



## Memorandum

PD-AAL-917  
15N 14788  
9326542/53

Date June 8, 1982

From Anthony A. Hudgins, M.A.S., Public Health Analyst and Leo Morris, Ph.D., Chief,  
Program Evaluation Branch (PEB), Family Planning Evaluation Division (FPED)  
Center for Health Promotion and Education (CHPE)

Subject Foreign Trip Report (AID/RSSA): Dominican Republic, March 28-April 9, 1982

To William H. Foege, M.D.  
Director, Centers for Disease Control (CDC)  
Through: Horace G. Ogden  
Director (CHPE) *HGO*

## SUMMARY

- I. PLACES, DATES, AND PURPOSE OF TRAVEL
  - II. PRINCIPAL CONTACTS
  - III. BACKGROUND
  - IV. EVALUATION OF LOGISTICS SYSTEM
    - A. Current Status
    - B. Response to Recommendations of February 1981
  - V. COMPARISON OF SERVICE STATISTICS WITH OTHER DATA
  - VI. PREPARATION OF ANNUAL BUDGET SUBMISSION (ABS) TABLES
  - VII. RECOMMENDATIONS--Logistics System
  - VIII. PROPOSED CONTRACEPTIVE PREVALENCE SURVEY
- TABLES 1-4  
APPENDICES 1-4

## SUMMARY

From March 28 until April 9, 1982, Anthony A. Hudgins of the Family Planning Evaluation Division (FPED)/CDC, provided technical assistance to the Ministry of Health in the Dominican Republic in logistics system management. As part of the consultation, recommendations made by CDC/FPED consultants in February of 1981 were reviewed. While most recommendations have been implemented, the system was found to have continuing problems in two areas, and new recommendations were made: (a) a format for quarterly reporting to the Director's Office of the National Council on Population (CONAPOFA) of the status of the logistics system was designed, and (b) advice, including an instructive diagram on warehouse maintenance, was given, particularly for use in regional warehouses.

Earlier consultations had found that the principal problem with CONAPOFA's logistics system was getting commodities out to regional warehouses and local distribution points in sufficient quantities to avoid recurrent stockouts at the distribution points. With an effective distribution system now in place, the problem has now become inconsistent receipt of supplies from outside the country. In order to resolve this problem, contacts with Family Planning International Assistance (FPIA) were initiated on behalf of CONAPOFA with the intention that FPIA become a regular donor of contraceptive commodities. FPIA has subsequently contacted CONAPOFA through the USAID Mission and sent copies of the NARF/2 form which agencies use to request commodities.

Future commodity needs for several years were forecast using data from three sources: (a) CONAPOFA user statistics, (b) CONAPOFA contraceptive distribution figures, and (c) results of the 1975 World Fertility Survey (WFS), and preliminary results of the 1980 WFS. The AID Annual Budget Submission tables were completed based on these forecasts. Results of this analysis also indicated that active users (especially of pills), as in other countries, have been over-reported in the user statistics. In addition, a 3-day consultation was provided by Leo Morris, in collaboration with John Novak of Westinghouse Health Systems, on planning a proposed 1983 Contraceptive Prevalence Survey.

#### I. PLACES, DATES, AND PURPOSE OF TRAVEL

Dominican Republic, March 28-April 9, 1982, at the request of USAID/Dominican Republic and AID/S&T/POP/FPSD, to provide technical assistance to the Consejo Nacional de Poblacion y Familia (CONAPOFA) in logistics management. This consultation was in followup to a February 1981 consultation (see CDC/RSSA Trip Report dated May 27, 1981) and was provided by Anthony A. Hudgins of the Program Evaluation Branch, FPED/CHPE/CDC. In addition, a 3-day consultation was provided by Leo Morris, in collaboration with John Novak of Westinghouse Health Systems, to CONAPOFA on planning the proposed 1983 Contraceptive Prevalence Survey. This travel was in accordance with the Resource Support Services Agreement (RSSA) between the Office of Population, AID, and CDC/CHPE/FPED.

#### II. PRINCIPAL CONTACTS

##### A. USAID/Dominican Republic

1. Dr. Oscar Rivera, Director, Health and Nutrition Office
2. Mr. John Thomas, Health and Nutrition Office
3. Ms. Dulce Jimenez, Health and Nutrition Office

##### B. Consejo Nacional de Poblacion y Familia (CONAPOFA)

1. Lic. Fernando Mangual, Executive Director
2. Lic. Manuel Varona, Administrative Supervisor
3. Lic. Leovigildo Baez, Director, Evaluation Division, Department of Research and Evaluation
4. Lic. Quintina Reyes, Director, Research Division, Department of Research and Education
5. Dr. Ramon Portes Carrasco, Chief, Medical Department
6. Sr. Robin Castillo, Chief, Central Warehouse
7. Dr. Antonio Martinez Abreu, Regional Supervisor for Maternal-Infant Health and Family Planning, Region IV
8. Dr. Duarte de Jesus Guarero, Medical Director, Region III

##### C. Atencion Rural Dispersas (ARD); formerly Servicios Basicos de Salud (SSD) or (SBS), Secretary of Health and Social Assistance (SESPAS)

1. Sr. Jose Matos, Region IV
2. Sra. Leoncia de Jesus Felix, Area Supervisor, Region IV

D. Other

1. Mr. John Novak, Contraceptive Prevalence Survey Project, Westinghouse Health Systems
2. Lic. Nelson Ramirez, Demographer, PROFAMILIA
3. Lic. Danilo Duarte, National Statistics Office (Census Division)

III. BACKGROUND

The National Council for Population and the Family (CONAPOFA), an agency of the Secretary of Health and Social Assistance (SESPAS), was created by presidential decree in 1968 and is the highest authority in the Dominican Republic with regard to family planning and demographic research. In addition to its clinical program, CONAPOFA coordinates with other institutions in the country with family planning programs: (1) the training of personnel to provide services, including sterilizations, (2) developing information and education programs, and/or (3) providing equipment and contraceptive supplies. These programs include the Asociacion Dominicana Pro-Bienestar de la Familia (PROFAMILIA), the Armed Forces, and Atencion Rural Dispersas (ARD), also an agency of SESPAS. PROFAMILIA is the only program which does not receive its contraceptive supplies from CONAPOFA. Since CONAPOFA and ARD are agencies of SESPAS, this report will focus primarily on these agencies.

