



Memorandum

Date January 9, 1981

From Jack Graves, M.P.H., Chief, Management Analysis Section
Program Evaluation Branch (PEB), Family Planning Evaluation Division (FPED)

Subject Foreign Trip Report (AID/RSSA): Thailand, November 12-December 12, 1980

To William H. Foege, M.D.
Director, Centers for Disease Control (CDC)
Through: Horace G. Ogden
Director, Center for Health Promotion and Education (CHPE) *HG*

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SUMMARY

At the request of AID/Washington, USAID/Thailand and the National Family Planning Program (NFPP) of Thailand, I traveled to Bangkok to evaluate the logistics system for family planning commodities. In addition, I assisted Anthony Boni and William Johnson, AID/Washington, in preparing a forecast of contraceptive needs for the 5-year plan beginning in January 1982.

The family planning program in Thailand, recognized to be one of the best in the developing world, is expanding rapidly. A recent contraceptive prevalence survey (CPS) showed that 53 percent of currently married women are using contraceptives. The goal of the present 5-year plan, which ends in 1981, is to reduce the rate of natural population increase to 2.1 percent. Recent evaluations indicate that this goal will be reached, if not surpassed. The program is now preparing a new 5-year plan with a goal to further reduce this rate to 1.5 percent by 1986.

One of the problems that could hinder the implementation of the new plan is that the system and facilities for managing contraceptive supplies are inadequate to assure continuing availability of contraceptives in the more than 6,000 outlets served by the program. Although the existing logistics system contains the necessary elements such as warehousing, transportation, inventory control, etc., there are a number of deficiencies which should be corrected. Among these are (1) inadequate storage facilities at central and provincial levels, (2) an ad hoc transportation system below provincial level, (3) an inadequate inventory accounting system, and (4) an incomplete service statistics system.

In addition, information concerning the quantities of contraceptives in the country at all program levels is inadequate. It is, therefore, impossible to accurately plan for procurement of these items. Also we observed imbalances of supplies ranging from some outlets being out of some items to some outlets having several years supplies on hand.

Our recommendations include (1) take a national inventory of all contraceptive commodities on December 31, 1980, (2) re-adjust the quantities of all contraceptives at all program levels to a more equitable distribution, (3) provide for more storage space at central and/or regional levels, (4) implement the first-in, first-out system of distribution with maximum and minimum supply levels, (5) make the necessary adjustments to the logistics system and document the system in the form of a supply manual, and (6) conduct an evaluation of the service statistics system and make modifications according to program needs.

I. PLACES, DATES, AND PURPOSE OF TRAVEL

- A. Bangkok, November 14-24; November 27-December 10, 1980
- B. Nakorn Sawan Province, November 25, 1980
- C. Uthai Thani Province, November 26, 1980

This trip was made at the request of USAID/Thailand, AID/FPSD/Washington, and the National Family Planning Program (NFPP) of Thailand; it was in accordance with the Resource Support Services Agreement between AID/FPSD and CDC/BE/FPED.

This consultancy was performed in cooperation with Anthony Boni, DS/POP/FPSD and William Johnson, DS/POP/Asia; AID/Washington and had two main objectives: (1) to project the requirements for contraceptive commodities through 1986 and (2) to evaluate the logistics system, identify problems and recommend improvements. Although we all worked to some extent on both objectives, Mr. Boni took the lead in the first one and is preparing a report covering those activities. I took the lead in addressing the second objective, and the results are reported herein.

In addition to visits to various offices of the National Family Planning Program (NFPP) in Bangkok and in the two provinces listed above, the logistics system of the Government Pharmaceutical Organization (GPO) and the National Malaria Program were observed. The offices of the United Nations Fund for Population Affairs (UNFPA) and the Community-Based Family Planning Services (CBFPS) were also visited.

