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A PRELIMINARY ASSESSMENT OF THE FEASIBILITY OF  
A SUBSIDIZED CONTRACEPTIVE MARKETING PROGRAM FOR  
GUATEMALA

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## SUMMARY

This report summarizes an investigation of the economic and technical feasibility of a subsidized commercial distribution program for pills, condoms and foaming tablets in Guatemala. It is recommended that steps be taken to develop such a program.

The socio-economic climate appears to offer an adequate market for such a program not now served by either the commercial, public or voluntary sectors. Necessary marketing support (distribution, advertising, media, packaging and market research capability) are of good quality.

A two-year program is recommended, with initial launch scheduled toward the end of the first year. In terms of economic feasibility, a price of about 30¢ to 40¢ for a month's supply of any product (oral pills, condoms, foaming tablets) should yield net revenue adequate to cover out-of-pocket expenses of program maintenance after the second year.

Because of demographic splits in the population, we recommend (subject to research on the subject) that the program consider a two-tier price-product mix and the possibility of developing different brands for the Indian and Ladino markets. If market research indicates this approach is desirable, the structure of the communication and distribution programs may be rather complex.

Because of a complex political climate and the special marketing skills required to implement the program, we recommend that a separate marketing organization be developed for the program.

## **I. Introduction**

This report documents the results of a one-week assignment in March 1979 to assess the potential for a subsidized contraceptive retail sales project in Guatemala.

The specific scope of work directed the consultants to determine the roadblocks and potential for the implementation of a subsidized contraceptive retail sales project and to make a considered assessment. For AID/W, U.S. AID and APROFAM, data were gathered through document review; meetings with Government officials; Pharmaceutical companies; Distributors; Advertising Agencies; Market Research firms; and visiting numerous retail outlets.

## II. THE ENVIRONMENT FOR A SUBSIDIZED CONTRACEPTIVE

The environment in Guatemala appears favorable at this time for a subsidized commercial contraceptive program. The general level and distribution of incomes, particularly in urban and semi-urban areas, indicate a significant potential market for contraceptives which has been only partially developed by public, private and voluntary organizations. While the political climate is sensitive and no population policy exists at this time, a free-standing marketing operation appears to be acceptable and would require minimal official government action. The necessary institutions are in place to provide distribution and all forms of modern advertising media are available. The necessary support in form of market research, advertising agencies and packaging firms is also available.

### A. Socio-Economic Climate

Table 1 shows socio-economic indicators for Guatemala to be in the same range as those of other nations in which commercial distribution programs have been undertaken. On balance, the socio-economic indicators for Guatemala appear favorable for a commercial distribution project. The relatively high income per capita (\$630 GNP per capita in 1976) indicates that the target market, which to this point has been barely penetrated, has adequate spending power.

The communications structure (as reflected by the availability of television sets and radio receivers) is good and the literacy rate is adequate to make a relatively sophisticated communications program effective, at least among the segments in the target segments for the program.

Further, the combination of high birth rate and low death rate, accompanied by significant income and reasonable literacy, indicate that Guatemala is in the group of countries profiled as promising for such programs.\*

However, behind these aggregates are some unique characteristics which have a major impact on the structure of the program. For example, the population is very dispersed. While some 885,000 of the estimated 6.5 million of the population live in Guatemala state (principally in the city) the next largest town has only 50,000 residents. It thus appears necessary to develop a program which approaches significant portions of both the urban and rural populations.

Of particular importance to a commercial distribution program is the cultural and ethnic make-up of the Guatemalan population, which is divided into Ladino and Indian populations. Various estimates place the fraction of Indians at about 45% of the population. The Indian group, defined operationally as those

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\*J.U. Farley and S.J. Samuel, "Predicting the Impact on Birth Rates of Reforms in Law Governing Contraceptive Marketing," Working Paper, Columbia and Tufts University, 1977.