As of December 1981, CONAPOFA provided family planning services in 314 SESPAS clinics throughout the country, representing an increase of 69 service outlets in the last 2-year period (Table 1). The ARD program, which has approximately 5,300 volunteer health promoters working largely in rural communities, is designed to bring basic health services, including family planning, to Dominican households (See Table 2).

In Table 3, active users by program, as reported by CONAPOFA's Evaluation Unit, are presented. In terms of active users, CONAPOFA's clinical program is the largest in the country; in December 1981 CONAPOFA accounted for 71 percent of all reported active users. The ARD program reported 34,000 active users or 20 percent of the total. Comparisons of reported active users with other available data will be made later in the report. Not shown in Table 3 is the number of sterilizations reported to CONAPOFA by all participating programs (public and private). From January 1977 through December 1981, 62,900 female sterilization procedures were reported to have been performed.

The percent distribution of active users by method (non-permanent methods) within each program is presented in Table 4. As this table shows, oral contraceptives are the non-permanent method of choice of the majority of active users, regardless of program affiliation.

IV. EVALUATION OF THE CONAPOFA CONTRACEPTIVE LOGISTICS SYSTEM

A. Current Status

CONAPOFA has developed a system to move family planning supplies from central storage through intermediate (regional) warehouses to distribution points (hospitales, sub-centros, and clinicas rurales) and to the ARD program on a

regular basis. With the transportation available, the system is capable of supplying the six regional warehouses in approximately 10 days. However, more time is required for the regional warehouses to supply the distribution points. There are procedures for ordering, invoicing, and accounting for supplies.

The problems of the CONAPOFA logistics system have changed considerably over the past 2 years. The initial FPED/CDC consultation in February 1980 found large stocks on hand in disorganized central warehouses, inadequate stocks at low levels, poor supervision throughout the system, and little accountability in reporting movement of supplies. In February of 1981 during a second consultation, FPED/CDC advisors found that regional warehouses and distribution points had some improvement in accountability and reporting and much improved supervision. Now the main problem is not within the distribution system but in obtaining adequate supplies from outside the country.

There is no bilateral agreement with the Dominican Republic (and USAID/Santo Domingo feels that pursuing such an agreement is politically inappropriate); so the agency has always had to depend on a mixture of international donors who have been able to send commodities only on a sporadic basis. This uncertainty of supply led to a stock-out of condoms at the central warehouse in the fourth quarter of 1981 and periodic stock-outs of spermicidal foam and vaginal tablets. The stock-out of condoms was resolved by a shipment of 2.4 million units (approximately a 1-year supply) received from the Pathfinder Fund on December 27, 1981. CONAPOFA apparently avoided stock-outs at distribution points by careful shifts of supplies between regional warehouses. The only other shipment received in 1981 was a small shipment of contraceptive foam from the Population Council. During the 1980 consultation, large supplies of oral contraceptives were found on hand. Since then these stocks have been used but are still in adequate supply for 1982.

During this consultation, while the central warehouse was found to be well maintained, two of the three regional warehouses visited had some storage problems--boxes stacked directly on the floor and against the wall.

There were complaints by USAID/DR that quarterly reports on the status of the logistics system were not being received on a timely basis. Although the Administrative Supervisor of the logistics system has been forwarding the reports to the Evaluation Division on time, they were held up to be joined with user data before being forwarded to the USAID Office. The Director of the Evaluation Division stated that these delays occurred because 1981 was a particularly bad year for the data processing budget, since over \$30,000 had not been received for WFS processing as expected. However, he stated that future reports should not be delayed.

#### B. Response to Recommendations Made in February 1981

Part of our task was to follow up on recommendations made by the CDC team during a followup evaluation of the logistics system in February of 1981. Major recommendations, along with the current status of each, are as follows:

Recommendation

1. On August 26, 1980, 13,250,000 cycles of oral contraceptives were requested, amounting to 3 years' supply. CONAPOFA should make arrangements for 900 square feet of additional warehouse space or arrange to direct part of this shipment to another country.

Status

The shipment was diverted, and CONAPOFA used supplies of oral contraceptives in-country, ending the year (1981) with approximately a full year's supply remaining in the central warehouse. Unless supply sources are used up, the agency will not have full supplies at the end of 1982.

Recommendation:

2. Inventory Control Cards (ICCs) need to be in use at every regional warehouse. Central and/or regional supervisors should check the ICCs for currency and accuracy during supervisory visits.

Status

All three of the regional warehouses visited, the Metropolitan Region (Santo Domingo), Region III and Region IV, had ICC books, and Regional staff understood their use. The ICC book at the Metropolitan warehouse was not current, but requisition/invoice forms were arranged and ready for entry into the ICC book to bring it current. Regional staff had the ICC book ready for inspection by the logistics system supervisor, suggesting a pattern of regular supervision which before did not exist.

Recommendation

3. Each regional warehouse should report distribution and balances of supplies on a quarterly basis.

Status

The form recommended in 1981 to report this data was found in use, and regions appeared to be reporting at the end of each quarter without delay.

Recommendation

4. Using information in the regional reports, a quarterly supply report should be prepared at the central level.

Status

A quarterly report of total inventory and distribution from regional offices is prepared for USAID/Santo Domingo. However, these reports do not contain necessary data for program management and assessment of the supply situation as does the format shown in Appendix 1. This format was recommended again and discussed with the individual in charge of the logistics system.