II. PRINCIPAL CONTACTS

A. USAID/Thailand

1. Donald D. Cohen, Mission Director
2. Henry D. Merrill, Public Health Advisor
3. David A. Oot, Population Advisor
4. Surindr Satchakul, Assistant Project Officer
5. Karoon Rugvanichje, Assistant Project Officer
6. Charunee Bejrakashem, Administrative Assistant
7. Kanda Suraskulwat, Administrative Assistant

B. National Family Planning Program (NFPP) and Ministry of Health

1. Somsak Varakamin, M.D., Director, NFPP
2. Dr. Suvanee, in charge of the voluntary surgical contraception (VSC) programs
3. Dr. Nonglak, in charge of port clearance
4. Kuhn Nipa, in charge of the supply system
5. Miss Aw, Assistant Chief, Logistics
6. Carl Skansing, Consultant for health services in disadvantaged provinces
7. Santhorn Thongkong, M.D., Provincial Chief Medical Officer, Nakon Sawan
8. Preachern Klaisuben, M.D., Provincial Chief Medical Officer, Uthai Thani

C. Community-Based Family Planning Services

1. Mechai Viravaidya, Director

D. United Nations Fund for Population Affairs

1. Richard Moore, Resident Representative

E. Columbia University

1. Tony Bennett, Population Advisor

III. OBSERVATIONS

A. Introduction

The National Family Planning Program (NFPP) in Thailand is experiencing problems associated with success. The recent

contraceptive prevalence survey (CPS), conducted with technical assistance from Westinghouse, and the program evaluation, conducted by the American Public Health Association, confirm the success of the program. By November 1978, 53 percent of currently married women were practicing contraception.* This proportion compares with only 37 percent using contraception in 1975 as measured by the WFS Survey of Fertility in Thailand. In 1978, 42 percent of all users were using oral contraception, and another 31 percent had elected either male or female surgical sterilization. No one expresses any doubt that the stated goal of a 2.1 percent rate of natural population increase will be reached by the end of 1981. The new 5-year plan calls for a further reduction to 1.5 percent by 1986.

The present success of the program has been brought about by intensive motivation efforts coupled with rapidly expanding service delivery capabilities and an active private sector. A wide range of family planning services is available through more than 6,000 NFPP service delivery outlets. The motivation efforts will continue, and modes of service delivery will expand with extensive training of program personnel to make clinic-based methods such as intrauterine devices (IUD), injectable contraceptives (DMPA), and voluntary surgical contraception (VSC) more readily available and with the expansion of community-based (CBD) services for non-clinical methods such as orals and condoms through Village Health Volunteers (VHV).

If it is to be sustained, this rapid program growth must be accompanied by improved methods of program administration, including supervision and logistics. The NFPP is already experiencing problems of mal-distribution of contraceptives. The logistics problem will be further complicated by anticipated budget constraints, which dictate that better use must be made of program resources that are devoted to the purchase and management of contraceptives. In the past, these commodities have been more freely available than is anticipated for the future. The program can compensate for this by adopting sound management practices in the logistics system. Good logistics systems and close supervision can assure that contraceptives will be continuously available in the necessary quantities at all outlets without the need for excessive inventories, thus releasing program resources to other uses.

During this consultancy we visited many offices and outlets at all program levels, examining the system and interviewing staff members who manage it. A number of problems were encountered. This report will describe the problems and contains recommendations for improving the system.

* Suvana Jata T and P Kamnvanvilpa: Thailand Contraceptive Prevalence Survey -- Country Report 1978. Ministry of Public Health, Bangkok, Thailand, 1979.

B. Description of the Logistics System

The movement of contraceptives through the NFPP logistics system is shown in Figure 1. Transportation down to the province level is provided by the Express Transportation Organization (ETO), a government-owned transportation company. Transportation below province level is provided by NFPP staff members. The District Health Officer (DHO) or his representative, attends monthly meetings at the Provincial Chief Medical Office (PCMO) and draws funds for staff salaries and supplies, which he must transport back to the District Health Office using his own or public transportation. Staff at the outlets under the supervision of the DHO attend similar monthly meetings at the District Health Office where they receive their salaries and any supplies which they have requested.

The NFPP Central Warehouse manages all supplies for the program, including contraceptives, medical equipment, drugs, information, education and communications materials (IE&C), and other items. There is one regional warehouse in Hangchat, Lampang Province which serves 17 provinces; the other 55 are served directly through the central warehouse. The ETO usually delivers the supplies to north, northeast and central provinces within a week of shipment, while those in the south may require as much as 2 to 3 months for delivery (according to GPO).

