

524-0158-00-4401 *Project*

App 17, Ch 9, 1983

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS PART I

|                             |     |
|-----------------------------|-----|
| 1. FUNDAL SYMBOL            | PAF |
| 2. DOCUMENT REVISION NUMBER | 5   |

COUNTRY CODE: NICARAGUA 5280158004401

PROJECT NUMBER: 524-0158 ACTION YEAR: IA [05]

PROJECT TITLE: Amigos de las Americas Immunization Program

APPROVAL DECISION: [A]  AUTHORIZED  DISAPPROVED  DEAUTHORIZED

EST. PERIOD OF IMPLEMENTATION: 03 12

| A APPROPRIATION | B PRIMARY FUNDING CODE | C PRIMARY TECH. CODE |        | E 1ST FY 78 |        | H 2ND FY 79 |        | K 3RD FY 80 |        |
|-----------------|------------------------|----------------------|--------|-------------|--------|-------------|--------|-------------|--------|
|                 |                        | C GRANT              | D LOAN | F GRANT     | G LOAN | I GRANT     | J LOAN | L GRANT     | M LOAN |
| 101 PUE         | 539 B                  | 510                  |        | 99          |        | 84          |        | 65          |        |
| TOTALS          |                        |                      |        |             |        |             |        |             |        |

| A APPROPRIATION | N 4TH FY |        | O 5TH FY |        | LIFE OF PROJECT |        | P PERCENT OF TOTAL AUTHORIZED | Q GRANT | R LOAN |
|-----------------|----------|--------|----------|--------|-----------------|--------|-------------------------------|---------|--------|
|                 | T GRANT  | U LOAN | V GRANT  | W LOAN | S GRANT         | X LOAN |                               |         |        |
| 101 PUE         |          |        |          |        | 248             |        |                               |         |        |
| TOTALS          |          |        |          |        | 248             |        |                               |         |        |

| A APPROPRIATION | B ALLOTMENT REQUEST NO. | C GRANT | D LOAN |
|-----------------|-------------------------|---------|--------|
| 101 PUE         | 1                       | 99      |        |
| TOTALS          |                         | 99      |        |

13. FUNDS RESERVED FOR ALLOTMENT: *Allocated*

TYPED NAME: *William H. Mudge*

SIGNATURE: *William H. Mudge*

DATE: *5-12-78*

14. SOURCE ORIGIN OF GOODS AND SERVICES:  OOD  941  LOCAL  OTHER

15. FOR AMENDMENTS, NATURE OF CHANGE PROPOSED: *Allocation 424-50-524-00-69-81 unobligated carryover*

Arthur W. Mudge, Director, USAID/Nicaragua

*Arthur W. Mudge*

|                       |                                 |                 |                                 |                       |
|-----------------------|---------------------------------|-----------------|---------------------------------|-----------------------|
| FOR RECIPIAS USE ONLY | 16. AUTHORIZING OFFICIAL SYMBOL | 17. ACTION DATE | 18. ACTION REFERENCE (Optional) | ACTION REFERENCE DATE |
|-----------------------|---------------------------------|-----------------|---------------------------------|-----------------------|

**Project Title: An Immunization Program in Nueva Segovia  
and Madriz, Nicaragua**

**Project Location: Nueva Segovia, Nicaragua  
Madriz, Nicaragua**

**PVO Name and Location: Amigos de las Americas, Inc.,  
5618 Star Lane  
Houston, Texas 77057**

**Central Headquarters: 5618 Star Lane  
Houston, Texas 77057  
(713) 782-5290**

**Contact Person: Melissa Patterson**

**Date of Submission to AID: August, 1977**

## PROJECT PURPOSE AND DESCRIPTION

### Purpose and Description:

The purpose of this project is to stimulate and guide elements of the private sector, on a people to people basis, to improve the health and well being of the rural poor, by assisting private citizens in establishing a local volunteer agency which will deliver appropriate health and social services in cooperation with governmental health agencies and rural community leaders/committees.

Amigos de las Americas will assist in the establishment of a local partner organization which will organize, train and supervise young Nicaraguan volunteers (to be known, tentatively, as "Amigos de las Americas en Nicaragua", Amigos/Nic.) to participate in public health activities which initially will be implemented in Zone IV. Amigos de las Americas has an eight year cooperative, working relationship with the Nicaraguan Ministry of Health (MOH). Approximately 1054 U.S. volunteers have assisted the MOH in various health related activities including the donation and application of over 620,000 immunizations.