Recommendation

5. The system currently operates with a 4-month maximum and 1-month minimum stock at the regional warehouses. Using a 6-month maximum and 2-month minimum would mean only three deliveries per year (saving gasoline) and a larger safety stock.

Status

The agency has maintained the quarterly delivery and the 4-month/1-month maximum/minimum system for several reasons:

- (a) The entire agency is used to working a quarterly basis;
- (b) AID requires quarterly reporting;
- (c) distances are small and, therefore, delivery of supplies is not difficult, and
- (d) storage space is limited in some Regions.

Since this recommendation is not absolutely necessary for smooth functioning of the logistics system and there is strong reluctance to adapt it, it was not recommended again.

Recommendation

6. The CONAPOFA Department of Research and Evaluation can prepare user figures by Region (and, in fact, by clinic). In one of the Regions, it was suggested that information of this type be sent to the regional office so that requisitions could be compared to trends in user demand. It is also good policy to feed back summary statistics to the lower level in the organization. We therefore recommended that such information be routinely sent to the regions.

Status

The Regional Offices now routinely receive this information. The Medical Director in Region IV affirmed its usefulness at his level of management.

Recommendation

7. Cooperation in the distribution of supplies within the ARD program should be increased and formalized.

Status

The agency has gone back to specific recommendations developed by CDC in 1980 (see the recommended joint supply delivery system in Appendix 2) as a basis for new discussions with ARD staff.

Recommendation

8. We recommended that CONAPOFA carry out a Contraceptive Prevalence Survey (CPS) to obtain more program management information. (The WFS had been conducted in 1975 with a second round in 1980.)

Status

Negotiations have been carried out with Westinghouse Health Systems (WHS) and consultation supplied by both WHS and FPED/CDC, so that the planning phase of a CPS can be completed in 1982 and the survey conducted in early 1983, following the hurricane and Christmas seasons.

V. COMPARISON OF SERVICE STATISTICS WITH OTHER DATA

CONAPOFA service statistics have been used in the past as a basis for projecting future needs of contraceptive commodities. However, studies have shown that service statistics generally over-estimate the actual prevalence in

the use of non-permanent contraceptives\*. Unpublished preliminary data from the 1980 World Fertility Survey (WFS) in the Dominican Republic, and historical contraceptive distribution data from CONAPOFA have allowed us to make comparisons to the reported user data and develop revised projections of future needs.

In 1975, the first WFS showed that 33.4 percent of currently married women (CMW) were using contraceptives. The preliminary WFS data from the second survey in 1980 estimates a total contraceptive prevalence of 43.3 percent (of CMW 15-49 years of age), but at the time of this report provided no estimates by method for current use. However, using the 1980 WFS "ever used" figure for sterilization (14.2 percent of all women 15-49) and marital status data (shown below in Table A), we were able to estimate use by method as shown in Table B on page 8.

TABLE A

Percent Distribution of Interviewed Women by Marital Status  
Preliminary Data, WFS-1980  
Dominican Republic

Never Married	29.4%
Married (Legal Union)	21.2%
Consensual Union	34.6%
Widowed	1.1%
Divorced or Separated	13.6%
	<u>100.0%</u>

\*Morris L, Anderson JE. The use of contraceptive prevalence survey data to evaluate family planning program service statistics; and Williamson NE. Who is practicing family planning? Comparing survey and clinic reports in Bohol, Philippines. In: Hermalin AI, Entwisle B, eds. The Role of Surveys in the Analysis of Family Planning Programs: Proceedings of a Seminar held in Bogota (Colombia) 28-31 October 1980. International Union for the Scientific Study of Population; Ordina Editions, Liege, Belgium, 1982: 149-170.

TABLE B

Estimates of Contraceptive Prevalence by Method in 1980  
Using Available Unpublished Data, Currently Married Women 15-49  
Dominican Republic

<u>Method</u>	<u>WFS-75</u> <u>(%)</u>	<u>WFS-80</u> <u>(%)</u>	<u>Estimates-1980</u> <u>(%)</u>
Female Sterilization	13.6	-	22.7
Pill	7.9	-	8.4
Withdrawal	3.7	-	3.7
IUD	2.8	-	2.9
Foam	1.6	-	1.7
Condom	1.5	-	1.6
Rhythm	1.2	-	1.2
Douche	0.6	-	0.6
Other	0.6	-	0.3
Injection	0.2	-	0.2
TOTAL	33.4	43.3	43.3

The final column in Table B (Estimates-1980) was calculated using the following assumptions:

1. We do know that 14.2 percent of all women 15-44 had had a surgical contraception. We assumed that sterilization was not used by single or widowed women and was half as prevalent among separated/divorced women (13.6 percent of all women) compared with women currently in unions (55.8 percent of all women). Therefore, if 14.2% of all women use sterilization, then 22.7 percent of women in union would be using sterilization ( $.558 + 1/2 (.136) = 62.6$  and  $14.2 \div 62.6 = .227$ ). This represents an increase of 9.1 percentage points since 1975, representing almost all of the overall increase of all contraceptive use of 9.9 percentage points\*.

\*This same pattern has been seen in Panama (1976-1979) and El Salvador (1975-1978) where at least two-thirds of the increase in contraceptive use was due to the increase in surgical contraception. See Monteith RS, Anderson JE, Mascarin F, Morris L; Contraceptive use and fertility in the Republic of Panama; Studies in Family Planning, V 12, no. 10; October 1981; and Morris L, Mendoza AM, et al; The use of contraceptive prevalence surveys to evaluate the family planning program in El Salvador; presented at the APHA annual meeting, Nov 4-8, 1979.

2. The balance of the increase (0.8%) was distributed proportionately over the other most used modern methods:

	1975 <u>(%)</u>	Estimated <u>Change</u>	1980 Estimated <u>(%)</u>
Pill	7.9	+0.5	8.4
IUD	2.8	+0.1	2.9
Foam	1.6	+0.1	1.7
Condom	1.5	+0.1	1.6

Using the prevalence estimates and an estimate of 663,000 Married Women of Reproductive Age (MWRA), the estimated number of women currently using contraception (1980) was calculated as shown in Table C below.