Not all DHOs maintain store rooms. Some of them receive requisitions from their outlets, forward them to the PCMO where the orders are prepared for pickup by DHO personnel. The supplies are transported to the DHO and distributed to outlet personnel as described above.

The normal movement of supplies is precipitated by a requisition (See Figure 2) submitted by the lower office to its supply source. The only exception is DMPA which is always distributed on an allocation basis. From time to time, pressures on storage space may be alleviated by shipping supplies from higher to lower levels without a requisition. The system is therefore, designed to be a "PUSH" system when the warehousing facilities are overloaded.

Stock records are maintained at all program levels, but there is no provision for physical inventories to be periodically taken, and the records do not always reflect a true picture of stock movements or balances on hand.

There are no comprehensive guidelines for supply management in the NFPP. There are standard forms for requisitions, reports, etc., but they do not contain all the necessary information, and instructions as to how they are to be used are vague. Also, there is no stated policy with regard to quantities of the various items in

the supply system to be maintained at the various program levels (according to the Chief of the central supply system, there are more than 200 line items managed by the NFPP). As a result, there are stock imbalances throughout the system and monthly reports (see Figures 3 and 4) are not always accurate or complete.

C. Problems Observed Within the Logistics System

Interviews were conducted and conditions observed in many offices and storage facilities in Bangkok and in two provinces (Nakorn Sawan and Uthai Thani). As a result of these interviews/observations the following problems were identified:

1. Routinely collected data on stock balances and distributions to consumers are of questionable quality. Some of the factors that contribute to this problem are addressed in items 2 through 9 below. Also, service statistics data on new and continuing users does not seem to tally with the results of the recent CPS or available data on stock distributions. The non-correspondence of acceptor data and distribution data is not always in one direction; acceptors are sometimes higher and sometimes lower than distribution figures would indicate. One reason for this could be that users from some of the other (non-governmental) programs, that do not take all their supplies from the NFPP supply system, are counted in the service statistics.
2. The central warehouse is seriously overloaded, and the two provincial storage facilities visited, given the current organization procedures, were also overloaded. Stock in the central warehouse is placed in such a way that it would be difficult, if not impossible to locate and count.
3. While the system for inventory control in the central warehouse seemed to be well kept, until there is some reorganization there is no way to verify the stock balances. We were able to document that the system does not provide for recording manufacturing or expiration dates of the various contraceptives.
4. According to the Provincial Chief Medical Officer at Nakorn Sawan the system of moving supplies from the PCMO to lower levels by program personnel does not work very well, because the amount is frequently more than the person can carry. In addition to family planning supplies, other drugs and supply items for other health programs are managed in the same way and at the same time.
5. There were instances where one outlet had "borrowed" supplies from another, indicating a breakdown of the system. These "loans" were not entered on the records of either outlet.

6. None of the storage facilities inspected were properly managed. We observed supplies that had been damaged by insects, and evidence that the principal of issuing the oldest stock first was not always followed.
7. Supply imbalances were observed ranging from some locations being out of some items (stock-outs) to some items being present in excessive quantities according to the amounts being dispensed to users.
8. The quantity indicated on the stock control records did not always agree with the actual count.
9. Although we did not make an in-depth evaluation of the service statistics system, some of the deficiencies we observed were:
 - a. The use of the word "distributed" on forms 3 and 7 (See Figures 3 and 4) could mean distributed to users or distributed down the supply system. If those completing the reports use one definition and program analysts another, then confusion would result as to how many contraceptives are being distributed to users and how many were moving down the system.
 - b. Supply data are reported for pills and IUDs only.
 - c. Although there are two blank spaces in Section 1 on form 3 for "other" methods, methods other than those listed might not be uniformly or universally reported.
 - d. Form 3 (and possibly form 7) is being submitted by some non-government programs. These are analyzed in aggregate with the NFPP outlets. It is, therefore, not possible to relate supply system data with new acceptor data.

