00 M1 red distribución (agua potable) 5.00 # conexión domicil/piletas(agua pot) 1.00 # equipos reh/nuev (agua potable)
REHAB. CASAS Y CALLES P. NUEVO COLAN	662.0	967.4			32 x 14	2.43 Km afirmado (pistas) 18064.00 M2 afirmado (pistas) 4.23 Km carretera rehabilitada (limpieza) 28.00 # casas rehabilitadas 122.00 # casas nuevas 3120.00 M2 casas de adobe 2880.00 M2 casas de bloques de concreto

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
INFRAESTRUCTURA COMUNAL 13 DE ABRIL	279.2	476.1			20 x 14	1.00	# CC.EE. beneficiados
						5.00	# aulas nuevas
						505.80	M2 CC.EE. nuevos
						5.00	# edificaciones comunales nuevas
						642.30	M2 edificaciones comunales nuevas
REHAB. CASAS EN BAJO PIURA			297.9		x		
CASAS C. PESCADOR: 60 CONS. 5 REHAB.				73	10 x 10	65.00	# casas nuevas
						8.00	# casas rehabilitadas
						3960.00	M2 casas de bloques de concreto
						1.00	# CC.EE. beneficiados
							M2 CC.EE. nuevos
CASAS CHULLIYACHI: 5 CONS. 6 REHAB.				5	10 x 2	5.00	# casas nuevas
						360.00	M2 casas de bloques de concreto
						1.00	# edificaciones comunales nuevas
						60.00	M2 edificaciones comunales nuevas
CASAS POZO RAMOS: 79 CONS.				79	10 x 11	79.00	# casas nuevas
						3555.00	M2 casas de adobe
CASAS BELLAVISTA : 2 CONS. 4 REHAB.				20	5 x 2	2.00	# casas nuevas
						18.00	# casas rehabilitadas
						40.00	M2 casas de adobe
CASAS LA ARENA : 30 CONS.87 REHAB.		500.0		271	10 x 13	55.00	# casas nuevas
						172.00	# casas rehabilitadas
						2475.00	M2 casas de adobe
						29.00	# casas nuevas
						1044.00	M2 casas de bloques de concreto
						15.00	# casas nuevas
						540.00	M2 casas de bloques de concreto
A.P. SAN CRISTO	19.0				x	60.00	M1 línea principal (agua potable)
							M3/s caudal (agua potable)
A.P. SERRAN	16.0				x	165.00	M1 línea principal (agua potable)
							M3/s caudal (agua potable)
A.P. RINCONADA LLICUAR	26.0			500	x	1.00	# pozos (agua potable)
						0.02	M3/s caudal que producen los pozos
						1.00	# equipos rehabilitados para pozos
						425.00	M1 línea principal (agua potable)
						500.00	# familias usando para agua domést.
A.P. SAN CLEMENTE	16.0				x	1.00	# equipos reh/nuev (agua potable)
A.P. YAPATERA-CRUZ PAMPA	24.0			593	x	1.00	# equipos reh/nuev (agua potable)
							Kw estación bombeo (agua potable)
						1.00	# pozos (agua potable)
						0.03	M3/s caudal que producen los pozos
						593.00	# familias usando para agua domést.
A.P. MALACASI	45.0				x	1.00	# pozos (agua potable)
							M3/s caudal que producen los pozos
						275.00	M1 línea principal (agua potable)
							M3/s caudal (agua potable)
							(Sigue)

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\*\* NOTAS: \*\*

CARRET. HUANCAYO-PAMPA ALTOPONGO Trabajo se deterioró por lluvias, y se rehab. en 85 de nuevo.

NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
***** MULTISECTORIAL *****						
SUPERV. IMPREV. Y LIQUIDACION DE OBRAS			450.8		x	

REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES  
 PROGRAMA DRR  
 07/07/87

NOMBRE	CORDEICA			# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	EJEC. 1984	EJEC. 1985	EJEC. 1986			CANTIDAD	DESCRIPCION DE META
***** SECTOR AGRICULTURA *****							
CHINCHA: REHAB. 7 CANALES	105.0			800	6 x 7		19.70 Km canal limpiado/mejorado/rehab. 3.00 M3/s caudal de canales 5000.00 Has mejorad./rehab. regadas
PISCO: REHAB. 11 CANALES	58.0			900	16 x 2		6.50 Km canal limpiado/mejorado/rehab. 8.00 M3/s caudal de canales 6500.00 Has mejorad./rehab. regadas
PISCO: CONST. DESAREN. CANAL EL CONDOR	205.9				5 x 3		1.00 # de principales obras de arte
ICA: REHAB. 5 CANALES	265.5			1800	4 x 6		15.50 Km canal limpiado/mejorado/rehab. 8.00 M3/s caudal de canales 20000.00 Has mejorad./rehab. regadas
ICA: CONST. BOCATOMA LA PORUMA	83.8				4 x 3		1.00 # de bocat./barajes/captac. constru. 1.50 M3/s caudal capacidad de bocatomas
PALPA: ESTUDIO INFRAESTR. DE RIEGO	35.6				x		1.00 # de estudios 800000.00 I/. valor de obras (objeto de estud)
PALPA: BOCAT. EL MOLINO	117.4			45	5 x 4		1.00 # de bocat./barajes/captac. constru. 0.50 M3/s caudal capacidad de bocatomas 2.00 # de muros/ diques/enrocados, etc. 20.60 M1 muros/diques/enrocados/defen.rib. 1.00 # estructuras de riego protegidas 45.00 Has mejorad./rehab. regadas
PALPA: BOCAT. LA COMUNIDAD	188.6			150	6 x 4		1.00 # de bocat./barajes/captac. constru. 2.00 M3/s caudal capacidad de bocatomas 2.00 # de muros/ diques/enrocados, etc. 18.00 M1 muros/diques/enrocados/defen.rib. 1.00 # estructuras de riego protegidas 5.20 Km canal nuevo construido 2.00 M3/s caudal de canales 150.00 Has mejorad./rehab. regadas
PALPA: BOCAT. JAURANGA	115.0			65	5 x 4		1.00 # de bocat./barajes/captac. constru. 1.20 M3/s caudal capacidad de bocatomas 2.00 # de muros/ diques/enrocados, etc. 16.80 M1 muros/diques/enrocados/defen.rib. 1.00 # estructuras de riego protegidas 5.20 Km canal nuevo construido 1.20 M3/s caudal de canales 65.00 Has mejorad./rehab. regadas
NAZCA: ESTUD. PREL. INFRA. DE RIEGO	19.6				x		
CHINCHA: LIMP. DEFEN. EN 2 RIOS	83.1			2600	6 x 3		4957.00 M1 cauce de río limpiado/encauzado 62604.00 M3 material limpiado de cauces 12000.00 Has de cultivos protegidos por defen

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
CHINCHA: PARTIDOR CONTA		1291.7		2200	32 x 6	2.00	# de bocas./baraj./capt. reha/mejor. 1.00 # de muros/ diques/enrocados, etc. 300.00 Ml muros/diques/enrocados/defen.rib. 30000.00 Has mejorad./rehab. regadas 15000.00 # de pobladores protegidos
PISCO:ENCAUZ. DEFEN. EN 8 SECTORES	49.8			2000	4 x 3	3.10	Ml cauce de río limpiado/encauzado 1.00 # estructuras de riego protegidas 1.00 Ml muros/diques/enrocados/defen.rib. 40.00 # de muros/ diques/enrocados, etc. 10000.00 Has de cultivos protegidos por defen
PISCO: DEFENSA VENTUROSA-FIGUEROA	58.3	748.8		1000	15 x 4	2.00	# de muros/ diques/enrocados, etc. 440.00 Ml muros/diques/enrocados/defen.rib. 7472.00 M3 roca utilizada 600.00 Has de cultivos protegidos por defen 4000.00 # de pobladores protegidos
ICA:ENCAUZ. DEFEN. EN 14 SECTORES	412.1			800	5 x 3	3400.00	Ml cauce de río limpiado/encauzado 1.00 # de muros/ diques/enrocados, etc. 3400.00 Ml muros/diques/enrocados/defen.rib. 18000.00 Has de cultivos protegidos por defen 150000.00 # de pobladores protegidos
PALPA:ENCAUZ. DEFEN. EN 4 RIOS	188.1			900	6 x 3	4154.00	Ml cauce de río limpiado/encauzado 1200.00 Has de cultivos protegidos por defen 1500.00 # de pobladores protegidos
NAZCA:ENCAUZ. DEFEN. EN RIOS	35.7			1400	4 x 6	3.74	Ml cauce de río limpiado/encauzado 5000.00 Has de cultivos protegidos por defen 5000.00 # de pobladores protegidos
NAZCA: DEFENSAS RIO AJA		1401.4		32000	22 x 4	1.00	# de muros/ diques/enrocados, etc. 700.00 Ml muros/diques/enrocados/defen.rib. 1.00 # de muros/ diques/enrocados, etc. 664.00 Ml muros/diques/enrocados/defen.rib. 4200.00 Has de cultivos protegidos por defen 190000.00 # de pobladores protegidos
REFOR. CUENCAS BAJAS CHINCHA	21.7				7 x 10	29.00	Has forestadas/reforestadas
REFOR. CUENCAS BAJAS PISCO	17.7				5 x 10	1.00	# viveros instalados 46000.00 # plantones producidos (forestación) 19.00 Has forestadas/reforestadas
REFOR. CUENCAS BAJAS ICA	28.7				6 x 10	1.00	# viveros instalados 150000.00 # plantones producidos (forestación) 32.00 Has forestadas/reforestadas
REFOR. CUENCAS BAJAS PALPA	13.8				4 x 10	17.00	Has forestadas/reforestadas
REFOR. CUENCAS BAJAS NAZCA	16.8				6 x 10	18.00	Has forestadas/reforestadas
REFOR. CUENCAS ALTAS CHINCHA		110.0	24.2		x	1.00	# viveros instalados 25500.00 # plantones producidos (forestación) 26.00 Has forestadas/reforestadas

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
REFOR. CUENCAS ALTAS PISCO		38.0	22.6		x	16.00	Has forestadas/reforestadas
REFOR. CUENCAS ALTAS ICA		123.0	37.6		x	1.00 # viveros instalados 75800.00 # plántones producidos (forestación) 17.00 Has forestadas/reforestadas	
REFOR. CUENCAS ALTAS PALPA		72.0	23.8		x	1.00 # viveros instalados 24000.00 # plántones producidos (forestación) 11.00 Has forestadas/reforestadas	
REFOR. CUENCAS ALTAS NAZCA		37.0	11.8		x	9.00 Has forestadas/reforestadas	