TABLE C

Estimated Number of Married Women 15-44  
Using Supply Methods of Contraception  
Dominican Republic, 1980

<u>Method</u>	<u>Percent Using</u>	<u>Estimated Number of Women</u>
Sterilization	22.7	150,500
Pill	8.4	55,700
IUD	2.9	19,200
Foam	1.7	11,300
Condom	1.6	10,600
	<u>37.3</u>	<u>247,300</u>

The above results were then compared to estimates prepared by CONAPOFA of women using all organized family planning programs in mid-1981 (Table D):

TABLE D

Comparison of CONAPOFA Active User Figures  
With User Estimates Based on 1980 WFS  
Dominican Republic

<u>Method</u>	<u>Users Reported by CONAPOFA</u>	<u>Estimated Users Based on WFS</u>
Pill	94,800	55,700
IUD	21,900	19,200
Sterilization	62,900	150,500
Others	43,500*	21,900*
	<u>223,100</u>	<u>247,300</u>

\*Foam, condom, or vaginal tablets.

The estimated number of users in Table D also reflect private sector distribution of contraceptives; so the figures should be viewed as an upper limit of public sector users. In fact, in 1975 approximately 25 percent of women using oral contraceptives obtained their contraceptives from the private sector. If this is the case now, the actual number of users in the public sector could be as low as 42,000. CONAPOFA figures show much larger numbers of users than estimates for pill users and users of "Other" methods. This may be partially caused by women not in union using these methods. However, most of the difference is probably due to delays in eliminating women from the active user count as they drop out of the program. On the other hand, sterilization users are under-reported as many women have obviously used sterilization prior to 1977 when reporting of sterilization began. Both these results are consistent with service statistics problems reported in the studies referenced earlier.

Another comparison was attempted by using CONAPOFA's contraceptive distribution data for orals and condoms to estimate Couple Years of Protection (CYP). Assuming 13 cycles of orals per user-year and 100 condoms per user-year, Table E was prepared. Of course, this assumes that all contraceptives delivered were issued to users.

TABLE E

Comparison of Reported Users With  
Calendar Years of Protection (CYP)

	1981 Reported Users	Distribution from Central Warehouse	1980 CYP Years	Distribution From Central Warehouse	1981 CYP Years
Orals	94,800	949,200	73,000	501,590	38,000
Condoms	43,500**	2,987,640	29,876	1,216,512*	12,165

Even with the assumption that all contraceptives distributed were issued to users, it is obvious that active users are substantially over-estimated in the service statistics system. The large variations in distribution from year to year can be explained. As discussed previously, because of large inventories of both condoms and pills in the central warehouse during 1980, large quantities of supplies were "pushed" out to Regional warehouses and were in turn "pushed" out to clinics. This resulted in higher distribution figures for 1980, and lower figures for 1981 when excess stocks in clinics were being

\*Out of stock part of year

\*\*Includes foam and vaginal tablet users

used, and there was a stock-out (at central level and some Regional warehouses) of condoms. Actual figures for 1980 and 1981 were probably somewhere between the figures shown, and a simple average would yield approximately a potential of 56,000 pill users and 21,000 condom users. This figure for pill users corresponds closely with our estimated figures from the 1980 survey. The figure for condoms is still much higher than the survey figure because many condoms may be supplied to single men or women.

#### VI. PREPARATION OF ANNUAL BUDGET SUBMISSION (ABS) TABLES

In preparing the ABS "Program Analysis of Oral Contraceptive and Condom Supplies," the above CYP figures were assumed for 1981: 60,000 users of oral contraceptives and 21,000 users of condoms, yielding a coverage of MWRA of 9.0 percent and 3.2 percent, respectively. With the growing popularity of female sterilization in this country, the level of coverage by temporary methods is expected to remain relatively constant, and use will, therefore, increase only with increases of MWRA and/or bringing more younger women into the program who want to space rather than limit their births.

In last year's ABS an in-country stock of 1.333 times the following year's use was used in the calculations (1 year at central level and 4 months' supply at regional level). Since CONAPOFA has proved to be more effective in distributing commodities, only 1-year's supply in-country is now needed and is assumed in the calculations.

While CONAPOFA had reported no condoms on hand at the end of 1981, they received a shipment of 2.4 million units on December 27, 1981. This inventory was used as a starting point for calculating 1982 and future needs.

In reporting the number of clinics providing services, a "full-service clinic" was considered to be a clinic which provided all temporary methods of contraception including IUD insertions. The clinics included hospitals (which also provided surgical sterilization), urban clinics, and approximately 15 rural clinics. Not included in the figures as distribution points are 5,280 part-time health promoters and distributors, who are shown in the "Personnel Section."

#### VII. RECOMMENDATIONS--LOGISTICS SYSTEM

1. The main continuing problem facing the logistics system is the lack of adequate and timely supplies of contraceptive commodities from the international donor agencies. We recommended that CONAPOFA establish a relationship with an international donor that would result in regular shipments of commodities. After returning to the United States, FPIA/Miami was contacted and the problem discussed. FPIA has subsequently sent CONAPOFA information regarding their commodities program as well as their "MARF/2" form to be used for requesting commodities. Mr. John Thomas, Health and Population Office, USAID/DR, has been alerted to the need to assure that CONAPOFA responds.