IV. RECOMMENDATIONS:

- A. While the supply system contains all the necessary elements (i.e., warehousing, transportation, inventory control, reporting system, etc.), there are certain deficiencies, some of which are illustrated above. These should be corrected, and guidelines should be written so that all program personnel concerned with supply management will know NFPP policy and procedures for supply management. Stock levels based on projected use should be established, communicated to the field and followed.
- B. There is an immediate need for accurate information on contraceptives on hand at all levels of the program. A national inventory should be taken as of December 31, 1980, or as soon thereafter as possible. This inventory should be an actual count

of orals, condoms, IUDs and DMPA. A policy for actual count on a semi-annual basis should be adopted. This inventory should be more precise than the initial one. It should contain the count by brand name and age (i.e., date of manufacture/expiration) for orals, by age for condoms, by size and brand (type) for IUDs, and by age for DMPA (see Annex A for proposed inventory forms).

- C. Based on the national inventory, as recommended in B above, and other existing data, the desired stock levels should be determined and stock imbalances corrected by removing excessive stock and/or replenishing those items in short supply at all program levels. The stock levels chosen should be such that outlets will never run out of any item which is being used at the outlet and which is available in the country. Ultimately, a system of maximum-minimum stock levels based on use and program plan should be established. The following stock levels should be considered.

<u>Program Level</u>	<u>Number of Months' Supplies to be Maintained</u>	
	<u>Maximum</u>	<u>Minimum</u>
Central/Regional	8	4
Provincial	6	3
District	4	2
Outlet*	4	2
Village Health Volunteer (VHV)	<u>2</u>	<u>1</u>
TOTAL	24	12

*Outlet is defined as any place where contraceptives are given or sold to consumers, except VHV or other field workers.

These stock levels are given here for illustrative purposes and for consideration. The actual stock levels to be recommended and/or adopted for the program depend on many factors. The interpretation of these figures is that the stock at any level will not exceed the stated maximum except in special situations, and the stock level will never be allowed to go below the stated minimum. The frequency of resupply is normally expected to be the difference between maximum and minimum.

For example, if PCMOs are expected to maintain a maximum of 6 months' supplies and a minimum of 3, then the program would expect to resupply PCMOs every 3 months. In actual practice the resupply interval would probably be closer to 2 months because the dispensing of several different commodities cannot be precisely predicted, and since a month's supply is defined as the average of the most recent 6 months dispensing to consumers, the actual would be expected to be increasing in a growing program. These levels

can be worked out more precisely with experience. The purposes of a maximum-minimum policy are (1) to assure that contraceptives are constantly available at all locations in quantities sufficient to meet the demands of consumers or lower level offices and (2) that this be done in the most economical way.

In our experience the maximum-minimum system works best for family planning programs because it is easy to understand, and supervision is straightforward. The key to a successful operation of this type is that a month's supply at any program level is based on actual dispensing to consumers, which should be nearly the same as issues to lower level offices if the system is working according to plan. Problems arise when stocks are moved down the system for reasons other than demand from consumers. For example, if stocks are moved because the supplying office cannot accommodate them in their storage facilities, then a higher-than-demand stock movement occurs, lower level offices become overstocked, and a chain effect of increasing shipments starts which will perpetuate stock imbalances.

One of the problems with this type of system arises when an outlet or other office receives supplies from more than one source. In these cases, it is difficult for the management of the supply system to interpret supply data and to plan for future procurement. Borrowing is one manifestation of this problem. If the system is working, borrowing should not be necessary. On the other hand, unforeseen demand, losses or breakdowns in the system may make it necessary for one outlet to borrow from another. When this is done, the transaction should be recorded on the supply accounting books of both units. Borrowing should be discouraged but not prohibited, lest we forget the reason for the supply system in the first place, i.e., to serve consumers.

The point of this section is that a simple system with clear written guidelines is needed, which meets the needs of the program with flexibility built in to meet unforeseen circumstances.

- D. Warehouses and stock records should be put in order when the national inventory is taken. Warehouse space at the central level is inadequate for the present levels of inventory. As the program grows this problem can only become more acute. The problem might be alleviated by (1) establishing more regional storage points and/or (2) increasing storage capacity at the central level. Good warehouse management should be followed with provisions for storing like items in the same area but in different stacks according to brand and age. The practice of issuing the oldest stocks first (first-in, first-out: FIFO) should be strictly adhered to. A directive should be issued to all program locations requiring the practice to FIFO.