**\*\* NOTAS: \*\***

PISCO: REHAB. 11 CANALES 1500 pobladores dependen del agua de la irrig. Cabeza de Toro para uso doméstico.  
PISCO: CONST. DESAREN. CANAL EL CONDOR Familias y has. beneficiadas son las mismas del comp. de rehab. de 11 canales.  
ICA: CONST. BOCATOMA LA PORUMA Familias y has. beneficiadas son las mismas del comp. de rehab. de 5 canales.  
PALPA: ESTUDIO INFRAESTR. DE RIEGO Se elaboraron estudios para 8 bocatoma y defensas. Se construyeron 3 bocatoma en 85.  
PALPA: BOCAT. EL MOLINO Algunas familias dependen del agua para uso doméstico.  
PALPA: BOCAT. LA COMUNIDAD Algunas familias dependen del agua para uso doméstico.  
PALPA: BOCAT. JAURANGA Algunas familias dependen del agua para uso doméstico.  
NAZCA: ESTUD. PREL. INFRA. DE RIEGO No se ejecutó constr. de bocatoma. Se incurrió en gastos administrativos. KK: Ver informe de Rodríguez para más info.  
CHINCHA: LIMP. DEFEN. EN 2 RIOS Además, instalación de 10 mallas. / Trabajos por bonos no incluidos.  
CHINCHA: PARTIDOR CONTA Reparación de 2 barrajes, 1 dique de encauzamiento, enrocado de colchón.  
PISCO: ENCAUZ. DEFEN. EN 8 SECTORES Trabajos por bonos no incluidos. / Además, instalación de 68 mallas. Trabajos ya han desaparecido, pero cumplieron su propósito.  
PISCO: DEFENSA VENTUROSA-FIGUEROA Protección de la ciudad de Pisco.  
ICA: ENCAUZ. DEFEN. EN 14 SECTORES Trabajos por bonos no incluidos. / Protección de pobl. urbana de Ica y rural de asentamientos ribereños. Además, instalación de 15 mallas.  
PALPA: ENCAUZ. DEFEN. EN 4 RIOS Trabajos por bonos no incluidos. / Protección de centros poblados de Sta. Cruz, Palpa y otros. Además, instalación de 49 mallas.  
NAZCA: ENCAUZ. DEFEN. EN RIOS Protección de centros poblados de Nazca, Ingenio y otros ribereños. Además, instalación de 82 mallas.  
REFOR. CUENCAS BAJAS CHINCHA Para todos los componentes de Forestación: Protección de cauces. No tiene beneficiarios directos. Trabajos con bonos no incluidos.

\*\*\*\*\* MULTISECTORIAL  
LIQUIDACION DE OBRAS

\*\*\*\*\*

370.0

x

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REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES

PROGRAMA DRR

07/07/87

CORDELAMBAYEQUE

NOMBRE	CORDELAMBAYEQUE			# FAM BENEF	EMPLEO GEN TRAB:MESES	METAS LOGRADAS	
	EJEC. 1984	EJEC. 1985	EJEC. 1986			CANTIDAD	DESCRIPCION DE META
***** SECTOR AGRICULTURA *****							
SECTOR HUACA DE LA CRUZ	256.1			1200	38 x 2	1.00	# de muros/ diques/enrocados, etc. Ml muros/diques/enrocados/defen.rib.
						1.00	# estructuras de riego protegidas
						1.00	# de bocat./barajes/captac. constru.
						9.00	M3/s caudal capacidad de bocatomas
						1.00	Km caminos de acceso a obras
						2100.00	Has mejorad./rehab. regadas
						3.00	# de principales obras de arte
SECTOR MAGDALENA	25.7			360	25 x 1	0.41	Km canal nuevo construido
						7.00	M3/s caudal de canal
						1.00	# de muros/ diques/enrocados, etc.
						145.00	Ml muros/diques/enrocados/defen.rib.
						5.00	# de principales obras de arte
						1000.00	Has mejorad./rehab. regadas
SECTOR SALAS	5.5			375	8 x 1	0.18	Km canal nuevo construido
						0.90	M3/s caudal de canal
						400.00	Has mejorad./rehab. regadas
SECTOR CACHINCHE-DISTR. RIEGO MOTUPE	716.3			21000	50 x 1	30.00	# de principales obras de arte
						12.14	Km caminos de acceso a obras
						1.20	Km canal limpiado/mejorado/rehab. M3/s caudal de canal
						25000.00	Has mejorad./rehab. regadas
						700.00	Has no regadas previamente
BOCATOMA LAS ANITAS	61.6	0.3		80	8 x 4	3.00	# de muros/ diques/enrocados, etc.
						101.00	Ml muros/diques/enrocados/defen.rib.
						1.00	# estructuras de riego protegidas
						1.00	# de principales obras de arte
						1.00	# de bocat./barajes/captac. constru.
						2.00	M3/s caudal capacidad de bocatomas
						400.00	Has mejorad./rehab. regadas
						820.00	Has no regadas previamente
MEJORAM. CAPTACION CANAL PRADA	148.1	0.4		77	13 x 5	2.00	# de principales obras de arte
						2.00	# de bocat./barajes/captac. constru.
						1.00	M3/s caudal capacidad de bocatomas
						1.00	# de muros/ diques/enrocados, etc.
						40.00	Ml muros/diques/enrocados/defen.rib.
						427.00	Has mejorad./rehab. regadas
TOMA CANAL EL PUEBLO	147.6	0.4		100	19 x 4	2.00	# de bocat./barajes/captac. constru.
						2.00	M3/s caudal capacidad de bocatomas
						1.00	# de principales obras de arte
						1.00	# de muros/ diques/enrocados, etc.
						40.00	Ml muros/diques/enrocados/defen.rib.
						313.00	Has mejorad./rehab. regadas
						441.00	Has no regadas previamente

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
TOMA CANAL ZAPATERO	190.5	3.2		80	15 x 4	2.00	# de bocat./barajes/captac. constru. 2.50 M3/s caudal capacidad de bocatomas 1.00 # de muros/ diques/enrocados, etc. 45.00 M1 muros/diques/enrocados/defen.rib. 320.00 Has mejorad./rehab. regadas 2.00 # de principales obras de arte
ELAB. EXP.TEC. OBRAS INCL. EN 500010		40.0			x		# de estudios I/. valor de obras (objeto de estud)
RESERVORIO LA PILCA		83.2		90	27 x 2	1.00	# de reserv. rehabil./mejorado 1.00 M3 volumen de reservorios 0.09 Km canal nuevo construido 1.00 M3/s caudal de canal 3.00 # de principales obras de arte 150.00 Has mejorad./rehab. regadas
COLOCHE RAMA TEMPON QUEBRADA VEGA		133.2		170	27 x 3	3.00	# de principales obras de arte 0.30 M3/s caudal de canal 858.00 Has mejorad./rehab. regadas
REHABILIT. CAUCE GENERAL SAN BARTOLO	109.7			150	31 x 4	0.18	Km canal revestido/reconstruido 1.00 Km canal limpiado./mejorado/rehab. 0.40 M3/s caudal de canal 1.00 # de bocat./barajes/captac. constru. 1.00 # de principales obras de arte 110.00 Has mejorad./rehab. regadas
CAUCE GENERAL POZO DE PATO	49.1			100	20 x 2	1.00	# de bocat./barajes/captac. constru. 2.00 Km canal limpiado/mejorado/rehab. 0.50 M3/s caudal de canal 2.00 # de principales obras de arte 87.00 Has mejorad./rehab. regadas
PARTIDOR ALITA Y CORTE	48.0			110	16 x 2	3.00	# de principales obras de arte 413.00 Has mejorad./rehab. regadas
ALCANTARILLA EN CALLEJON ALITA	29.9			100	12 x 1	2.00	# de principales obras de arte 413.00 Has mejorad./rehab. regadas
CONSTR. E INST. COMPUERTA TOMA PRADA	7.4			400	x 1	1.00	# de bocat./baraj./capt. reha/mejor. 1.00 M3/s caudal capacidad de bocatomas 1245.00 Has mejorad./rehab. regadas
REMODELACION OBRAS SECTOR ZAÑA	2.7				28 x 1	34.00	# de espigones, gaviones 61.00 M1 de riberas proteg.por espig.,gavi 3.00 # de muros/ diques/enrocados, etc. M1 muros/diques/enrocados/defen.rib. 150.00 M3 roca utilizada 2.00 # de bocat./baraj./capt. reha/mejor. 3.00 M3/s caudal capacidad de bocatomas 1000.00 Has mejorad./rehab. regadas 1.00 # de principales obras de arte 1.39 Km caminos de acceso a obras

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
REMOD.SIST.IZAJE COMP.DESAREN.MOSEFU		23.1		400	x	1.00	# de bocat./baraj./capt. reha/mejor. 3.00 M3/s caudal capacidad de bocatomas 5750.00 Has mejorad./rehab. regadas
TOMA TORTOLITA		288.8	62.0	176	20 x 4	1.00	# de bocat./barajes/captac. constru. 1.00 M3/s caudal capacidad de bocatomas 152.00 Has mejorad./rehab. regadas
TOMA CHONTO		359.7	64.6	92	25 x 4	1.00	# de bocat./barajes/captac. constru. 1.00 M3/s caudal capacidad de bocatomas 126.00 Has mejorad./rehab. regadas 1.00 # de muros/ diques/enrocados, etc. 3.70 M1 muros/diques/enrocados/defen.rib. 1.00 # estructuras de riego protegidas
TOMA TRAPICHE, TOMA HUABAL		387.0	53.7	143	20 x 4	2.00	# de bocat./barajes/captac. constru. 1.00 M3/s caudal capacidad de bocatomas 228.00 Has mejorad./rehab. regadas 0.40 Km caminos de acceso a obras
TOMA HORCONES		220.5	58.9	123	18 x 4	1.00	# de bocat./barajes/captac. constru. 1.00 M3/s caudal capacidad de bocatomas 183.00 Has mejorad./rehab. regadas 1.00 # de principales obras de arte
TOMA OTRA BANDA (MORROPE)		257.8	72.9	294	30 x 4	1.00	# de bocat./barajes/captac. constru. 1.50 M3/s caudal capacidad de bocatomas 599.00 Has mejorad./rehab. regadas 1.00 # de principales obras de arte
TOMA OTRA BANDA (ZAÑA)		562.8	218.7	60	50 x 6	1.00	# de bocat./barajes/captac. constru. 3.00 M3/s caudal capacidad de bocatomas 28.00 Km canal nuevo construido 3.00 M3/s caudal de canal 2.00 # de muros/ diques/enrocados, etc. M1 muros/diques/enrocados/defen.rib. 1.00 # de principales obras de arte 1600.00 Has mejorad./rehab. regadas
TOMA LA FLORIDA - EL PALTO			722.8	160	47 x 4	4.00	# de bocat./barajes/captac. constru. 1.00 M3/s caudal capacidad de bocatomas 4.00 # de muros/ diques/enrocados, etc. 81.50 M1 muros/diques/enrocados/defen.rib. 0.85 Km canal limpiado/mejorado/rehab. 0.40 M3/s caudal de canal 2.00 # de principales obras de arte 6.00 Km caminos de acceso a obras 850.00 Has mejorad./rehab. regadas
TOMAS CARRIZAL, ACNAPE Y CHIRRAN			1041.1	150	49 x 4	1.00	# de bocat./barajes/captac. constru. 2.10 M3/s caudal capacidad de bocatomas 3.00 # de principales obras de arte 134.00 Km canal nuevo construido 2.10 M3/s caudal de canal 1.00 # de muros/ diques/enrocados, etc. 20.00 M1 muros/diques/enrocados/defen.rib. 310.00 Has mejorad./rehab. regadas