2. Pursuant to the above recommendation, there is a need for forecasting of future contraceptive needs, not only for orals and condoms but other methods as well. Forecasts for the next 3 years are shown in the following table:

TABLE F  
Contraceptive Commodity Needs of CONAPOFA  
1982-1984 (Units)

<u>Method</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
Orals	600,000	833,000	852,000
Condoms	1,965,000	2,278,000	2,330,000
Foam	50,000	52,000	55,000
Vaginal Tablets	50,000	52,000	55,000
"Copper T" IUDs	10,000	10,500	11,000

These need figures are designed to ensure that a year's supply will be on hand at the end of each year. The assumptions used for orals and condoms are the same as used in preparing the ABS. The figures for other methods were determined using a variety of assumptions and are somewhat more speculative. It should be remembered that these are forecasts and all the figures need to be reviewed and revised on at least an annual basis, taking into account the distribution of commodities during the previous year.

3. In 1981 we recommended several forms/formats for reporting supply information from the regional level to the central level of CONAPOFA and for preparing summary reports within the agency. The reporting forms are now being used; however, the summary reports are still not in use. These summary formats were again discussed with the supervisor of the logistics system and recommended once again (Appendix 1).
4. Two of regional warehouses visited had improper storage. Copies of a diagram of proper warehousing techniques in Spanish were left for distribution to the warehouses (see Appendix 3).

#### VIII. PROPOSED CONTRACEPTIVE PREVALENCE SURVEY

Following discussions with local officials, the following principal objectives were agreed upon, and the survey was entitled, "Encuesta de Planificacion Familiar y Salud Materno Infantil en la Republica Dominicana." This survey would measure changes in fertility, contraceptive use, and other program variables, since the 1980 second round of the World Fertility Survey.

1. Estimation of the crude birth rate and total fertility rate in each of two strata: urban and rural areas.
2. Estimate knowledge, past use, and current use of contraception in all three strata by age group, educational level, marital status, and other demographic variables.

3. For women currently using contraception, describe the method and source of contraception. For women not currently using contraception, investigate the reason why they are not using contraception. And for those women who want to space or limit their families, determine what method of contraception they prefer, whether they know where to go for contraceptive services, and their knowledge of availability of those services.
4. Define the percentage of women 15-44 years of age that are in need of contraception (not currently pregnant and not desiring pregnancy but not using contraception for reasons not related to sexual activity or fecundity) and the proportion of women with unwanted pregnancy, by parity.
5. The proportion of women who do not desire any more children and would consider surgical contraception as a permanent method of limiting fertility will be determined as well as the proportion of women that would use contraceptives distributed through a community-based distribution program.
6. Determine the proportion of women with a history of abortion, including the percentage of women needing medical care and hospitalization following abortion.
7. Determine the proportion of ever-pregnant women who have used maternal-child health services, and document the place of birth for their last child.
8. Measure breastfeeding prevalence and duration.
9. Determine the immunization status of children less than 5 years of age.

Specifications of the survey include:

1. An independent multi-stage probability sample of approximately 3,000 households in each of two strata: urban areas and rural areas--a total of 6,000 households. It is estimated that 3,000 households are necessary in order to obtain completed interviews with 2,000 women 15-44 years of age in each strata. With 2,000 women of fertile age, the 95 percent confidence interval, including design effect, will be plus or minus 3 percent for the variable, actual use of contraception. For the entire country, the confidence interval, including design effect, will be plus or minus 5 percent.

During this visit a draft questionnaire, based on the instruments used in Westinghouse surveys and the Family Planning/Maternal-Child Health Survey conducted in Southern Brazil in late 1981, was discussed. The proposed timetable for the survey is shown below. Preliminary discussions included the possibility that field work would be carried out during the latter part of 1982. However, field work has been scheduled for January through March 1983 because the rainy season will be over, facilitating field work in rural areas, and data processing of the 1980 WFS will be in progress until the end of the year. A preliminary budget for the survey came to \$96,961.

The timetable is as follows:

<u>Month (82/83)</u>	<u>Activities</u>
March	1) Preliminary discussions with Oficina de Estadística Nacional (ONE) concerning sampling frame. 2) Discussion of draft questionnaire, preliminary budget and work plan with CONAPOFA.
May/June	1) Sample selection (first stage). 2) Development of draft questionnaire. 3) Final budget.
August	1) Sample selection (second stage). 2) Questionnaire revision.
October	1) Pretest questionnaire. 2) Write interviewer and coding manuals.
November	1) Print questionnaire. 2) Plan field work.
January/March	Training and field work.
February/April	Coding.
April/May	Key punching.
June	Editing.
July/August	Tabulations and data analysis.
September	Report.

TABLE 1

Number of CONAPOFA Family Planning Clinics  
by Health Region  
December 1979 and 1981

<u>Health Region</u>	<u>December 1979</u>	<u>December 1981</u>	<u>% Increase 1979-81</u>
Metropolitan	42	43	
I	26	37	
II	69	80	
III	38	52	
IV	29	37	
V	<u>41</u>	<u>65</u>	
TOTAL	245	314	

TABLE 2

ARD Personnel by Type of Personnel and Health Region  
December 1981

<u>Health Region</u>	<u>Supervisors</u>	<u>Promoters</u>	<u>Supervisor to Promoter Ratio</u>
Metropolitan	65	691	1:10.6
I	76	830	1:10.9
II	120	1,313	1:10.4
III	160	1,515	1:09.5
IV	33	337	1:10.2
V	<u>55</u>	<u>594</u>	<u>1:10.4</u>
	509	5,280	1:10.4

TABLE 3

Reported Number of Active Users by Program  
(Non-permanent Methods)  
Dominican Republic, 1976-1981

Month & Year	Program*					TOTAL
	CONAPOFA	SSID	ARD	ADPBF	FENAC	
December 1976	93,173	9,642	-	-	-	102,812
December 1977	103,501	8,550	6,304	9,769	-	128,124
December 1978	103,703	9,533	11,873	10,600	3,549	139,258
August 1979	105,400	11,403	13,837	13,371	-	144,011
October 1980	106,436	-	32,754	14,494	-	153,684
December 1981	115,912	-	34,000**	14,137	-	164,049