TABLE 1

Economic and Social Indicators for Guatemala and for Other Countries  
with Subsidized Commercial Distribution Systems

	Morocco	Sri Lanka	Bangladesh	Jamaica	Ghana	Nepal	Guatemala	El Salvador
Population(millions)	18.0	14.2	85.0	2.10	10.9	15.4	6.2 ('78)	3.6 ('75)
Percent economically active	26.3%	35.4%	35.2%	42.6%	38.9%	42.0%	30.6% ('75)	30.9% ('75)
Percent agriculture forestry	50.0%	40.6%	N.A.	29.5%	N.A.	94.4%	58.2%	41.2% "
Percent of labor force in manufacturing	9.3%	7.6%	N.A.	10.8%	N.A.	1.1%	13.5%	10.0% "
Wages in manufacturing (hourly, 1975)	2.21 dirham	12.83 r/day	12.81 taka/day	N.A.	77.5/mo.	N.A.	\$59/week (76) or 49.4 cent-aros/hr.	55-69 colones/wk (77) or 1.30-1.50/1 colones
Price Index 1977 (1970-100)	131.4	147.5	276.4	237.5	724.3	151.0	124.4(77)	204.3(78) 180.8 (77)
Motor vehicles in use (1975)	320,000	91,700	31,000(72)	86,100(72)	85,000(74)	4,000(68)	133,000(76)	60,000(74)
Telephones per 100	1.0	0.5	0.1	5.0	0.6	2.1(73)	1.0(73)	1.4(76)
Population per hospital bed	723(76)	333(73)	946(72)	257(74)	649(73)	6630(74)	457(73)	563(75)
Population per physician	13.8(74)	4.0(72)	9.3(73)	3.5(74)	11.2(74)	36.5(74)	4.4(73)	3.6(75)
Radio receivers per 1000	7/(74)	37(74)	N.A.	320(73)	110(74)	6(75)	N.A.†	N.A.
TV sets per 1000	23	--	N.A.	49	3	--	N.A.†	N.A.
Newspaper circulation per 1000	14 (74)	N.A.	N.A.	90(74)	41(73)	6(73)	N.A.†	N.A.

TABLE 1 (cont'd.)

	<u>Morocco</u>	<u>Sri Lanka</u>	<u>Bangladesh</u>	<u>Jamaica</u>	<u>Ghana</u>	<u>Nepal</u>	<u>Guatemala</u>	<u>El Salvador</u>
Birth Rate	45	26	47	30	49	44	42.8	39.9
Death Rate	14	9	20	7	20	20	11.8	7.9
Rate of Natural Increase	3.1%	1.7%	2.7%	2.3%	2.9%	2.3%	3.1%	3.2%
Urban Population	38%	22%	9%	41%	31%	4%	36.4%	42%
Adult Literacy	24%	85%	N.A.	86%	N.A.	14%	47%	N.A.
GNP/Capita (US\$ )	540	200	110	1070	580	120	630	N.A.

Sources: World Bank, World Tables, 1976, Johns Hopkins University Press; World Population Reference Sheet, 1978; United Nations Yearbook of Labor Statistics, I.L.O., 1977; and, United Nations Statistical Yearbook, 1977.

\*Estimates provided by market research and advertising companies in Guatemala are located in Section II of this report.

who have not taken up modern ways of living, have several characteristics which are important from a marketing point of view.

- They are concentrated in rural areas. This has implications for distribution.

- They speak different languages -- some 22 identifiable languages of which four are major (Mam, Ketchi, Quiche, Katcaiquel). This has major implications for design of communication strategies.

- Many socio-economic indicators are based more on the Ladino than on the Indian population, including incomes and literacy rates which are key to the structure of any proposed commercial distribution program. This has implications for overall marketing strategy, especially on establishing the target market.

## B. Political Climate

Although family planning services have been present in the country for some time and the Ministry of Health has been involved in the subsidized sale of contraceptives, there is as yet no national policy on the issue of family planning. Government officials appear to be placing distance between themselves and positive statements on programs related to the subject. The political climate for family planning therefore makes it desirable to formulate a program organization which will not require direct connection with the Guatemalan government.

Apparently, the government's position would best be described as "hands off." An example is government reaction to the recent controversy over the private-sector sales of Depo-Provera. Ministry officials stated that they are powerless to prevent private-sector sales of this product despite the fact that drug registration procedures and regulations, if enforced, could be used to control private-sector sales of any ethical pharmaceutical product.

## C. The Family Planning Situation

Family planning activities are concentrated in the voluntary association, Asociación Pro Bienestar de la Familia (APROFAM), founded in 1962. The Ministry of Health has also participated in family planning since 1967, although that participation has generally been passive.

Contraceptives are currently available through public sector channels, through the voluntary organization (APROFAM) and in the commercial market. Better estimates of volumes of contraceptive movement through voluntary and private channels will be available on completion of the World Fertility Survey and when a new information system builds up a history, but some crude estimates are now available.