The initial public health activities of the Amigos/Nic. will center on

an immunization program, outlined below, which will service the populations of the relatively isolated regions of Madriz and Nueva Segovia (see orange area of attached map), residence of many of the rural poor of Nicaragua (see attached population table.)

Immunizations for polio, DPT, DT, T, and measles, as requested by the Ministry of Health, will be administered using standard, accepted techniques, vaccines and volunteer organizational procedures developed and successfully implemented by the Amigos de las Americas.

Year One will consist of organizing Amigos/Nic., training volunteers, arranging the field immunization program, and supervising a two month field training session in Madriz and Nueva Segovia.

In Year Two the Amigos/Nic. group will be developed with a strong committee of local, adult support for assuming administration, training and fund raising activities. Volunteers will receive advanced training in immunization and first aid and assume roles in a two month immunization campaign in the designated work areas.

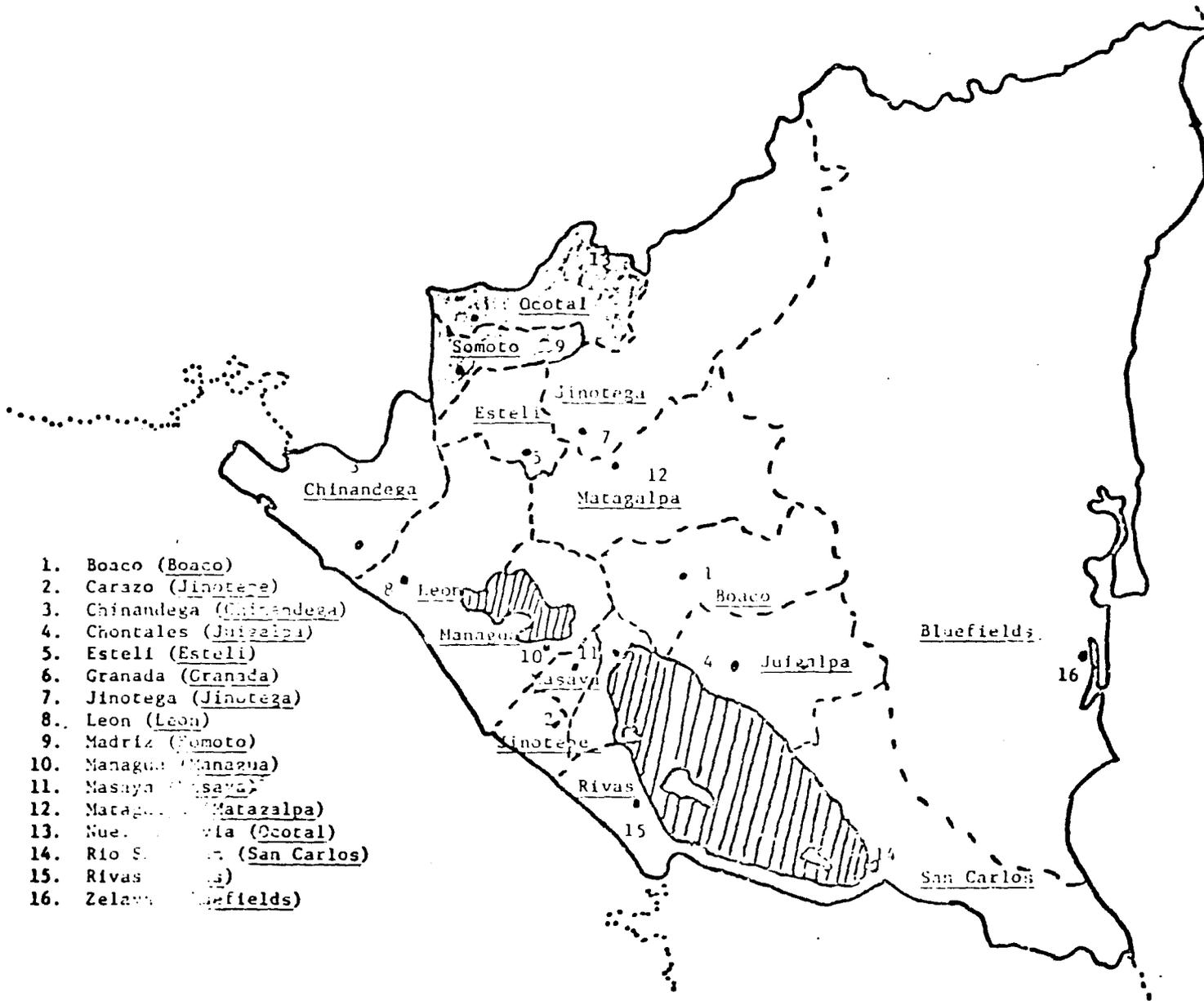
Year Three will further develop organizational techniques for Amigos/Nic. with in-country workshops and materials furnished by Amigos, Inc. New training materials for local use will be available for intensive year round

training and activity - Amigos/Nic. volunteers will be appointed to field staff positions for supervising the two month immunization campaign.