\*NOTE: CONAPOFA - Consejo Nacional de Poblacion y Familia  
 SSID - Servicio Social de Iglesias Dominicanas (No longer in operation)  
 ARD - Atencion Rural Dispersas, formerly Servicios Basicos de Salud (SBS)  
 ADPBF - Asociacion Dominicana Pro-Bienstar de la Familia (PROFAMILIA)  
 FENAC - Federacion Nacional De Campesinas (No longer in operation)

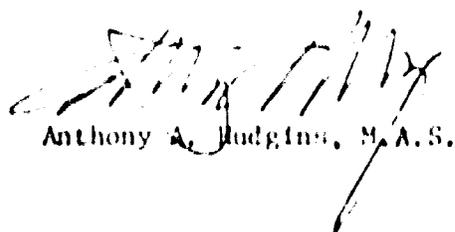
\*\*July, 1981

TABLE 4

Percent Distribution of Active Users  
by Method for Each Program, 1981

Method	Program		
	CONAPOFA	ARD	ADPBF
Orals	57.0	57.0	94.5
IUD	18.4	-	-
Condoms	11.0	-	-
Foam	9.2	-	-
Other*	4.4	43.0	6.5
TOTAL	100.0	100.0	100.0

\*Other includes foam, cream, jellies and vaginal tablets; for the ADPBF and ARD programs, condoms are also included.

  
Anthony A. Judgins, M.A.S.

INFORME DE SUMINISTRO TRIMESTRAL

Nivel Central

Fin de Trimestre \_\_\_\_\_, 19\_\_

Anticonceptivos Distribuidos por Cada Región

<u>Regiones</u>	<u>Píldoras</u> <u>(Cajas de 60)</u>	<u>Preservativos</u> <u>(Craetas)</u>	<u>DIU's Espuma</u>	<u>Tabletas</u>
I				
II				
III				
IV				
V				
Metro				
Total				

Cantidades de Suministros del Nivel Central

	<u>Balance al final</u> <u>Trimestre (a)</u>	<u>Distribuidos</u> <u>Trimestra(b)</u>	<u>Meses</u> <u>(a)x3</u> <u>(b)</u>
Píldoras (cajas de 60)			
Preservativos (Gr.)			
etc.			
etc.			
etc.			

## Cambio de Distribución\_

	(1) Distribuidos Trimestre Pasado	(2) Distribuidos Este Trimestre	(3) Porcentaje Cambio*	Notas
Píldoras				
Condomes				
DIU's				
Tabletas				
Espuma				
etc..				

\*  $\frac{\text{Columna 2} - \text{Columna 1}}{\text{Columna 1}} \times 100 = \text{Porcentaje Cambio}$

ACCION NECESITADO AHORA:

ACCION NECESITADO POR EL AÑO QUE VIENE:

EXHIBIT 4

EXISTING PARALELL SUPPLY DELIVERY SYSTEMS

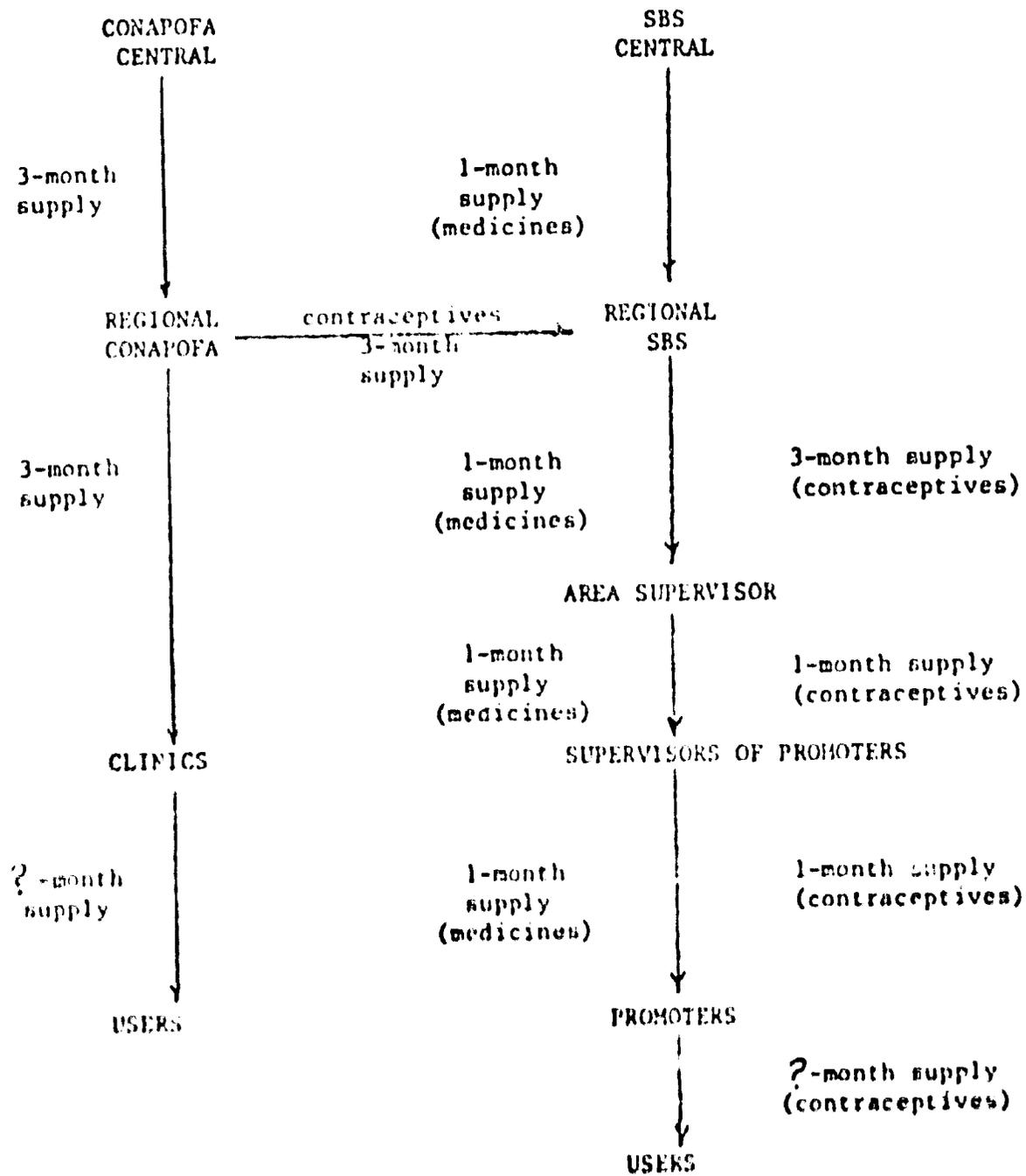
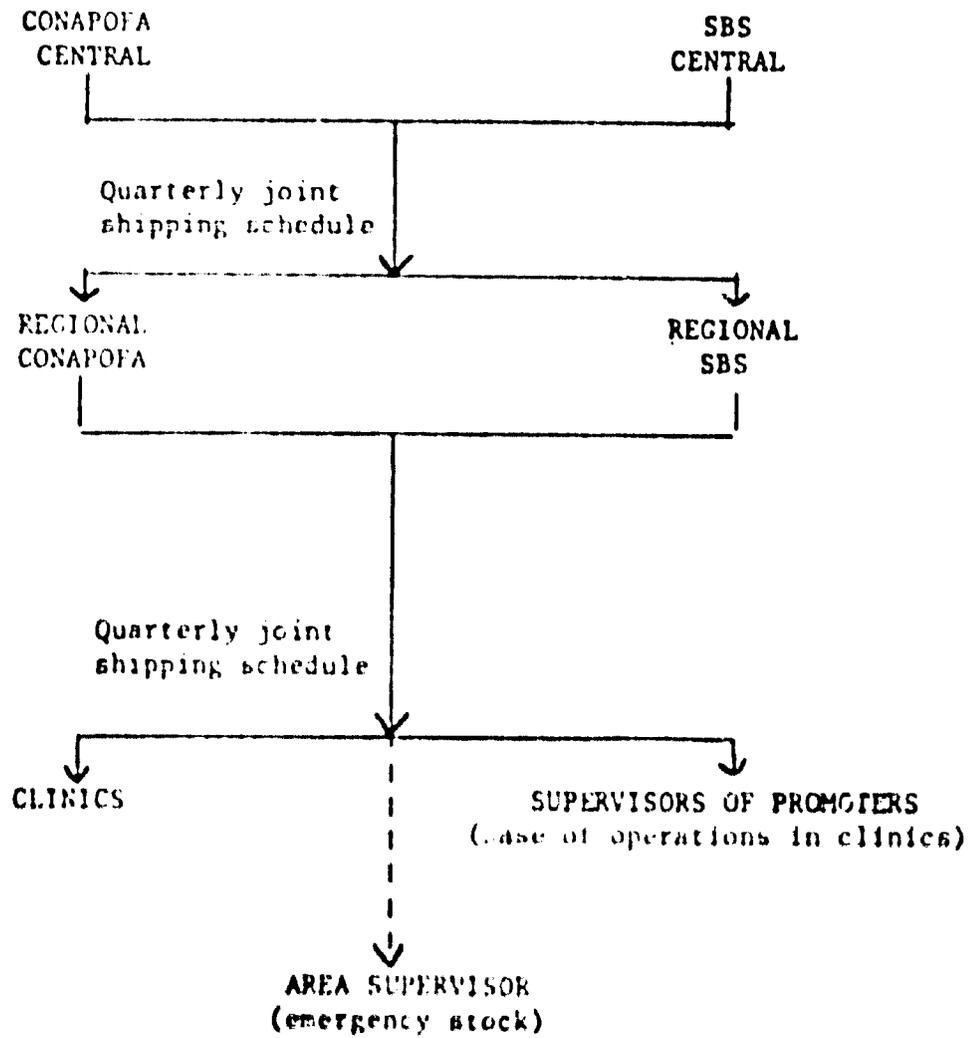
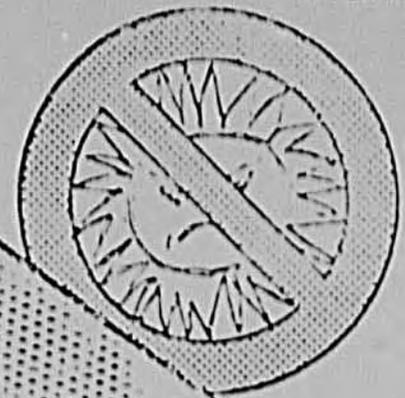