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
ELABORACION DE EXPED. TECNICOS.		81.8			x	15.00	# de estudios I/. valor de obras (objeto de estud)
ENCAUZAMIENTO RIO OLOS		27.5		50	25 x 1	1.00	# de muros/ diques/enrocados, etc. 12.00 M1 muros/diques/enrocados/defen.rib. 1.00 # de bocat./baraj./capt. reha/mejor. 1.00 M3/s caudal capacidad de bocatomas 70.00 Has mejorad./rehab. regadas
ENCAUZ. RIO MOTUPE SECT.LAS ANITAS		287.7		220	18 x 5	2.00	# de muros/ diques/enrocados, etc. 121.00 M1 muros/diques/enrocados/defen.rib. 10.00 # de espigones, gaviones 361.00 M1 de riberas proteg.por espig.,gavi 1.00 # estructuras de riego protegidas 1850.00 Has de cultivos protegidos por defen
ENCAUZ.RIO MOTUP.PUENT.PAN.JAYANCA		292.8		250	15 x 4	1.00	# de muros/ diques/enrocados, etc. M1 muros/diques/enrocados/defen.rib. 1.00 # puentes y otra infraest. protegida 12.00 M3 roca utilizada 1.00 # de muros/ diques/enrocados, etc. 50.00 M1 muros/diques/enrocados/defen.rib. 12.00 # de espigones, gaviones 1300.00 M1 de riberas proteg.por espig.,gavi 1500.00 Has de cultivos protegidos por defen
ENCAUZ. RIO LA LECHE-TOMA MAGDALENA		289.8		45	25 x 9	7.00	# de espigones, gaviones 150.00 M1 de riberas proteg.por espig.,gavi 1.00 # estructuras de riego protegidas 1.00 # de muros/ diques/enrocados, etc. 150.00 M1 muros/diques/enrocados/defen.rib. 3.00 M3/s caudal capacidad de bocatomas 515.00 Has mejorad./rehab. regadas
ENCAUZ.R.CHANCAY TRAMO CARNICHE-VEGA		473.8		150	35 x 3	1.00	# de muros/ diques/enrocados, etc. 60.00 M1 muros/diques/enrocados/defen.rib. 24.00 # de espigones, gaviones M1 de riberas proteg.por espig.,gavi 2.00 # de principales obras de arte 100.00 Has no regadas previamente 200.00 Has de cultivos protegidos por defen
ENCAUZ. R. CHANCAY TRAMO CUCULI-PUNT		109.9		22	15 x 2	1.00	# de muros/ diques/enrocados, etc. 30.00 M1 muros/diques/enrocados/defen.rib. 6.00 # de espigones, gaviones 500.00 M1 de riberas proteg.por espig.,gavi 1.00 # estructuras de riego protegidas 150.00 Has de cultivos protegidos por defen
ENCAUZ. RIO ZAÑA SECTOR CULPON		236.4		50	25 x 3	6.00	# de espigones, gaviones 400.00 M1 de riberas proteg.por espig.,gavi 180.00 Has de cultivos protegidos por defen
ENCAU R ZAÑA SEC. LA LEONERA S.PEDRO		772.1		200	70 x 3	25.00	# de espigones, gaviones 2500.00 M1 de riberas proteg.por espig.,gavi 1.00 # estructuras de riego protegidas 450.00 Has de cultivos protegidos por defen

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	1984	1985	1986			CANTIDAD	DESCRIPCION DE META
ENCAUZ.R.CHANCAY BOC.MONSEFU AL MAR		2826.1	147.5	1000	35 x 5	3.00	# de muros/ diques/enrocados, etc. 740.00 Ml muros/diques/enrocados/defen.rib. 11.00 # de espigones, gaviones 120.00 Has de cultivos protegidos por defen 1.00 # puentes y otra infraest. protegida
ENCAUZ.R.CHANCAY CALLANCA-PTE.REQUE			1939.7	1200	69 x 8	6.00	# de espigones, gaviones 6000.00 Ml de riberas proteg.por espig.,gavi 1.00 # de muros/ diques/enrocados, etc. 130.00 Ml muros/diques/enrocados/defen.rib. 120.00 Has de cultivos protegidos por defen 1.00 # puentes y otra infraest. protegida
PROTEC. TOMA ZAPATERO RIO CASCAJAL			167.2		21 x 2	1.00	# estructuras de riego protegidas 4.00 # de muros/ diques/enrocados, etc. 40.00 Ml muros/diques/enrocados/defen.rib. 2.00 # de principales obras de arte
PROTECCION DE VARIOS GAVIONES			1198.4		71 x 4	20.00	# puentes y ctra infraest. protegida 21.00 # de espigones, gaviones 8000.00 Ml de riberas proteg.por espig.,gavi 2.00 # de muros/ diques/enrocados, etc. 520.00 Ml muros/diques/enrocados/defen.rib.
PROTEC. TOMA HUACA DE LA CRUZ			1456.7		41 x 4	5.00	# de espigones, gaviones 180.00 Ml de riberas proteg.por espig.,gavi 1.00 # estructuras de riego protegidas 1.00 # de muros/ diques/enrocados, etc. 130.00 Ml muros/diques/enrocados/defen.rib.
DREN. D-1000 PAQUETE III		8233.9		10000	x	10720.00	ml de drenaje constr./rehab. m3/s caudal de drenaje 10.72 Km caminos de acceso a obras 19.00 # de principales obras de arte 45000.00 Has de cultivos protegidos por defen
HUACA DE LA CRUZ		1563.2	4316.0	1200	216 x 19	1.00	# de bocat./barajes/captac. constru. 9.00 M3/s caudal capacidad de bocatomas 1.00 # puentes y otra infraest. protegida 5.00 # de muros/ diques/enrocados, etc. 100.00 Ml muros/diques/enrocados/defen.rib. 0.98 Km canal nuevo construido 0.88 Km canal revestido/reconstruido 9.00 M3/s caudal de canal 0.88 Km caminos de acceso a obras 5.00 # de principales obras de arte 5000.00 Has mejorad./rehab. regadas

\*\* NOTAS: \*\*

SECTOR HUACA DE LA CRUZ

K:4/87 Se necesita el largo del muro./Obras de emergencia para el restablecimiento inmediato de l riego. Luego se hicieron obras más permanentes.

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CONSTR. E INST. COMPUERTA TOMA PRADA K:4/87 Falta trabajadores por 1 mes./Instalación de compuertas.  
 REMODELACION OBRAS SECTOR ZAÑA K:4/87 Falta número de familias beneficiadas, si es que éstas no están incluidas en otro compon  
 ente complementario, y ml de muro.  
 REMOD.SIST.IZAJE COMP.DESAREN.MOSEFU K:4/87 Falta trabajadores x meses.  
 TOMA OTRA BANDA (ZAÑA) K:4/87 Falta ml de muro.  
 ENCAUZ.RIO MOTUP.PUENT.PAN.JAYANCA K:4/87 Falta ml de uno de los muros descritos.  
 PROTEC. TOMA ZAPATERO RIO CASCAJAL Familias y hectáreas beneficiadas son las mismas que las de la Toma Zapatero.  
 PROTECCION DE VARIOS GAVIONES Hectáreas y familias beneficiadas consideradas en otros componentes.  
 PROTEC. TOMA HUACA DE LA CRUZ Beneficiarios son los mismos que los de Huaca de la Cruz.  
 DREN. D-1000 PAQUETE III K:4/87 Falta trabajadores x meses y m3 de capacidad de evacuación.

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
* * * * * SECTOR VIVIENDA * * * * *							
PROTEC. LAGUNA ESTABILIZA. PACORA			525.0		35 x 2		3.00 # de espigones, gaviones 49.00 Ml de riberas proteg.por espig.,gavi 1.00 # puentes y otra infraest. protegida
CHICLAYO-PIMENTEL-SANTA ROSA (ESTUD)	28.5				x		1.00 # de estudios 1214.00 I/. valor de obras (objeto de estud)
ESTUDIO S.D. CHICLAYO	605.9	237.6			x		1.00 # de estudios 177240.00 I/. valor de obras (objeto de estud)
C.T. LAMBAYEQUE (PEQ. PLANTA)	46.1	104.9		5381	6 x 2		1.00 # infraestr. civil rehab./constru. 2.00 # grupos electrógenos nuevos/reh. 70.00 KW grupos electrógenos nuevos/reh.
C.T. MOCUPE (PEQ. PLANTA)	25.6	14.4		775	3 x 2		1.00 # subestaciones nuevas/rehabil. 1.00 # transformadores (subestación) 100.00 kW transformadores 1.00 # grupos electrógenos nuevos/reh. 100.00 KW grupos electrógenos nuevos/reh. 1.00 # infraestr. civil rehab./constru.
C.T. OYOTUN (PEQ. PLANTA)	82.0	37.3			5 x 2		1.00 # infraestr. civil rehab./constru. 2.00 # grupos electrógenos nuevos/reh.
C.T. ZAÑA (PEQ. PLANTA)	32.3	22.6		961	3 x 2		100.00 KW grupos electrógenos nuevos/reh. 1.00 # grupos electrógenos nuevos/reh. 1.00 # subestaciones nuevas/rehabil. 2.00 # transformadores (subestación) 200.00 kW transformadores
LINEA CHICLAYO-MONSEFU	155.5		332.5		x		58.00 # postes para líneas eléct o alumbr. 13.50 Km líneas eléctricas
S.D. CHICLAYO I ETAPA	119.1	48.4			4 x 5		10.00 KW líneas eléctricas 1.51 Km líneas eléctricas 5.00 # subestaciones nuevas/rehabil. 4.00 # transformadores (subestación) 520.00 kW transformadores
S.D. MORROPE	113.1	438.7			8 x 5		2.00 # transformadores (subestación) 4.40 Km líneas eléctricas 142.00 # postes para líneas eléct o alumbr.

NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
S.D. TUCUME	41.7	115.7		313	15 x 3	10.00 KW líneas eléctricas 15.40 Km líneas eléctricas 102.00 # postes para líneas eléct o alumbr. 2.00 # subestaciones nuevas/rehabil. 4.00 # transformadores (subestación) 175.00 kW transformadores
S.D. ZAÑA	38.1	109.8		70	10 x 2	8.30 Km líneas eléctricas 10.00 KW líneas eléctricas 60.00 # postes para líneas eléct o alumbr. 2.00 # subestaciones nuevas/rehabil. 150.00 kW transformadores
S.D. NUEVA ARICA	26.8			309	8 x 4	1.40 Km líneas eléctricas 10.00 KW líneas eléctricas 12.00 # postes para líneas eléct o alumbr.
S.D. SAN JOSE	7.5			810	6 x 3	0.70 Km líneas eléctricas 15.00 KW líneas eléctricas 5.00 # postes para líneas eléct o alumbr.
S.D. SANTA ROSA	18.6			1028	8 x 3	1.10 Km líneas eléctricas 10.00 KW líneas eléctricas 6.00 # postes para líneas eléct o alumbr.
S.D. PACORA	45.6			469	10 x 4	2.30 Km líneas eléctricas 10.00 KW líneas eléctricas 20.00 # postes para líneas eléct o alumbr.
S.D. OYOTUN	162.8	882.8			12 x 5	51.18 Km líneas eléctricas 258.00 # postes para líneas eléct o alumbr. 2.00 # subestaciones nuevas/rehabil. 2.00 # transformadores (subestación)
S.D. CHOCHOPE	74.0	317.5			18 x 1	1.00 # grupos electrógenos nuevos/reh. 5.20 Km líneas eléctricas 37.00 # postes para líneas eléct o alumbr. 1.00 # infraestr. civil rehab./constru.
S.D. PICSÍ	18.2			5198	6 x 2	0.10 Km líneas eléctricas 10.00 KW líneas eléctricas
REHAB. ALCANTARILLADO DIST. TUCUME	364.1	1323.8	1064.1		x	5520.00 M1 línea principal (desagüe) 0.01 M3/s caudal (desagüe) 50.00 # buzones construidos/rehab. 1.00 # estación bombeo cons/reh(agua/des) 1.00 # lagunas de oxidación 6000.00 M3 laguna oxidación (nuevo/rehab.) 3.00 # equipos reh/nuev (alcant.)
REHAB. LINEA IMPULS. DESAGUE PACORA	16.2	273.0			6 x 1	300.00 M1 línea principal (desagüe)
ESTUD. Y REHAB. AGUA POTABLE MORROPE	35.3	416.5	496.3	567	11 x 36	1520.00 M1 red distribución (agua potable) 0.01 M3/s caudal (agua potable) 6.00 # conexión domicil/piletas(agua pot) 3.00 # pozos (agua potable) 20.00 M1 de perforación de pozos (Sigue)

NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
						3.00 M3/s caudal que producen los pozos 100.00 M3 Tanques apoyados (agua potable) 1.00 # estación bombeo cons/reh(agua/des) 1.00 # equipos (sgua potable)
L. REBOSE QUEBR. CHOTOQUE-MOTUPE	218.5	60.0		1700	18 x 4	21.00 # buzones construidos/rehab. 1855.00 M1 línea principal (desagüe) 0.03 M3/s caudal (desagüe)
LINEA IMPULSION DESAGUE JAYANCA	25.0	10.5		1700	22 x 2	190.00 M1 red alcantarillado 0.02 M3/s caudal (desagüe)
DESARENA. CANAL ALIMENT. LAGUNA BORO	31.4			60000	50 x 2	1620.00 M1 línea principal (agua potable) 2.00 M3/s caudal (agua potable)
REHAB. AGUA POTABLE OYOTUN		25.3		60	10 x 2	200.00 M1 línea principal (agua potable) 0.02 M3/s caudal (agua potable)
LINEA IMPUL. Y CONDOC. PUERTO ETEN	204.9	28.2		700	18 x 2	1070.00 M1 línea principal (agua potable) 0.03 M3/s caudal (agua potable)
EMISOR DE DESCARGA PUERTO ETEN	11.1	0.2		700	30 x 3	14.00 # buzones construidos/rehab. 160.00 M1 limpieza de desagües 147.00 M1 línea principal (desagüe) 0.02 M3/s caudal (desagüe) 1.00 # estación bombeo cons/reh(agua/des)
REHAB. ALCANTAR. CIUDAD ETEN	139.5	19.8		667	15 x 3	2500.00 M1 limpieza de desagües 280.00 M1 línea principal (desagüe) 50.00 # buzones construidos/rehab. 0.03 M3/s caudal (desagüe) 500.00 M3 laguna oxidación (nuevo/rehab.) 50.00 M1 línea principal (agua potable) 0.03 M3/s caudal (agua potable) 1.00 # de reserv. rehabil./mejorado 80.00 M3 volumen de reservorios
COLECTORES CALLE IZAGA-MONSEFU	8.8	0.2		3000	45 x 4	350.00 M1 limpieza de desagües 7.00 # buzones construidos/rehab. 40.00 # conexión domiciliarias (desagüe) 150.00 M1 línea principal (desagüe) 0.02 M3/s caudal (desagüe)
EMISOR DESCARGA MONSEFU	194.0	21.2		3000	12 x 3	9.00 # buzones construidos/rehab. 780.00 M1 línea principal (desagüe) 0.05 M3/s caudal (desagüe) 400.00 M3 laguna oxidación (nuevo/rehab.)
POZO AGUA POTABLE DE REQUE	21.2	44.4		1300	8 x 2	1.00 # pozos (agua potable) 60.00 M1 de perforación de pozos 0.05 M3/s caudal que producen los pozos
REHAB. AV. LA MARINA	419.3				16 x 4	3.65 Km asfaltado (pistas) 19298.00 M2 asfaltado (pistas)

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	1984	1985	1986			CANTIDAD	DESCRIPCION DE META
REHAB. AV. MARISCAL NIETO	158.2	0.1			17 x 5	0.45 Km asfaltado (pistas)	3000.00 M2 asfaltado (pistas)
REHAB. AV. CHINCHAYSUYO	299.2	0.3			16 x 3	1.40 Km asfaltado (pistas)	11520.00 M2 asfaltado (pistas)
REHAB AV CHINCHAYSUYO-CALLE OLLANTAY	121.1	0.4			18 x 4	0.66 Km asfaltado (pistas)	5328.00 M2 asfaltado (pistas)
REHAB. AV. JOSE BALTA	94.0	1.1			15 x 3	0.24 Km asfaltado (pistas)	3415.00 M2 asfaltado (pistas)
REHAB. AV. SAENZ PEÑA	97.9	8.7			17 x 4	190.00 M1 línea principal (desagüe)	100.00 M1 red alcantarillado
						15.00 # conexión domiciliarias (desagüe)	0.03 M3/s caudal (desagüe)
						0.36 Km asfaltado (pistas)	2953.00 M2 asfaltado (pistas)
REHAB. AV. SANTA VICTORIA	1028.9	118.5			27 x 5	1.07 Km asfaltado (pistas)	14165.00 M2 asfaltado (pistas)
REHAB. CALLE HIPOLITO UNANUE		49.9			13 x 3	0.30 Km asfaltado (pistas)	2250.00 M2 asfaltado (pistas)
REHAB. AV ELVIRA GARCIA Y GARCIA		238.5			16 x 5	1.06 Km asfaltado (pistas)	7632.00 M2 asfaltado (pistas)
REHAB. PISTAS Y VEREDAS CIUDAD ETEN		485.3			15 x 5	0.13 Km afirmado (pistas)	10040.00 M2 afirmado (pistas)
						1.75 Km veredas	2101.00 M2 veredas
REHAB. AV. BOLIVAR	199.6	60.8			17 x 3	0.88 Km asfaltado (pistas)	7040.00 M2 asfaltado (pistas)
REHAB. AV. MEJICO	245.5	0.6			17 x 5	0.53 Km asfaltado (pistas)	4000.00 M2 asfaltado (pistas)
REHAB. PISTAS LA VICTORIA-MOSHOQUEQUE		2555.1	380.0		60 x 8	3.30 Km asfaltado (pistas)	29990.00 M2 asfaltado (pistas)
REHAB. PLAZA DE ARMAS DE CHONGOYAPE		376.0			27 x 3	0.46 Km concreto (pistas)	4165.00 M2 concreto (pistas)
REHAB. PISTAS Y VEREDAS EN TUCUME		513.9			x	1.00 Km afirmado (pistas)	6800.00 M2 afirmado (pistas)
						1.95 Km veredas	2340.00 M2 veredas
REHAB. PISTAS Y VEREDAS EN MORROPE		442.8			17 x 3	0.94 Km afirmado (pistas)	7480.00 M2 afirmado (pistas)
						1.60 Km veredas	1931.00 M2 veredas

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
REHAB. AV. LIBERTAD-LAMBAYEQUE	98.6	25.7			13 x 4	0.35 Km asfaltado (pistas) 2979.00 M2 asfaltado (pistas) 70.00 M1 línea principal (desagüe) 0.02 M3/s caudal (desagüe)
REHAB. PRIM. URBANA P.J. TUPAC AMARU	203.4	182.0			14 x 15	200.00 # lotes habilitados 30000.00 M2 lotes habilitados 2708.00 M1 línea principal (agua potable) 0.01 M3/s caudal (agua potable) 10.00 # conexión domicil/piletas (agua pot) 10.00 M3 Tanques apoyados (agua potable) 4.00 # de reserv. rehabil./mejorado 60.00 M3 volumen de reservorios 1.30 Km afirmado (pistas) 13130.00 M2 afirmado (pistas) 1.00 # edificaciones comunales nuevas 25.00 M2 edificaciones comunales nuevas
HABIL. PRIM. LOTES DE CANASLOCHE	358.3	197.7			15 x 14	182.00 # lotes habilitados 7500.00 M2 lotes habilitados 1.00 # edificaciones comunales nuevas 25.00 M2 edificaciones comunales nuevas 4200.00 M1 línea principal (agua potable) 0.01 M3/s caudal (agua potable) 6.00 # conexión domicil/piletas (agua pot) 11.00 # tanques (agua potable) 60.00 M3 Tanques elevados (agua potable) 1.00 Km afirmado (pistas) 10000.00 M2 afirmado (pistas)
HABIL. PRIM. CHOCHOPE	316.5	22.7			15 x 15	251.00 # lotes habilitados 50000.00 M2 lotes habilitados 3165.00 M1 línea principal (agua potable) 710.00 M1 red distribución (agua potable) 0.01 M3/s caudal (agua potable) 6.00 # conexión domicil/piletas (agua pot) 1.00 # tanques (agua potable) 25.00 M3 Tanques apoyados (agua potable) 2.00 Km afirmado (pistas) 20000.00 M2 afirmado (pistas)
HABIL. VIVIEN. TUPAC AMARU	178.5	1.6		135	140 x 21	135.00 # casas nuevas 3375.00 M2 casas de adobe
HABIL. VIVIEN. LAGUNAS CANASLOCHE	161.9	0.7		90	93 x 21	90.00 # casas nuevas 2250.00 M2 casas de adobe
REHAB. VIVIENDAS EN CHOCHOPE	117.2	181.5		67	60 x 21	67.00 # casas nuevas 1675.00 M2 casas de adobe
REHAB. VIVIENDAS EN TUCUME	138.0	350.2		205	100 x 16	158.00 # casas nuevas 3950.00 M2 casas de adobe 47.00 # casas rehabilitadas 1175.00 M2 casas de adobe