Project Results :

At the conclusion of the project, the group Amigos/Nic. will be a self sustaining voluntary organization significantly contributing to the health and well being of the rural population. Amigos/Nic. will be skilled in training, funding, supervising and continuing field immunization programs in various regions of Nicaragua. The following programmatic goals related to specific immunization levels should be achieved:

| <u>Type of Vaccine</u> | <u>% of Population Immunized</u> |
|------------------------|----------------------------------|
| Polio                  | 95                               |
| Measles                | 80                               |
| DPT                    | 80                               |
| DT                     | 80                               |



NICARAGUA: DEPARTMENTS AND RESPECTIVE CAPITALS

Illustration 71

PROJECT BACKGROUND

Needs in Nicaragua:

42% of all deaths in Nicaragua occur in children under five years of age.

The five leading causes of death, by age group, are listed below:

Under one year of age: 27.7% of all deaths

1. Enteritis and other diarrheal diseases
2. Perinatal Mortality
3. Tetanus
4. Pneumonia
5. Other respiratory diseases (including acute bronchitis, empyema and abscess of lung, pleurisy, pneumoconioses, etc.)

Ages one to four: 14.3% of all deaths

1. Enteritis and diarrheal diseases
2. Measles
3. Other infectious and parasitic diseases (including poliomyelitis, rubella, viral encephalitis, infectious hepatitis and other helminthiasis)
4. Bronchitis, emphysema, and asthma
5. Avitaminosis and other symptoms of malnutrition

Ages 5 to 14: 4.5% of all deaths

1. Accidents other than motor **vehicle**
2. Homicides
3. Anemias
4. Enteric and diarrheal diseases
5. Motor vehicle accidents

The immunization program, described above, addresses three of the leading causes of childhood death --- tetanus, measles and polio.

Table 19  
Number of Deaths by Cause and Age Group

| Groups of causes  | All ages |           | Age groups in years |       |      |       |       |
|---|----------|-----------|---------------------|-------|------|-------|-------|
|   | Number   | Per cent* | Under one           | 1-4   | 5-14 | 15-44 | 45-64 |
| Group F   | 15,938   | 100.0     | 4,420               | 2,281 | 725  | 2,866 | 2,230 |
| Symptoms and ill-defined conditions (780-796)               | 4,213    | 26.4      | 630                 | 648   | 218  | 450   | 530   |
| Total excluding Group F                                     | 11,725   | 100.0     | 3,790               | 1,633 | 507  | 2,356 | 1,700 |
| Group A   | 5,564    | 47.5      | 3,234               | 1,327 | 190  | 365   | 228   |
| A. 1  | 1,021    | 8.7       | 518                 | 284   | 56   | 80    | 47    |
| Tuberculosis (010-019)                                      | 119      | 1.0       | -                   | -     | 5    | 67    | 38    |
| Diphtheria (032)  | 4        | 0.0       | -                   | 3     | 1    | -     | -     |
| Whooping cough (033)  | 203      | 1.7       | 126                 | 65    | 12   | -     | -     |
| Tetanus (037)   | 375      | 3.2       | 286                 | 25    | 16   | 27    | 28    |
| Polio-myelitis (040-043)                                    | 6        | 0.1       | 2                   | 3     | -    | -     | -     |
| Smallpox (050)  | -        | -         | -                   | -     | -    | -     | -     |
| Measles (055)   | 314      | 2.7       | 104                 | 188   | 22   | -     | -     |
| A. 2  | 3,320    | 28.3      | 2,238               | 683   | 85   | 126   | 72    |
| Typhoid fever (001)   | 75       | 0.6       | 18                  | 10    | 5    | 24    | 28    |
| Paratyphoid fever and other salmonella infections (002,003) | 180      | 1.5       | 50                  | 52    | 12   | 31    | 35    |
| Bacillary dysentery and amebiasis (004,006)                 | 31       | 0.3       | 1                   | 6     | 5    | 4     | -     |
| Enteritis and other diarrheal diseases (008, 009)           | 2,764    | 23.6      | 2,032               | 568   | 40   | 34    | 29    |
| Plague (020)  | -        | -         | -                   | -     | -    | -     | -     |
| Yellow fever (060)  | -        | -         | -                   | -     | -    | -     | -     |
| Rabies (071)  | -        | -         | -                   | -     | -    | -     | -     |
| Typhus and other rickettsial diseases (080-083)             | -        | -         | -                   | -     | -    | -     | -     |
| Malaria (084)   | 270      | 2.3       | 137                 | 47    | 23   | 28    | 35    |