EXHIBIT 5

RECOMMENDED JOINT SUPPLY DELIVERY SYSTEM





EVITAR EL SOL EN LOS CARGOS

DISTRIBUIR EL MAS VIEJO PRIMERO

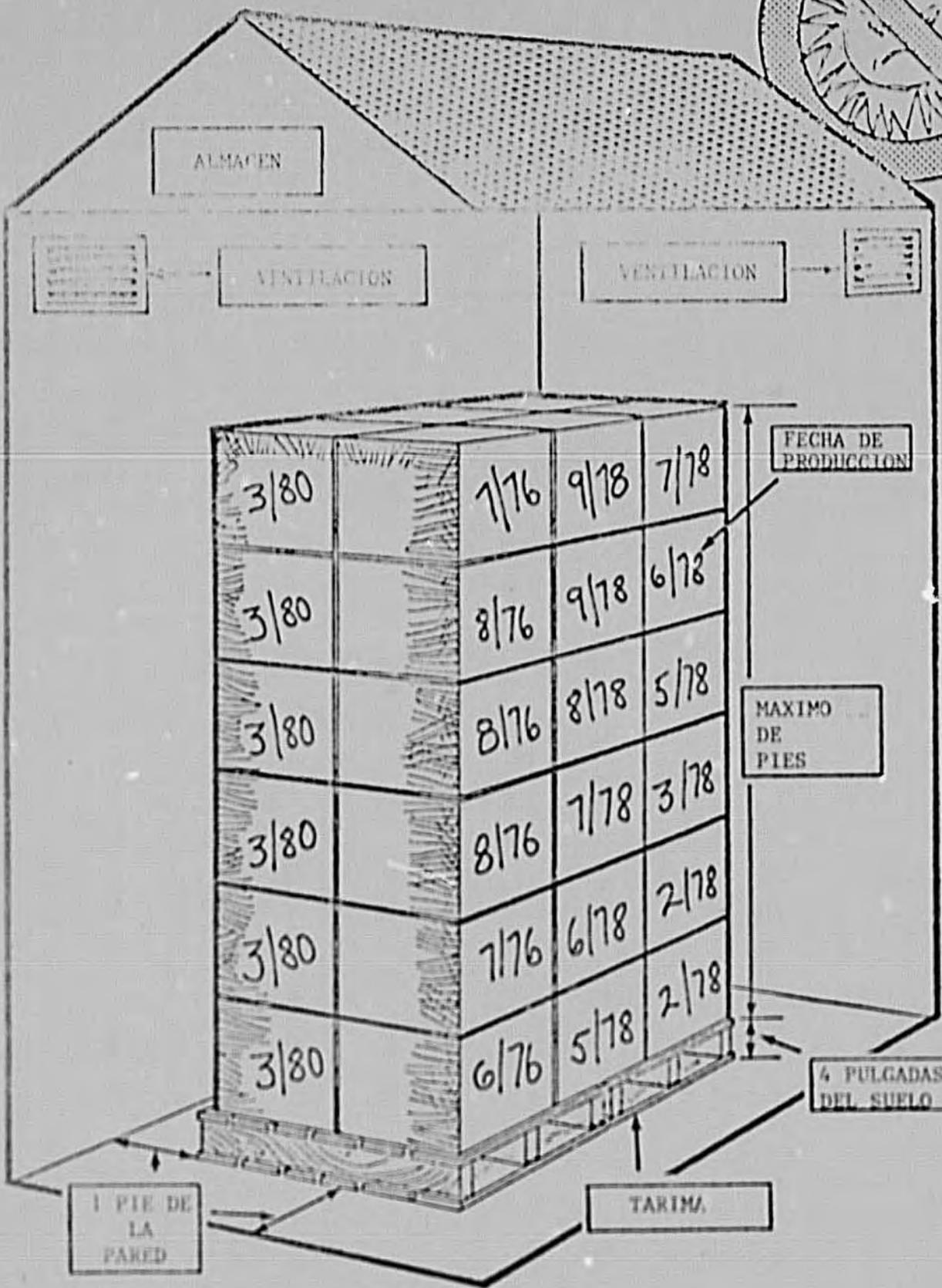


TABLE 1

Economic Analysis of Oral Contraceptive and Condom Supplies  
(in thousands)

	1981	1982	1983	1984	1985	1986	1987
Desired Requirements							
Desired Women of Reproductive Age - 1985 (See Annex A)	662	679	695	712	728	744	761
Desired Annual country contraceptive availability/use level as a percent of M483							
a. Pills	9.0	9.0	9.0	9.0	9.0	9.0	9.0
b. Condoms	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Annual country stock requirement to satisfy desired contraceptive availability/use level							
a. Pills - line A2a x line A1 x 13 monthly cycles	776	794	813	833	852	870	890
b. Condoms - line A2b x line A1 x 100 pieces	2,121	2,172	2,224	2,278	2,330	2,381	2,435
Annual New Supply From Non-AID Bilateral Sources							
Private Commercial Sector							
a. Pills	-	-	-	-	-	-	-
b. Condoms	-	-	-	-	-	-	-
Other Donors (FFIA)							
a. Pills	0	600	833	852	870	890	-
b. Condoms	2,431	1,965	2,278	2,330	2,381	2,435	-
Country Government Procurement							
a. Pills	-	-	-	-	-	-	-
b. Condoms	-	-	-	-	-	-	-
Total New Supply							
a. Pills (B1a + B2a + B3a)	2,431	1,965	2,278	2,330	2,381	2,435	
b. Condoms (B1b + B2b + B3b)							

TABLE 2

## Logistics Analysis of Orals and Condoms

A. Inventory Analysis - ORALS (thousand M/C)	CALENDAR YEAR				
	1982	1983	1984	1985	1986
1. Beginning-of-Year Stock					
a. AID Bilateral Supply	0				
b. Other Sources of Supply	1,007	813	833	852	870
2. Add: New Supply					
a. AID Bilateral Supply Requirement*	+ 0	+ 0	+ 0	+ 0	+ 0
b. Other Sources of Supply (See B1a of Table 1)	+ 600	+ 83	+ 852	+ 870	+ 890
3. Less: Contraceptive Availability/Use Level (See A3a of Table 1)	- 794	- 813	- 833	- 852	- 870
4. End-of-Year Stock	813	833	852	870	890
<b>B. Inventory Analysis - CONDOMS (thousand pieces)</b>					
1. Beginning-of-Year Stock					
a. AID Bilateral Supply	0				
b. Other Sources of Supply	2,431	2,224	2,278	2,330	2,381
2. Add: New Supply					
a. AID Bilateral Supply Requirement*	+ 0	+ 0	+ 0	+ 0	+ 0
b. Other Sources of Supply (See B1b of Table 1)	+ 1,965	+ 2,278	+ 2,330	+ 2,381	+ 2,435
3. Less: Contraceptive Availability/Use Level (See A3b of Table 1)	- 2,172	- 2,224	- 2,278	- 2,330	- 2,381
4. End-of-Year Stock	2,224	2,278	2,330	2,381	2,435

\* See Annex B for AID bilateral shipments for 1982.