- E. Stock imbalances now exist in the program. The magnitude of this problem will only be known after the national inventory is analyzed. According to the seriousness of the problem, steps should be taken to relocate stocks where they exist in obvious oversupply and build up the stocks of those outlets and other offices that do not have enough to meet reasonable demand. Desired stock levels should be determined using a method similar to that given in C above, and stocks at all program levels should be adjusted accordingly. A suggested procedure is given in Annex B.
- F. Since there are more than 200 different items (called line items in logistics terminology) managed by the system, a series of stock numbers should be assigned by group-type-item-quantity or some other method that will help to identify each line item separately. Also, a stock locator system should be installed at the central warehouse.
- G. The movement of supplies below provincial level has been identified as a problem (see Problems Observed, number 4). The current procedure should be investigated and, if it is found to be a problem in any location, alternate methods of moving these supplies down the system should be identified.
- H. It should be determined whether it is desirable to carry stocks at the district level. To maintain stocks at this level would obviously make resupply to outlets easier. Whether the added expense of maintaining stock at this level will be compensated for by the convenience of doing so should be determined. It may be desirable to maintain stocks at some districts while serving other outlets from the provincial level.
- I. Studies should be conducted to determine the time that elapses between the identification of need for resupply at the various locations and the time when those supplies arrive at that location (this is called "lead time" in logistics terminology). It is necessary to know lead time if the proper minimum levels of stock are to be prescribed.
- J. The program plan calls for a community-based distribution system involving VHV's distributing pills and condoms in villages. A system for resupplying the VHV's should be devised and documented. The system should include records, reports, and supply points.
- K. The reporting system should be modified to include all contraceptives rather than pills and IUDs only.
- L. The maximum-minimum type of supply system uses the "management by exception" principal, which is explained in the "Commodity Management Manual" available in the H/P/N office at USAID. This is an excellent manual on supply management and should be used as a reference. The manual is a Thai-English parallel translation.

- a. A thorough evaluation of the service statistics system should be made. Until this can be done, consideration should be given to correcting the deficiencies listed in Observation No. 9 of this report. The terms "issued" could be used for supplies moving down the system and "dispensed" for those given or sold to users. Condoms and injectables should be added to Form 7 and to Section 1, Form 3. Service statistics data for NFPP and other outlets and/or offices should be analyzed separately.

V. CONCLUDING COMMENTS

The NFPP is growing, and indications are that it will continue to grow for several years into the future. One of the deterrents to the program's growth could be a breakdown in the system for supplying contraceptives throughout the country. The CPS shows that almost all Thai couples (99.7 percent) have a knowledge of contraception, and that the stated desired family size decreases with decreasing age from 5.7 for the 45-49 age group to 2.4 for the 15-19 age group (Table 3.9, page 23). There is no reason to expect that as these women increase in age their desire for more children will increase. This translates into a greater proportion of the population demanding contraception over time. The NFPP must be ready to provide these services; they cannot be provided unless contraceptives and contraceptive services are made conveniently available throughout the country. With more than 6,000 outlets now existing in the country, the task of assuring an uninterrupted flow of these commodities to all locations is a complex and difficult one. With the addition of CBD through the VHVs, the task will become even more so. It is for these reasons that a good supply system must be established and closely supervised.

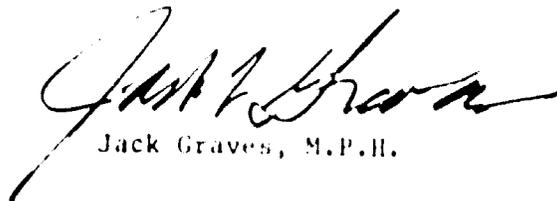

Jack Graves, M.P.H.