APROFAM supplies contraceptive services and supplies through five clinics in Guatemala City and through a network of several hundred voluntary representatives throughout the countryside at a price of almost 15¢ per unit, and it also

acts as distributor for the public sector. During the past ten years, APROFAM has provided services to 131,000 couples, and in 1978, 29,000 new acceptors were reported, about half through the community-based system and a third through the clinics. APROFAM's community-based distribution system involves ten supervisors, 40 promoters and about 800 distributors who sell pills and condoms (dozens) at about 15¢ per unit. Four detail men also distribute contraceptives to Ministry of Health outlets and municipal pharmacies. In addition, there are distribution programs through several agricultural co-ops and growers' associations as well as through the military. It is estimated that last year about 400,000 cycles of pills and 400,000 condoms were distributed through these channels.

The public sector has mounted a rather passive program through 37 hospitals, 159 health centers and 470 "health posts" (clinics) that sell contraceptives at about 15¢ per unit. Health related private voluntary organizations maintain an additional 56 centers which distribute contraceptives at low prices. In addition, 125 municipal pharmacies sell contraceptives at the same price. In 1978, 18,000 new acceptors were reported, with a total of about 400,000 cycles of pills and 400,000 condoms sold through these channels.

The private sector supplies all types of contraceptives at commercial prices. In 1978, approximately 300,000 cycles of two dozen brands of pills were sold on the market at prices ranging from \$1.50 to \$2.50 per cycle. Pharmacy audits indicate that some 10 to 20 percent of pills are, in fact, sold on prescription. The largest firms are Schering, which holds about a third of the market and Wyeth, which is about half that large. The market appears to be in a down-trend, growing at 1 percent annually in contrast to drug sales growth of 6 percent. A recent study in El Quiche, a rural department, indicated that pills have achieved deep distribution through the pharmaceutical system. A wide variety of condoms from different countries are also available in the pharmaceutical system and prices range up from 10¢ per piece. Pills are often visible on store shelves and condom displays also can be found for such brands as Touch, Manform, Sunrise, Arouse and Scentuals.

#### D. Laws Affecting Contraceptives

From initial investigation, it appears that the status of laws and regulations related to family planning generally and commercial sector distribution in particular, approximates those of other nations just entering the cycle of consideration of such programs. There is as yet no national population policy. We were told, however, that a Congressional Committee is drafting a national policy at this time.

The language and approach of laws touching on family planning activities reflect the lack of a coordinated national policy. For example, no specific legislation exists on voluntary sterilization. Like early legislation on abortion in other nations, abortion is treated as a criminal offense carrying harsh prison terms for all persons involved and allowing only a narrow "to save the life of the mother" exception. (Law and Population Program, Fletcher School, 1976).

Import of oral contraceptives requires a permit, as does local production and semi-manufacturing processing like repackaging. Distribution of oral pills is restricted to clinics and pharmacies. Like a wide range of other products, prices for oral contraceptives are controlled. (El Guatemalteco, Dec. 24, 1959, p. 1409-10, W.H.O. International Digest of Health Legislation. Vol. 12, 1961 and proposed Health Law, Chapter II, Sec. 123).

Import of both oral contraceptives and condoms is taxed. Neither is classified as a contraceptive; rather they appear to be included in other product categories. Oral pills seem to be classified with "Other Prepared Medicaments Not Elsewhere Specified, for Oral Administration," (#541-09-04-09), are taxed at the rate of U.S. \$0.50 per gross kilo plus 10 percent C.I.F. (cost, insurance, freight) and carry a 30 percent surcharge. Condoms are classified with "Sanitary, Medical or Surgical Rubber Articles, Except Tubes" (#629-02-00) and are taxed at 20 percent ad valorem plus U.S. \$0.25 per gross kilo.

Neither current law nor Chapter II of proposed health legislation directly intervene in marketing functions other than price control and distribution of oral pills. While advertising of ethical pharmaceutical products appears to require prior approval by the Director General of Health Services, it is not prohibited. (Ch. II, Sec. 128)

#### E. The Marketing Climate

The consumer marketing system operates fairly freely and competitively.

##### 1. Retailing Distribution

The discussion of retail distribution is divided into two parts: the pharmaceutical system and the general retailing system.

##### a. Pharmaceuticals

The pharmaceutical system is divided into first-class pharmacies (A), which number over 250, and second (B) and third (C) class pharmacies which number between 800 to 1,000. The definitions of the three classes have some implications for development of distribution strategies:

First class pharmacies are required to be owned and operated by a licensed pharmacist and technician ("examinado"). There are approximately 225 such outlets in Guatemala and 90 in 20 other urban centers throughout the country. As an example, Zacapa (area population 35,700) lists five such outlets and Coban (area population 43,538) lists three.