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
REHAB. VIVIENDAS EN MORROPE	110.2	301.1		146	83 x 16	146.00	# casas nuevas 3650.00 M2 casas de adobe
HABIL. VIVIEN. CIUDAD ETEN	107.3			152	92 x 15	90.00	# casas nuevas 2250.00 M2 casas de adobe 62.00 # casas rehabilitadas 1550.00 M2 casas de adobe
REHAB. SUBPREFECTURA LAMBAYEQUE	21.2	0.6			5 x 3	1.00	# edificaciones comunales rehabil. 145.00 M2 edificaciones comunales rehabil.
REC.POZO SEPTICO PTO.SANI. CANSLOCHE				200	6 x 1	100.00	M1 red alcantarillado M3/s caudal (desagüe)
RECONSTR. POSTA MEDICA INSCULAS		10.4		50	8 x 4	1.00	# postas o centros médicos nuev/reh 160.00 M2 postas o centros médicas nuev/reh
RECONS. POSTA MEDICA P.J. ATUSPARIAS		1.6		200	8 x 4	1.00	# postas o centros médicos nuev/reh 160.00 M2 postas o centros médicas nuev/reh
C.E. 10159 CARACUCHO		73.1		80	12 x 2	1.00	# CC.EE. beneficiados 2.00 # aulas nuevas 107.25 M2 CC.EE. nuevos
C.E. 10162 TRANCA FANUPE		71.3	89.8	80	16 x 6	1.00	# CC.EE. beneficiados 2.00 # aulas nuevas 107.25 M2 CC.EE. nuevos 1.00 # aulas nuevas 53.63 M2 CC.EE. nuevos
C.E. 10972 PUPLAN		74.1		80	6 x 2	1.00	# CC.EE. beneficiados 2.00 # aulas nuevas 46.50 M2 CC.EE. nuevos
C.E. 10137 LA PAVA		73.2	91.6	130	13 x 6	1.00	# CC.EE. beneficiados 2.00 # aulas nuevas 107.25 M2 CC.EE. nuevos 1.00 # aulas nuevas 46.50 M2 CC.EE. nuevos
C.E. 10719 ZAPOTAL		78.4		80	6 x 3	1.00	# CC.EE. beneficiados 2.00 # aulas nuevas 46.50 M2 CC.EE. nuevos
C.E. 10232 LOS BANCES		73.3	140.1	200	7 x 6	1.00	# CC.EE. beneficiados 2.00 # aulas nuevas 90.00 M2 CC.EE. nuevos 2.00 # aulas nuevas 93.00 M2 CC.EE. nuevos
C.E. 10848 SAPAME		41.2		40	7 x 2	1.00	# CC.EE. beneficiados 1.00 # aulas nuevas 52.62 M2 CC.EE. nuevos



NOMBRE	EJEC.	EJEC.	EJEC.	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	1984	1985	1986			CANTIDAD	DESCRIPCION DE META
C.E. 10800 EL HORCON		37.1		40	6 x 3	1.00	# CC.EE. beneficiados 1.00 # aulas nuevas 55.25 M2 CC.EE. nuevos
C.E. 10231 LA RAYA		69.1		80	10 x 3	1.00	# CC.EE. beneficiados 2.00 # aulas nuevas 107.25 M2 CC.EE. nuevos
C.E. OCUPACIONAL PACORA		73.6		40	10 x 2	1.00	# CC.EE. beneficiados 2.00 # aulas nuevas 107.25 M2 CC.EE. nuevos
C.E. 10998 PUENTE MACHUCA		76.7		80	7 x 4	1.00	# CC.EE. beneficiados 2.00 # aulas nuevas 107.25 M2 CC.EE. nuevos
C.E. 10216 EL BANCO		41.6		40	6 x 2	1.00	# CC.EE. beneficiados 1.00 # aulas nuevas 48.00 M2 CC.EE. nuevos
C.E. 10782 PASABAR ASERRADERO		35.9		40	7 x 2	1.00	# CC.EE. beneficiados 1.00 # aulas nuevas 48.00 M2 CC.EE. nuevos
C.E. 10816 SENQUELO		36.0		40	15 x 1	1.00	# CC.EE. beneficiados 1.00 # aulas nuevas 48.00 M2 CC.EE. nuevos
C.E. 10197 SAN CRISTOBAL		34.1		40	4 x 3	1.00	# CC.EE. beneficiados 1.00 # aulas nuevas 48.00 M2 CC.EE. nuevos
C.E. 10029 MOCUPE		83.5		250	8 x 2	1.00	# CC.EE. beneficiados 6.00 # aulas rehabilitadas 200.00 M2 CC.EE. rehabilitados
C.E. 10940 PAREDONES-MORROPE			92.9	50	6 x 2	1.00	# CC.EE. beneficiados 1.00 # aulas nuevas 53.63 M2 CC.EE. nuevos
C.E. 11078 ACNAPE-MORROPE			157.5	100	7 x 4	1.00	# CC.EE. beneficiados 2.00 # aulas nuevas 107.25 M2 CC.EE. nuevos
C.E. 10132 MOCHUMI			100.5	200	6 x 3	1.00	Km afirmado (pistas) 4.00 # aulas rehabilitadas 156.00 M2 CC.EE. rehabilitados
C.E. 10122 CHIRIMOYO-ILLIMO			70.5	100	6 x 3	1.00	# CC.EE. beneficiados 2.00 # aulas rehabilitadas 76.00 M2 CC.EE. rehabilitados
C.E. 10927 CERRO-ASCUTE-PACORA			92.0	50	6 x 3	1.00	# CC.EE. beneficiados 1.00 # aulas nuevas 53.63 M2 CC.EE. nuevos

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
C.E. 10129 PAMPA EL LINO-JAYANCA			69.2	50	1 x 3	1.00 # CC.EE. beneficiados 1.00 # aulas nuevas 46.50 M2 CC.EE. nuevos	
C.E. 10131 LA TOMASITA-JAYANCA			83.8	50	6 x 3	1.00 # CC.EE. beneficiados 1.00 # aulas nuevas 53.63 M2 CC.EE. nuevos	
C.E. 10148 CHOLOCAL-MOTUPE			161.0	100	8 x 4	1.00 # CC.EE. beneficiados 2.00 # aulas nuevas 107.25 M2 CC.EE. nuevos	
C.E. 10221 SUCCHA ALTA SALAS			56.8	50	x	1.00 # CC.EE. beneficiados 1.00 # aulas nuevas 87.00 M2 CC.EE. nuevos	
C.E. 10196 LA PILCA-OLMOS			85.4	50	5 x 3	1.00 # CC.EE. beneficiados 1.00 # aulas nuevas 46.50 M2 CC.EE. nuevos	
C.E. 10987 ANCOL GRANDE-OLMOS			76.7	50	1 x 4	1.00 # CC.EE. beneficiados 1.00 # aulas nuevas 46.50 M2 CC.EE. nuevos	
C.E. ANTONIO RAYMONDI-SALTUR-CHICLAY			147.1	100	8 x 4	1.00 # CC.EE. beneficiados 2.00 # aulas nuevas 107.25 M2 CC.EE. nuevos	
C.E. 10977 PAMPA RUME-SALAS			24.0	50	x	1.00 # CC.EE. beneficiados 1.00 # aulas rehabilitadas 60.00 M2 CC.EE. rehabilitados	
ITS ENRIQUE LOPEZ ALBUJAR-FERRAÑAFE			26.9	1000	x	1.00 # CC.EE. beneficiados 254.00 M2 CC.EE. rehabilitados	

\*\* NOTAS: \*\*

CHICLAYO-PIMENTEL-SANTA ROSA (ESTUD) No tiene beneficios porque no se usó el estudio.  
ESTUDIO S.D. CHICLAYO Se usó la primera etapa del estudio solamente.  
C.T. OYOTUN (PEQ. PLANTA) No tiene beneficios porque obras (C.T. y S.D) no se usan. Los grupos electrógenos tendrían una capacidad de 400 KW.  
LINEA CHICLAYO-MONSEFU No tiene beneficios porque no se concluyó. ELECTROPERU debe concluir la obra/K:4/87 Falta trab.x meses  
S.D. CHICLAYO I ETAPA K:4/87 ¿Está dando beneficios? Si sí, entonces falta dar número de familias.  
S.D. MORROPE No tiene beneficios porque obra no se usa. Habría 1193 familias benef. Transformadores de 220 K W, líneas de 10 KW.  
S.D. OYOTUN No tiene beneficios porque obra no se usa. Habría 1720 familias beneficiadas. Transformadores de e 340 KW y líneas de 10 KW.  
S.D. CHOCHOPE No tiene beneficios porque obra no se usa. Habría 50 familias beneficiadas. El grupo electrógeno es de 50 KW.  
REHAB. ALCANTARILLADO DIST. TUCUME K:4/87 Falta trab. x meses./No tiene beneficios porque obra no se concluyó. Falta instalar el equipo electromecánico, que no requeriría de mucho tiempo. Sin embargo no se hizo.

REHAB. LINEA IMPULS. DESAGUE PACORA No tiene beneficios porque no se usa. Tubería fue rota y aún no han solucionado el problema ni puesto en funcionamiento sistema. Habría 1100 familias beneficiadas y 500 m3 de capacidad de la guna oxid.

REHAB. PISTAS Y VEREDAS EN TUCUME K:4/87 Falta trabajadores x meses.

REHAB. PRIM. URBANA P.J. TUPAC AMARU Además, habilitación de 90 letrinas y un molino de viento. Beneficiarios son los mismos que los de las viviendas.

HABIL. PRIM. LOTES DE CANASLOCHE Además, habilitación de 90 letrinas. Beneficiarios son los mismos que los de las viviendas.

HABIL. PRIM. CHOCHOPE Beneficiarios son los mismos que los de las viviendas.

REHAB. VIVIENDAS EN CHOCHOPE K:4/87 Faltó este comp. en el Reporte Final.

HABIL. VIVIEN. CIUDAD ETEN K:4/87 Faltó este comp. en el Reporte Final.

C.E. 11078 ACNAPE-MORROPE K:3/10/87 No se especifica área de aulas.

C.E. 10221 SUCCHA ALTA SALAS K:4/87 Falta trabajadores x meses.

C.E. 10977 PAMPA RUME-SALAS Se donó materiales, no se pagó mano de obra.

ITS ENRIQUE LOPEZ ALBUJAR-FERRAÑAFE Se donó materiales para construir el cerco perimétrico del C.E. que beneficia a toda la población estudiantil de 3 turnos.