FIGURE 1

How Contraceptives Move Within
the NFPP Logistics System

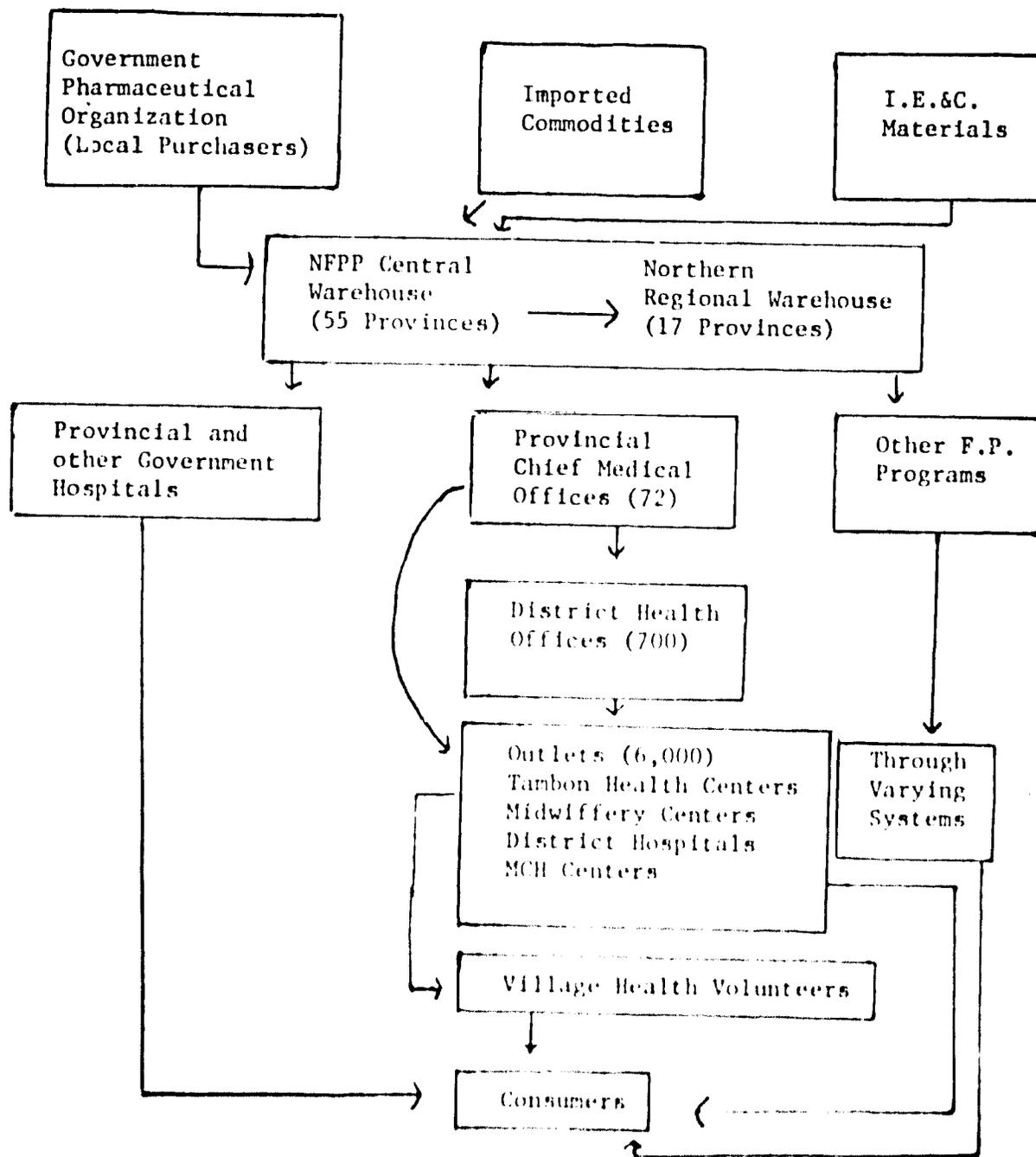


FIGURE 2

ORDERS FOR FAMILY PLANNING SUPPLIES

Unit

District Province

<u>Serial No.</u>	<u>Description</u>	<u>Used</u>	<u>On Hand</u>	<u>Requested Amount</u>	<u>Approved Quantity</u>	<u>Remarks</u>
1.	Oral Contraceptives					
2.	Condom					
3.	IUD					
4.	DMPA					
5.	Other					
6.	Pregnancy Test					
7.	Form VK 01					
8.	Form 02					
9.	Form 03					
10.	Form 04					
11.	Form 05					
12.	Publication					
13.	Poster					
14.	MCH Pamphlet					
15.	MCH Poster					
16.	Other					

Signature
(.....)