\*Percentage of total deaths, excluding Group F, ill defined and unknown causes.

BEST COPY AVAILABLE

B. Project Background

In Syncrisis: The Dynamics of Health, Barbara Holland describes the need for immunization programs:

"The high proportion of deaths from diseases preventable through vaccination (8.7 percent of all known causes of death) reveals the inadequacy of coverage of the immunization program. It is estimated that the number of people immunized against specific diseases is equivalent to no more than 50 percent of the population immediately accessible to health centers. This figure is far below the recommended immunization level of 80 percent of the susceptible population.

Children under five are the most susceptible to fatalities from these diseases. Seventy-eight percent of the deaths from diseases preventable by vaccination occurred in this age group. There is no information on the extent of morbidity of these diseases in children under five, but it is quite high. As discussed in earlier sections, many of the problems revolve around poor nutrition, overcrowded living conditions, and lack of sanitation facilities. In young children, the impact of these problems is increased because of the vulnerability of the body's own defense system.

In spite of the death toll taken by these preventable diseases, the

great majority of people never seek treatment. These infectious diseases represent only 1.9 percent of all hospital discharges and 1.8 percent of all health center consultations. In addition, most of these visits are for long-term illnesses such as tuberculosis. Only 0.4 percent of all hospital discharges and 0.6 percent of all health center consultations were for preventable diseases other than tuberculosis. Yet, there were almost nine times as many deaths from these diseases, (tetanus, whooping cough, and measles) as from tuberculosis.

The primary reason for this discrepancy is that tetanus, whooping cough, and measles develop quickly and have clearly recognizable symptoms. Most families are familiar with these diseases and view them as necessary conditions of childhood. Difficult accessibility to health services leads to delays in seeking medical attention. If and when they do decide to seek medical treatment, the child has either recovered or died.

Although the therapy of these diseases is valuable in preventing their spread and for treating complications, little can be done to alter the course of the diseases themselves. Tetanus toxoid or anti-toxin can be administered for tetanus, but measles and whooping cough must in large measure be allowed to run their course. As a result, preventive measures are invaluable for controlling their incidence. A good

immunization program can do much to minimize their effects in Nicaragua, especially deaths due to these diseases.

Programs:

Immunization programs are administered under the auspices of the Ministry of Public Health through the health centers and mobile health units. The Ministry has recognized the extreme susceptibility of the young population, particularly children under five, and has geared its programs toward this age group.

However, immunization rates continue to be low. The highest level of immunization coverage achieved in 1970 was 54.7 percent of children under five for polio. This level is largely the result of an intensive inoculation campaign following an outbreak of epidemic proportions in 1967. The next highest level of immunization is for tuberculosis, where 30.5 percent of children under 15 years of age have been immunized with BCG vaccine. Through the use of DPT, immunization against diphtheria, whooping cough and tetanus has covered only 17.4 percent of children under five, and there is no tetanus toxoid immunization program for the fertile female population. This group is particularly important in any plan for tetanus immunizations, since most of the tetanus cases are neonatal as a result of septic conditions at birth. Tetanus ranks fifth among leading causes of death in children under one year of age. Since the child will carry the mother's immunity for the first several months after birth, immunizing mothers prior to delivery would

do much to lower this death rate. Tetanus toxoid can be administered safely during pregnancy at minimal cost.

The most obvious deficiency in the program, however, is the fact that there is no program of immunization for measles. During the period from 1968 to 1970, there were 364,000 children under five but no immunizations given. This disease is the second leading cause of death in children between one and four years of age and increases host susceptibility to other diseases. Measles vaccine can be safely administered after the infant reaches a sufficient level of development to tolerate the vaccine, at about nine months of age."