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	1984	1985	1986			CANTIDAD	DESCRIPCION DE META
* * * * * SECTOR TRANSPORTE * * * * *							
SECTOR REQUE	5.9				15 x 1	1.00 # puentes vehiculares nuevos	1.50 M1 puentes de concreto
						7.50 M2 puentes de concreto	
BADEN ALITAS Y HUMEDADES		2.7			2 x 1	1.00 # badenes	
ENCAUZAMIENTO DEL RIO INSCULAS		351.2			25 x 3	1.00 # de muros/ diques/enrocados, etc.	30.00 M1 muros/diques/enrocados/defen.rib.
						4.00 # de espigones, gaviones	116.00 M1 de riberas proteg.por espig.,gavi
						2.00 # puentes y otra infraest. protegida	
PROTECCION PUENTE INSCULAS			611.9		20 x 2	3.00 # de espigones, gaviones	58.00 M1 de riberas proteg.por espig.,gavi
						1.00 # de muros/ diques/enrocados, etc.	60.00 M1 muros/diques/enrocados/defen.rib.
						2.00 # puentes y otra infraest. protegida	
R. LA LECHE PROT.ZANJON BATAN GRANDE			286.8		20 x 2	1.00 # de muros/ diques/enrocados, etc.	130.00 M1 muros/diques/enrocados/defen.rib.
						1.00 # puentes y otra infraest. protegida	
CARR.ZAÑA-CAYALI-NVA ARICA	235.4	107.2			17 x 2	1.00 # badenes	1.00 # de muros/ diques/enrocados, etc.
						12.00 M1 muros/diques/enrocados/defen.rib.	1.00 # puentes y otra infraest. protegida
CARR. PANAM. DESVIO PIURA PTE ANCHOV		2456.8	57.2		50 x 7	15.90 Km asfaltados (carreteras)	200000.00 M2 asfaltados (carreteras)
CARR. CHICLAYO-CHONGOYAPE		4678.3	3002.3		80 x 7	43.00 Km asfaltados (carreteras)	283800.00 M2 asfaltados (carreteras)
						5.00 # alcantarillas (carreteras)	9.00 M1 alcantarillado (carreteras)
ESTUDIO PUENTE ETEN		19.9			x		

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
PUENTE ZANJON BATANGRANDE	1098.9	2089.6			25 x 9	1.00 # puentes vehiculares nuevos 40.00 M1 puentes de concreto M2 puentes de concreto M3 material de accesos puentes

\*\* NOTAS: \*\*

SECTOR REQUE

EvS/E: Facilitará transporte de productos agropecuarios.

PROTECCION PUENTE INSCULAS

Protección de puente Insculas y carretera Panamericana.

CARR. PANAM. DESVIO PIURA PTE ANCHOV

K:4/87 Según el Reporte Final, hay más metas de las que están especificadas aquí (bermas, obras de arte, etc). Por favor, completar la información.

CARR. CHICLAYO-CHONGOYAPE

K:4/87 Mismo comentario que para Carr. Panam. Desvío Piura Pte. Anchovira.

ESTUDIO PUENTE ETEN

No tiene beneficios porque se concluyó el estudio.

PUENTE ZANJON BATANGRANDE

K:4/87 Falta m2 de puente y m3 de accesos.

\* \* \* \* \* MULTISECTORIAL

\* \* \* \* \*

LIQUIDACION DE OBRAS

1984.9

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REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES  
PROGRAMA DRR  
07/07/87

NOMBRE	CORDELIBERTAD			# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	EJEC. 1984	EJEC. 1985	EJEC. 1986			CANTIDAD	DESCRIPCION DE META
***** SECTOR AGRICULTURA *****							
ENCAUZAM. DEFENSA VALLE JEQUETEPEQUE	297.0			2000	8 x 1	220.00	M1 muros/diques/enrocados/defen.rib. 2100.00 M1 cauce de río limpiado/encauzado 35000.00 M3 material limpiado de cauces 6.00 # estructuras de riego protegidas 12000.00 Has de cultivos protegidos por defen 0.60 Km canal limpiado/mejorado/rehab. 63.00 M3/s caudal de canales 12000.00 Has mejorad./rehab. regadas
ENROCADO DE CERRO BLANCO	44.3	230.8	665.8	500	24 x 4	90.00	M1 cauce de río limpiado/encauzado 157.00 M1 muros/diques/enrocados/defen.rib. 1.00 # de muros/ diques/enrocados, etc. 3.00 # de principales obras de arte 0.13 Km caminos de acceso a obras 1.00 # puentes y ctra infraest. protegida 4.00 M3/s caudal de canales 4000.00 Has mejorad./rehab. regadas
CANAL Y BOCATOMA VALLE CHICAMA	787.0			2500	9 x 3	5460.00	M1 cauce de río limpiado/encauzado 75000.00 M3 material limpiado de cauces 2.45 Km canal limpiado/mejorado/rehab. 66.20 M3/s caudal de canales 6.00 # de bocat./barajes/captac. constru. 66.20 M3/s caudal capacidad de bocatomas 3.00 # de espigones, gaviones M1 de riberas proteg.por espig.,gavi 200.00 M1 muros/diques/enrocados/defen.rib. 15000.00 Has mejorad./rehab. regadas
CANAL Y BOCATOMA VALLE MOCHE	475.1			2500	8 x 1	4100.00	M1 cauce de río limpiado/encauzado 30000.00 M3 material limpiado de cauces 1.80 Km canal limpiado/mejorado/rehab. 16.20 M3/s caudal de canales 6.00 # de bocat./baraj./capt. reha/mejor. 16.20 M3/s caudal capacidad de bocatomas 7500.00 Has mejorad./rehab. regadas
CANAL Y BOCATOMA VALLE VIRU	129.2			1000	8 x 1	4800.00	M1 cauce de río limpiado/encauzado 19000.00 M3 material limpiado de cauces 6.20 Km canal limpiado/mejorado/rehab. 35.80 M3/s caudal de canales 8.00 # de bocat./baraj./capt. reha/mejor. 35.80 M3/s caudal capacidad de bocatomas 10000.00 Has mejorad./rehab. regadas
CANAL SAUSAL-QUEMAZON	1839.1	3159.7		90	60 x 15	3.02	Km canal nuevo construido 2.00 M3/s caudal de canales 1.00 # de bocat./barajes/captac. constru. 2.00 M3/s caudal capacidad de bocatomas 13.00 # de principales obras de arte 750.00 Has mejorad./rehab. regadas

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NOMBRE	EJEC. 1984	EJEC. 1985	EJEC. 1986	# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS CANTIDAD DESCRIPCION DE META
CRUCE QUEBRADA RIO CHAMAN	322.9			1000	8 x 6	8.00 # de espigones, gaviones 290.00 M1 de riberas proteg.por espig.,gavi 9000.00 Has de cultivos protegidos por defen
REH.BOCAT.Y CONS. BARRAJE STA. ROSA	69.0			500	5 x 2	1.00 # de bocat./barajes/captac constr. 2.00 # de muros/ diques/enrocados, etc. 62.00 M1 muros/diques/enrocados/defen.rib. 2740.00 Has de cultivos protegidos por defen
MUROS CONCRETO SANTO DOMINGO	17.1			700	4 x 1	2.00 # de muros/ diques/enrocados, etc. 38.00 M1 muros/diques/enrocados/defen.rib. 3500.00 Has de cultivos protegidos por defen
<b>** NOTAS: **</b>						
ENROCADO DE CERRO BLANCO	Las obras aseguran el abastecimiento de agua para irrigación y protección de la Carretera Trujillo - Otuzco.					
CANAL Y BOCATOMA VALLE VIRU	¿Están los 2000 m de canal desarenado dentro de los 6.2 Km de canal mejorado?					
CANAL SAUSAL-QUEMAZON	Beneficiarios concluyeron último trayecto por lo que el canal funciona y tiene beneficios.					
REH.BOCAT.Y CONS. BARRAJE STA. ROSA	¿Funciona? ¿Qué ha pasado?/ En dic.86 CORLIB dice que financiará concl.(fondos Presup. Normal a prox.I/.600,000). Consistirá en construir un barraje. La licitación será en dic.86 con plazo de 3 meses.					
<b>* * * * * SECTOR VIVIENDA * * * * *</b>						
AFIRMADO URBANA SANTA ISABEL			306.8		12 x 1	2.47 Km afirmado (pistas) 15948.00 M2 afirmado (pistas)
LINEA A.T. SALAVERRY	168.3				4 x 1	39.00 # postes para líneas eléct o alumbr. 5.28 Km líneas eléctricas 5000.00 KW líneas eléctricas
A.P. LAREDO	29.0	2.8			5 x 5	380.00 M1 línea principal (agua potable) 75.00 M1 red distribución (agua potable) 0.04 M3/s caudal (agua potable) 470.00 M1 red alcantarillado 0.02 M3/s caudal (desagüe) 7.00 # buzones construidos/rehab.
A.P. Y ALCANT. CHEPEN	32.3	18.4			7 x 4	300.00 M1 red alcantarillado 0.04 M3/s caudal (desagüe) 63.00 # buzones construidos/rehab. 3000.00 M1 limpieza de desagües 2.00 # de reserv. rehabil./mejorado 7000.00 M3 volumen de reservorios 3.00 # lagunas de oxidación 7000.00 M3 laguna oxidación (nuevo/rehab.)
A.P. SIMBAL	26.5				5 x 5	600.00 M1 línea principal (agua potable) 128.00 M3/s caudal (agua potable) 0.02 360 (No existe código.)
A.P. Y ALCANT. GUADALUPE	22.4	27.9			9 x 5	200.00 M1 red alcantarillado 0.03 M3/s caudal (desagüe) 87.00 # buzones construidos/rehab. 2000.00 M1 limpieza de desagües 1.00 # lagunas de oxidación 7000.00 M3 laguna oxidación (nuevo/rehab.)

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
						1.00 # equipos reh/nuev (agua potable)
A.P. Y ALCANT. PACASMAYO	12.2				x	2000.00 M1 limpieza de desagües 0.04 M3/s caudal (desagüe) 35.00 # buzones contruidos/rehab. 1.00 # de reserv. rehabil./mejorado 500.00 M3 volumen de reservorios
A.P. Y ALCANT. SAN PEDRO DE LLOC	15.8				6 x 3	200.00 M1 red alcantarillado 0.04 M3/s caudal (desagüe) 2000.00 M1 limpieza de desagües 84.00 # buzones contruidos/rehab.
A.P. Y ALCANT. PUERTO CHIMACA	19.2	30.5			7 x 6	1000.00 M1 limpieza de desagües 0.01 M3/s caudal (desagüe) 40.00 # buzones contruidos/rehab. 2.00 # lagunas de oxidación 12000.00 M3 laguna oxidación (nuevo/rehab.) 1.00 # equipos reh/nuev (alcant.) 150.00 M1 línea principal (desagüe)
A.P. Y ALCANT. MOCHE	22.2	90.7			7 x 6	420.00 M1 red alcantarillado 2000.00 M1 limpieza de desagües 0.03 M3/s caudal (desagüe) 38.00 # buzones contruidos/rehab. 2.00 # equipos reh/nuev (alcant.) 1.00 # equipos reh/nuev (agua potable)
A.P. Y ALCANT. VIRU	8.2	67.1			7 x 5	144.00 M1 red alcantarillado 1000.00 M3/s caudal (desagüe) 24.00 M1 limpieza de desagües 26.00 # buzones contruidos/rehab. 2.00 # equipos reh/nuev (alcant.)
A.P. Y ALCANT. JEQUETEPEQUE	12.4				5 x 4	140.00 M1 red alcantarillado 0.02 M3/s caudal (desagüe) 3.00 # buzones contruidos/rehab. 1.00 # lagunas de oxidación 7500.00 M3 laguna oxidación (nuevo/rehab.)
A.P. Y ALCANT. CHICAMA	11.4				4 x 3	131.00 M1 red alcantarillado 0.02 M3/s caudal (desagüe) 27.00 # buzones contruidos/rehab. 1.00 # plantas de tratamiento nuev/reh 1.00 # lagunas de oxidación 3500.00 M3 laguna oxidación (nuevo/rehab.)
A.P. Y ALCANT. POROTO	6.2	23.4			5 x 5	200.00 M1 red alcantarillado 0.01 M3/s caudal (desagüe) 33.00 # buzones contruidos/rehab. 600.00 M1 limpieza de desagües
ALCANT. TRUJILLO	51.4	149.2			8 x 6	30280.00 M1 limpieza de desagües 100.00 # buzones contruidos/rehab. 0.09 M3/s caudal (desagüe)