Position

Date

FIGURE 3

MONTHLY ACTIVITY REPORT
FAMILY PLANNING PROGRAM

39
(Form 03)

PROVINCE _____ MONTH _____ YEAR _____

DISTRICT _____

REPORTING UNIT _____

TOTAL NO. OF SUB-UNITS _____

NO. OF SUB-UNITS REPORTING THIS MONTH _____

1. NEW ACCEPTORS

- 1.1 IUD
- 1.2 Pill
- 1.3 Tubal Ligation
- 1.4 Vasectomy
- 1.5 Other _____
- 1.6 Other _____

TOTAL

2. REVISITS

- 2.1 IUD
- 2.2 Pill
- 2.3 Other _____

TOTAL

3. HOME VISITS

- 3.1 Postpartum
- 3.2 Acceptor
- 3.3 Other _____

TOTAL

4. Cycles of Pills Distributed

- 4.1 New Acceptors
- 4.2 Old Acceptors

TOTAL

Reported by.....

Position.....

FIGURE 4

PILL AND IUD INVENTORY (F.P. FORM 07)

Province
 Month

UNIT	PILL				IUD			
	Previous Balance	Re-ceived	Dis-tributed	New Balance	Previous Balance	Re-ceived	Dis-tributed	New Balance
Provincial Medical and Health Service Office								
1. P.M.H.S.O. Clinic								
2. District Capital Clinic (excluding P.M.H.S.O. Clinic)								
3. District								
4. District								
.....								
.....								
.....								
.....								
16. District								
etc.								
Hospital								

Signature Reporter
 (.....)

Position

Date

ANNEX A

National Inventory of Contraceptives

Submitted by:

Province _____ District _____ Location _____ Date _____

The following is a list of contraceptives on hand at this location at the close of business on the above date. I certify that the quantities indicated below have been physically counted.

Signed _____
Officer-in-Charge

<u>Item</u>	<u>Quantity on Hand by Actual Count</u>	
	<u>In Usable</u> <u>Condition</u>	<u>Not</u> <u>In Usable</u> <u>Condition</u>
Oral Pills (all brands) (Number of Monthly Cycles)		
Condoms (Number of Pieces)		
IUDs (Loop C only) (Number of Pieces)		
IUD Inserters (Number of Pieces)		
DMPA (Number of 10 cc vials Use fractions if partially used)		
(Number of 3 cc vials)		

Note: This form is to be completed in 3 copies. Mail the original to the central office in the attached, self-addressed envelope, the duplicate to the PCMO, and retain the triplicate for your records.

National Inventory of Contraceptive Materials
(Suggested Form for Routine Semiannual Inventories)

Date Counted _____

Submitted by:

Province _____ District _____ Location _____

The following is a list of contraceptives on hand at this location at the close of business on the above date. I certify that the quantities indicated below have been physically counted.

Signed _____
 Officer-in-Charge

Item	Quantity on Hand in Usable Condition		Quantity on Hand Not in Usable Condition (Any Date)
	With Year of Manufacture 1977 or Earlier, or Expiration Date 1982 or Earlier	With Year of Manufacture 1978 or Later or Expiration Date 1983 or Later	
Monthly Cycles of Pills			
Demulen			
Eugynon			
Noriday			
Norinyl			
Ovostat			
Ovral			
Other (list)			
TOTAL			
Pieces of Condoms			
All Brands			
Vials of DNPA			
10 cc			
(use fractions for partially used vials)			
3 cc			
Pieces of IUD's			
Loop B			
Loop C			
Loop D			
PPD			
Copper T			
Other (list)			
Inserters			

Monthly Cycles of Pills

Demulen
 Eugynon
 Noriday
 Norinyl
 Ovostat
 Ovral
 Other (list)

TOTAL

Pieces of Condoms

All Brands

Vials of DNPA

10 cc
 (use fractions for
 partially used vials)
 3 cc

Pieces of IUD's

Loop B
 Loop C
 Loop D
 PPD
 Copper T
 Other (list)

Inserters

**Instructions for Conducting the Annual Physical Inventory
of Family Planning Materials**

(1) The stock of every unit holding any of the listed supplies is to be physically counted. Estimates will not be accepted. Full cases, boxes, packages or foil packs are not to be opened for the purpose of this inventory, but are to be assumed to contain the proper quantities. Opened boxes or foil packs are to have their contents removed and physically counted. For your information, cases, boxes and foil packs contain the following quantities unless otherwise marked on the outside of the case.