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS	
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD	DESCRIPCION DE META
C.E. ANDRES RAZURI	76.3			40	6 x 6	1.00 # CC.EE. beneficiados 3.00 # aulas nuevas 475.00 M2 CC.EE. nuevos	
C.E. SR.DE LOS MILAGROS-LA ESPERANZA		40.5		70	3 x 1	1.00 # CC.EE. beneficiados 5.00 # aulas rehabilitadas 200.00 M2 CC.EE. rehabilitados	
C.E. 80077 FRANCISCO DE ZELA-TRUJILL	23.7			15	5 x 2	1.00 # CC.EE. bereficiados 1.00 # aulas nuevas 40.00 M2 CC.EE. nuevos	
C.E. 80012 PEDRO RIVADENEYRA-TRUJILL		15.1		15	3 x 1	1.00 # CC.EE. beneficiados 2.00 # aulas rehabilitadas 140.00 M2 CC.EE. rehabilitados	
C.E. 80824 PORVENIR	28.3			130	4 x 3	1.00 # CC.EE. beneficiados 10.00 # aulas rehabilitadas 540.00 M2 CC.EE. rehabilitados	
C.E. 80414 S.MARTIN DE PORRAS-PACASM	20.0			30	3 x 2	1.00 # CC.EE. beneficiados 3.00 # aulas nuevas 475.00 M2 CC.EE. nuevos 2.00 # aulas rehabilitadas 112.50 M2 CC.EE. rehabilitados	
C.E. 80044 LAREDO-TRUJILLO	48.4	88.1		200	5 x 3	1.00 # CC.EE. beneficiados 3.00 # aulas nuevas 60.00 M2 CC.EE. nuevos 3.00 # aulas rehabilitadas 60.00 M2 CC.EE. rehabilitados	
9 OBRAS EN SANCHEZ CARRION		78.0		40	6 x 6	9.00 # CC.EE. beneficiados 17.00 # aulas rehabilitadas 1638.00 M2 CC.EE. rehabilitados	
4 OBRAS EN PACASMAYO		78.0			4 x 3	4.00 # CC.EE. beneficiados 11.00 # aulas rehabilitadas 517.46 M2 CC.EE. rehabilitados	
3 OBRAS EN CHEPEN		58.0		25	5 x 1	3.00 # CC.EE. beneficiados 5.00 # aulas rehabilitadas 184.56 M2 CC.EE. rehabilitados	
3 OBRAS EN ASCOPE		53.8		30	4 x 2	3.00 # CC.EE. beneficiados 7.00 # aulas rehabilitadas 445.00 M2 CC.EE. rehabilitados	

\*\* NOTAS: \*\*

AFIRMADO URBANA SANTA ISABEL

La pavimentación la hizo el Concejo Provinvial de Trujillo.

2003



LINEA A.T. SALAVERRY

A.P. SIMBAL  
A.P. Y ALCANT. GUADALUPE

C.E. ANDRES RAZURI

C.E. 80824 PORVENIR  
C.E. 80044 LAREDO-TRUJILLO

9 OBRAS EN SANCHEZ CARRION

4 OBRAS EN PACASMAYO  
3 OBRAS EN ASCOPE

Para todos los componentes de electricidad, agua potable y alcantarillado falta # familias beneficiadas.

Además, 600 ml de canal revestido para transportar agua potable. Uno de los motores de la estación de bombeo de aguas servidas estaba en reparación en agosto 86 ¿se reparó?.

¿Qué pasos se han tomado en el 87 para concluir esta obra?/Obra quedó en un 75% de la meta programada.

Además, rehabilitación de un ambiente de cocina.

En Febrero 87, se reportó que no se había concluido todavía. ¿Qué pasos se han tomado en 87 para concluir?

Falta m2 reh. para CE 80132, # aulas reh. para CE 80767. Confusas metas para CE 80985: ¿2 aulas constr o rehab. y 16 rehab? ¿Falta m2 de las 2 aulas o todo incluido en 1550 m2? Revisar # familias.

Falta # familias beneficiadas.

Además, en un C.E., rehabilitación de 2 SS.HH.

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
***** SECTOR TRANSPORTE *****						
CARRET. SAUSAL-SALINAR Y OBRAS COMPL	292.7	1038.2	2383.0		28 x 30	0.64 Km trocha abierta 7.86 Km afirmados (carreteras) 42131.00 M2 afirmados (carreteras) # alcantarillas (carreteras) 60.00 M1 alcantarillado (carreteras) 504.00 M1 cunetas/bermas
CARR. COINA-CHUQUIZONGO-HUARANCHAL	49.9				x	18.70 Km afirmados (carreteras) 65450.00 M2 afirmados (carreteras) 4.70 Km carretera rehabilitada (limpieza)
CONST. PUENTE CEPEDA	119.2	48.8			18 x 7	100.00 M1 cauce de río limpiado/encauzado 0.01 Km trocha abierta 1.00 # puentes vehiculares nuevos 7.00 M1 puentes de concreto 88.20 M2 puentes de concreto
CARR. PICHANDAY-LUCMA-HUARANCHAL	115.3				x	9.10 Km trocha abierta 12.00 Km afirmados (carreteras) 42000.00 M2 afirmados (carreteras)
CARRET. CACHICADAN-HUAMACHUCO	134.3	73.5			x	7.00 Km trocha abierta 20.00 Km afirmados (carreteras) 60000.00 M2 afirmados (carreteras) 2.00 # puentes vehiculares nuevos 9.00 M1 puentes de madera 100.00 M2 puentes de madera
CARRET. SIMBAL-SINSICAP-PARANDAY	204.5	163.3			x	8.00 Km carretera rehabilitada (limpieza) 24.00 Km afirmados (carreteras) 87500.00 M2 afirmados (carreteras) 2500.00 M1 cunetas/bermas
PUENTE ZANGAL (POROTO)		60.0			10 x 4	1.00 # puentes vehiculares rehabil. 8.80 M1 puentes de concreto 38.70 M2 puentes de concreto

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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
PUENTE BAÑOS CHIMU		72.0	770.8		x	1.00 # puentes vehiculares nuevos 39.72 M1 puentes de fierro 246.26 M2 puentes de fierro
CARR. SALPO-PLAZAPAMPA	73.3				25 x 8	5.80 Km trocha abierta
PTE. GILDEMEISTER-TAMBO	22.3				5 x 2	1.00 # puentes vehiculares rehabil. 40.00 M1 puentes de madera 160.00 M2 puentes de madera
CARR. HUANCAY-COMPIN	34.2				37 x 11	2.20 Km afirmados (carreteras) 11000.00 M2 afirmados (carreteras) 13.00 Km carretera rehabilitada (limpieza)
CARR. COCHABAMBA-CHUGAY-CONSUSO	27.4				13 x 6	15.90 Km afirmados (carreteras) 23850.00 M2 afirmados (carreteras) 13000.00 M1 cunetas/bermas 17.20 Km trocha abierta
MEJORAM. PUENTE CHAGUAL	6.9				x	
CARR. HUAMACHUCO-MARCABELITO	22.2				12 x 5	14.10 Km trocha abierta
CARR. SIMBAL-LA CUESTA	56.0				17 x 7	17.80 Km afirmados (carreteras) 20640.00 M2 afirmados (carreteras)
CARR. LONGOTEJA-TRES CRUCES	139.1				x	
ACCESOS PUENTE MACABI	5.5		109.0		15 x 9	1.00 # puentes vehiculares nuevos 10.00 M1 puentes de concreto 83.00 M2 puentes de concreto 2204.00 M3 material de accesos puentes
RECONSTRUCCION DE BERMAS			872.6		18 x 2	32000.00 M1 cunetas/bermas

\*\* NOTAS: \*\*

CARR. SAUSAL-SALINAR Y OBRAS COMPL Quedaron sin lastrar 450 m que son los más críticos.  
 CARR. COINA-CHUQUIZONGO-HUARANCHAL En éste y otros componentes de carreteras falta trab.x meses.  
 CARR. CACHICADAN-HUAMACHUCO Falta terminar de colocar las alcantarillas en la variante.  
 PUENTE BAÑOS CHIMU Falta opinión técnica por parte del MTC.  
 CARR. SALPO-PLAZAPAMPA ¿Cuándo se va a concluir? ¿cuánto va a costar?/No se ha concluido la carretera. Terminación por parte de CORLIB.  
 MEJORAM. PUENTE CHAGUAL Falta EvS/E.  
 CARR. HUAMACHUCO-MARCABELITO ¿Cuándo se va a concluir las obras?/No tiene beneficio porque faltan las alcantarillas. COOPOP Huamachuco ha trabajado en 86 y continúa en 87.  
 CARR. LONGOTEJA-TRES CRUCES Falta EvS/E.  
 RECONSTRUCCION DE BERMAS Hay tramos mal compactados.

\*\*\*\*\* MULTISECTORIAL \*\*\*\*\*

SUPERVISION, CONTROL, LIQUID. DE OBRAS 54.6 318.3 655.0 x

\*\* NOTAS: \*\*

SUPERVISION, CONTROL, LIQUID. DE OBRAS Montos ejecutados en 85 incluye 53.2 del 010 y 265.2 del 020, total 318.4

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REPORTE DE IMPACTO DE COMPONENTES Y SUBCOMPONENTES  
 PROGRAMA DRR  
 07/07/87

NOMBRE	CORDEMOQUEGUA			# FAM BENEF	EMPLEO GEN TRABxMESES	METAS LOGRADAS	
	EJEC. 1984	EJEC. 1985	EJEC. 1986			CANTIDAD	DESCRIPCION DE META
***** SECTOR AGRICULTURA *****							
CONSTR. RESERVOIRIO ESTUQUINA	348.9	464.1	210.0	300	25 x 5	1.00	# de reservorios construidos
						5184.00	M3 volumen de reservorios
						160.00	Has mejorad./rehab. regadas
						3.00	# de muros/ diques/enrocados, etc.
							# de principales obras de arte
						2.00	# estructuras de riego protegidas
						1.00	# de bocat./barajes/captac. constru.
						1.00	# de bocat./baraj./capt. reha/mejor.
						0.10	Km caminos de acceso a obras
CONSTR. RESERVOIRIO ESCAPALAUQUE	99.2			100	40 x 7	1.00	# de reservorios construidos
						60.00	Has no regadas previamente
						1500.00	M3 volumen de reservorios
						0.16	Km canal nuevo construido
						2.00	# de principales obras de arte
CONSTR. RESERV. STA. ROSA - PUQUINA	334.1			250	30 x 5	1.00	# de reservorios construidos
						4000.00	M3 volumen de reservorios
						1.00	# de bocat./barajes/captac. constru.
						1.00	# de principales obras de arte
						120.00	Has mejorad./rehab. regadas
CONSTR. RESERVOIRIO CATA-CATAS	74.9	107.0	207.4		15 x 7	0.01	Km canal nuevo construido
						0.40	M3/s caudal de canales
						1.00	# de reservorios construidos
						1035.00	M3 volumen de reservorios
						3.00	# de principales obras de arte
						250.00	Has no regadas previamente
CONSTR. CANAL LA PASCANA - TORATA	94.9			150	18 x 5	1.50	Km canal nuevo construido
						0.15	M3/s caudal de canales
						50.00	Has mejorad./rehab. regadas
						18.00	# de principales obras de arte
CONSTR. CANAL URINAY	248.3			150	21 x 7	3.48	Km canal revestido/reconstruido
						0.15	M3/s caudal de canales
						100.00	Has mejorad./rehab. regadas
						50.00	# de principales obras de arte
CONSTR. CANAL CARUMAS	126.8	923.6	70.4		10 x 7	2.93	Km canal nuevo construido
						0.35	# de bocat./barajes/captac. constru.
						3.00	# de principales obras de arte
ESTUDIO Y REHAB. CANAL TASSATA	8.7	230.6	62.9		20 x 3	1.00	# de estudios
						950.00	I/. valor de obras (objeto de estud)
						0.36	Km canal nuevo construido
						7.00	Km caminos de acceso a obras
CHACRAS PILOTO RIEGO TECN. (4)	189.7	10.1	88.9	4	15 x 3	4.00	# parcelas y huertas demostrativas
						14.09	Has parcelas y huertas demostrativas
						14.09	Has riego tecnificado (demostr.)
						4.00	# familias benefic. con créditos

(Segue)

NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
						177.28 I/.x1000 total de créditos otorgados 4.00 # agricultores, etc. capacitados
PERF.EQUIP.ELECT. POZO CHIMBA ALTA 1	117.2	63.5	175.8	50	5 x 29	1.00 # pozos tubulares nuevos 40.00 Ml de perforación de pozos 0.02 M3/s caudal que producen los pozos 1.00 # equipos nuevos para pozos 25.00 KW de potencia de equipos de pozos 40.00 Has beneficiadas por pozos
PERF.EQUIP.ELECT. POZO CHIMBA ALTA 2	215.4	178.1	117.2	30	5 x 30	1.00 # pozos tubulares nuevos 54.00 Ml de perforación de pozos 0.02 M3/s caudal que producen los pozos 1.00 # equipos nuevos para pozos 50.00 KW de potencia de equipos de pozos 30.00 Has beneficiadas por pozos
PERF. POZO TUB. CORPANTO 1	49.0				2 x 1	1.00 # pozos tubulares nuevos 25.00 Ml de perforación de pozos
REHAB.EQUIP. POZO CRUZ VERDE	60.0	143.1		20	5 x 20	1.00 # pozos tubulares rehabilitados 34.00 Ml de perforación de pozos 0.03 M3/s caudal que producen los pozos 1.00 # equipos nuevos para pozos 25.00 KW de potencia de equipos de pozos 45.00 Has beneficiadas por pozos
REHAB.EQUIP.ELECT. POZO MONTALVO	40.7	74.7	42.2	15	5 x 20	1.00 # pozos tubulares rehabilitados 72.00 Ml de perforación de pozos 0.03 M3/s caudal que producen los pozos 1.00 # equipos nuevos para pozos 32.00 KW de potencia de equipos de pozos 55.00 Has beneficiadas por pozos
PERF. POZO TUB. SAMEGUA 2	74.4	5.9			2 x 1	1.00 # pozos tubulares nuevos 51.00 Ml de perforación de pozos 0.01 M3/s caudal que producen los pozos
REHAB.EQUIP.ELECT. POZO SENAPA 1	40.7	10.9	33.4	20	4 x 10	1.00 # pozos tubulares rehabilitados 39.00 Ml de perforación de pozos 0.03 M3/s caudal que producen los pozos 1.00 # equipos rehabilitados para pozos 75.00 KW de potencia de equipos de pozos 55.00 Has beneficiadas por pozos
REHAB.EQUIP.ELECT. POZO SENAPA 3	48.2	12.0	244.3	8	5 x 22	1.00 # pozos tubulares rehabilitados 36.50 Ml de perforación de pozos 0.03 M3/s caudal que producen los pozos 1.00 # equipos rehabilitados para pozos 100.00 KW de potencia de equipos de pozos 35.00 Has beneficiadas por pozos
REHAB.EQUIP. POZO VIVERO 1	48.9				4 x 3	1.00 # pozos tubulares rehabilitados 17.00 Ml de perforación de pozos 0.01 M3/s caudal que producen los pozos 1.00 # equipos nuevos para pozos KW de potencia de equipos de pozos

(Sigue)

NOMBRE	EJEC.	EJEC.	EJFC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
						2.50 Has beneficiadas por pozos 2.50 Has parcelas y huertas demostrativas
PERF.EQUIP.ELECT. POZO VIVERO 2	83.7	177.0	125.9	15	5 x 25	1.00 # pozos tubulares nuevos 32.00 Ml de perforación de pozos 0.02 M3/s caudal que producen los pozos 1.00 # equipos nuevos para pozos 50.00 KW de potencia de equipos de pozos 15.00 # familias usando para agua domést. 25.00 Has beneficiadas por pozos
SEMILLEROS Y PLANTONES FRUTICOLAS	311.1	16.3		57	10 x 27	40000.00 Kg semillas distribuidas 49.00 Has semilleros sembrados 1250000.00 Kg semillas producidas 36.00 Has papas (áreas beneficiadas) 13.00 Has granos y panllevar (areas ben.) 57.00 # familias benefic. con créditos 148267.00 I/.x1000 total de créditos otorgados # visitas de campo (capacitación) 2.00 # campañas agrícolas
PROGRAMA DE SANIDAD VEGETAL	137.5	329.2		750	26 x 10	2.00 # campañas de sanidad vegetal 684.00 Has beneficiadas por sanidad vegetal
ABASTECIMIENTO DE INSUMOS AGRICOLAS	50.0			200	2 x 12	43410.00 Kg semillas distribuidas 22500.00 Kg fertilizantes distribuidos 20.00 Has papas (áreas beneficiadas) 70.00 Has granos y panllevar (areas ben.)
ABASTEC. INSUMOS PRODUC. PECUARIA	70.7	15.4		500	4 x 12	400000.00 Kg insumos para animales distribuid. 1.00 # de estudios 632840.00 I/. valor de obras (objeto de estud)
SANIDAD ANIMAL		54.0		300	4 x 8	25585.00 Sanidad animal de vacunos (# cbzs.)

\*\* NOTAS: \*\*

CONSTR. RESERVORIO CATA-CATAS  
CONSTR. CANAL CARUMAS

Riego de áreas de forestación y reforestación.

No tiene beneficio porque no se concluyó. Benef. serían 10 famil y 0.35m3/s caud./C:2/13/87 Prog ramado para 87,constr.minicentral Carumas (399,000 Programa de Inv.Normal) que pondrá en operac ion canal.

ESTUDIO Y REHAB. CANAL TASSATA

No tiene beneficios porque no se usa. Benef. serían 20 familias/C:2/13/87 Se ha considerado en 87, 300,000 en Progr. de Inver. Normal de Microregión Omate para continuar canal.

PERF. POZO TUB. CORPANTO 1

Pozo abandonado por bajo rendimiento.

PERF. POZO TUB. SAMEGUA 2

Pozo abandonado por bajo rendimiento.

REHAB.EQUIP. POZO VIVERO 1

Y:2/3/87 Pozo se usa para parcelas demostr. del MA.

SEMILLEROS Y PLANTONES FRUTICOLAS

Semillas distibuidas corresponde a las que se usaron para los semilleros./Has de papa, etc. son las que se sembrarán con lo producido.

PROGRAMA DE SANIDAD VEGETAL

Hectáreas de frutales.

ABASTEC. INSUMOS PRODUC. PECUARIA

Valos de instalación de una planta de alimentos balanceados.

\*\*\*\*\* SECTOR VIVIENDA \*\*\*\*\*

PERF.EQUIP.ELECT. POZO SAMEGUA 1	107.0	128.9	278.6	6000	5 x 22	1.00 # pozos tubulares nuevos 52.00 Ml de perforación de pozos 57.00 M3/s caudal que producen los pozos 1.00 # equipos nuevos para pozos 75.00 KW de potencia de equipos de pozos (Sigue)
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NOMBRE	EJEC.	EJEC.	EJEC.	# FAM	EMPLEO GEN	METAS LOGRADAS
	1984	1985	1986	BENEF	TRABxMESES	CANTIDAD DESCRIPCION DE META
						6000.00 # familias usando para agua domést.
** NOTAS: **						
PERF.EQUIP.ELECT. POZO SAMEGUA 1						Y:2/14/86 Ha incrementado en 40% el abastecimiento de agua en la ciudad de Moquegua.
***** SECTOR TRANSPORTE *****						
CARR. ACCESO A LOMAS DE ILO	47.1				15 x 7	26.00 Km trocha abierta
CARR. CRUCE CUAJONE-YACANGO-TORATA	479.0	1495.9	1061.3		40 x 6	4.77 Km afirmados (carreteras) 47700.00 M2 afirmados (carreteras) 7.00 # obras de arte princip. de concreto 110.00 M3 de concreto para obras de arte 16.00 M1 muros (contención, etc.)
CARR. CORALAUQUE-ICHUÑA	298.1				30 x 3	2.00 Km afirmados (carreteras) 8000.00 M2 afirmados (carreteras) 2.00 Km trocha abierta
CARR. MOQUEGUA-OMATE	985.7	405.1			30 x 16	1.40 Km afirmados (carreteras) 11480.00 M2 afirmados (carreteras) 58.30 M1 alcantarillado (carreteras) 150.00 M1 muros (contención, etc.) 4.00 # alcantarillas (carreteras)
CARR. MOQUEGUA-PUNO AV. INT.MONTALVO	1215.5	335.9			40 x 8	2.52 Km asfaltados (carreteras) 25590.00 M2 asfaltados (carreteras)
CARR. CARUMAS-CHILLIGUA	449.1	1424.1	163.6		33 x 15	5.60 Km carretera rehabilitada (limpieza) 6.00 # obras de arte princip. de concreto 109.00 M3 de concreto para obras de arte
***** MULTISECTORIAL *****						
LIQUIDACION DE OBRAS			540.5		x	

600