<u>Pills</u>	<u>Case</u>	Quantity in a:	
		<u>Box</u>	<u>Foil Pack</u>
Noriday	600	60	3
Norinyl	1,200	?	3
Ovral	5,400	50	-
"	2,000	50	3
Ovostat	1,600	?	?
"	2,000	?	?
"	3,000	?	?
Eugynon	1,000	?	?
Demulen	?	?	?

For example:

If a Tambon Health Center has 1 case, 3 boxes, 6 foil packs and 12 cards of Noriday the quantity would be:

$$1 \times 600 = 600$$

$$3 \times 60 = 60$$

$$6 \times 3 = 18$$

$$12 \times 1 = \underline{12}$$

$$\text{TOTAL} = 810 \text{ monthly cycles}$$

Please note that Ovral and Ovostat come in different size cases. Be sure to use the proper number when counting these items.

<u>Condoms</u>	<u>Case</u>	<u>Box</u>	<u>Strip</u>
Tahiti	6,000	100	4
Japan	?	144	?
Durex	?	144	?
Korean	?	144	?
Other	?	?	?

IUD's are packed in plastic bags of 100 each.

DMPA is packed in packages of 12-10 dose vials or ____ Single dose vials per package.

(2) Some items have a date of manufacture marked on the boxes and some have an expiration date.

For your information this date is explained for all commodities as follows:

(a) Noriday has the date of manufacture stamped on the case and on the card.

It does not appear on the box or foil pack.

(b) Norinyl has the date of expiration stamped on the case, the foil pack and on the card.

(c) Etc. (Note: Enter the correct information for all items to be counted)

(d) Etc. (Note: Enter the correct information for all items to be counted)

(e) Etc. (Note: Enter the correct information for all items to be counted)

(3) The Inventory Report is to be completed on (date) in three copies; the original is to be mailed to the central headquarters in the attached, self-addressed envelope. It is to be mailed not later than (date). The duplicate is to be mailed to the Chief Provincial Medical Officer and the triplicate is to be retained by the unit or office completing the form.

ANNEX B

Procedure for Stock Adjustment

(1) Levels of stock to be maintained:

Level		Number of Month's Supply	
		Maximum (MAX)	Minimum (MIN)
1	Central/Regional	8	4
2	Province	6	3
3	District	4	2
4	Outlet*	4	2
5	VHV	<u>2</u>	<u>1</u>
		24	12

(2) Calculate an average month's usage in all outlets by adding the quantities dispensed to users in the past 6 months and dividing by 6. This is a month's supply.

(3) Divide the quantity on hand by one month's supply to determine the number of month's supply on hand for each type of contraceptive.

(4) DHOs should add the average month's supplies dispensed by their outlets to arrive at the average month's supply for the district.

(5) PCMOs should add the average month's supplies dispensed by the outlets served through the provincial supply system to arrive at the average month's supply for the province.

*Outlet is defined as any place where contraceptives are given or sold to users, except VHV's.

- (6) The outlets holding supplies in excess of 2 x the MAX should remove the surplus to the DHO.
- (7) The outlets holding less than the MIN should pick up an amount sufficient to bring their stock level to MAX. These supplies should be made available at the DHO.
- (8) Any surplus remaining at the DHO should be removed to the PCMO; shortages at the DHO should be made up by taking stock from the PCMO.
- (9) During this operation, every effort should be made to be sure that the oldest stocks are placed in the outlets.
- (10) Depending on the amount of stocks remaining in the country after completion of the above operation stocks should be balanced in PCMO's by removing surplus to the Central Warehouse or taking stock from the Central Warehouse to bring stock levels to MAX. If it is found that this will deplete the inventory in the Central Warehouse to less than MIN, then the quantity provided to the PCMO's should be adjusted downward.
- (11) If it is found during this exercise that to follow these instructions to the letter would result in an undesirable stock situation at any level, than adjustments should be made to these instructions to reflect the most desirable situation throughout the country.
- (12) After the decision has been made by the Central Office as to quantities to be maintained at the different program levels, directives should be issued to the offices and units concerned. When the directive has been sent to the field, any deviation from the procedures contained therein must be justified by the officer-in-charge in writing.