Second class pharmacies are operated by a licensed technician ("examinado"). These are concentrated in smaller urban areas and number roughly 250. They sell a more limited list of ethical drugs, including contraceptives in some cases. One such pharmacy visited stocked 19 brands of orals, ranging in price from \$1.24 to \$2.17 per cycle.

For third class pharmacies, no specially skilled personnel are required and they deal mainly with proprietary drug products. Concentrated in smaller communities, there are approximately 800 such outlets. Class C pharmacies have inventories of \$500 to \$1,000 and sales of \$200 to \$500 per month, mostly of proprietary products. This is about half the size of a B pharmacy. Proprietary products are also available in larger tiendas.

Pharmaceutical firms use traditional marketing methods for the industry, employing detail men who call on physicians, wholesalers, distributors and pharmacies.

Margins on pharmaceuticals vary, but generally are as follows:

Price to consumer	100
Price to retailer	80
Price to distributor or wholesaler	64

Large pharmaceutical distributors may represent as many as 40 different manufacturers of ethical and proprietary products. Such a firm can cover 80 percent of the country's pharmacies with three representatives, who call on a monthly basis in the country and on nearly a daily basis in the city. Distributor sales are generally made on 30 (sometimes 60) days credit without cash discount. Pharmaceutical and other company representatives do sometimes give both cash discounts and discounts in the form of products, as well.

#### b. Distribution of Consumer Products

Consumer products with mass distribution in Guatemala are sold through approximately 15,000 to 18,000 retail outlets. One typical distribution system begins with direct sales to ten special wholesalers who act as distributors, continues through about 150 regular wholesalers and reaches the public through the 15,000 to 18,000 retailers that handle significant amounts of packaged goods.

Price controls exist on many food products and other "necessities." Standard margins depend on volumes, but averages at each level are:

<u>Level</u>	<u>Price for Standard Products</u>	<u>Price for Established Products Selling in Large Volume</u>
Price to consumer	100	100*
Price to retailer	75	60
Price to regular wholesalers	65	55
Price to large wholesalers	55	45

\*allows for significant price cutting at retail and wholesale level.

Retailer margins are usually 33 percent of consumer price but vary depending on product sales volume. For products selling in very large volumes, retail margins may be as low as 20 percent and wholesale margins as low as 6 percent. Figure 1 is a schematic of the distribution system for a mass distributed consumer product.

Movement of goods at wholesale may involve several levels, each receiving a portion of the margin. Wholesalers often are concentrated at bus terminals where retailers may purchase a stock for themselves or for their retailers. Such firms may also employ their own sales forces and use "routeros" as well.

Daily and weekly markets are supplied by "routeros" and "archimayos," in addition to retailers traveling to major towns to secure products from wholesalers.

Distribution of censused retail shops by size is approximately as follows:

	<u>Guatemala</u>	<u>Other parts of the country (estimated)</u>	
Supermarkets, large			
grocery stores, mini and			
micro markets:	90	60	150
Medium-sized food and			
general stores	746	250	956
Tiendas	6123	7000	<u>13,123</u> <u>14,249</u>

A major package goods firm estimates that wholesalers and retailers are distributed throughout the country as follows:

	<u>Retailers</u>	<u>Wholesalers</u>
Southern Region	3250	79
Western Region	3087	102
Capital Region	5725	144
Eastern Region	<u>4092</u>	<u>83</u>
TOTAL	16,154	408

The firm has about 30 cash vans which cover the country, calling on wholesalers and large retailers. Eleven of these are in the capital and the rest are in the interior. The majority of sales in this case are through smaller (C and D) tiendas. In addition, there may be another 15,000 very small outlets, not picked up in the statistics, which handle very limited lines of merchandise.

Figure 1

Distribution System for a Widely Distributed  
Consumer Product

Importer/Manufacturer

Ten Distributors or Special Wholesalers

Margin: 18-20% of wholesale cost

150 Regular Wholesalers

Margin: 15% of Cost to Regular Wholesaler

15,000 - 18,000 Retail Outlets

Margin: 20-33% of Cost to Retailer

Some further insight into the depth of the distribution system in smaller urban areas is given by Table 2, which shows in smaller towns that there will be a tienda for each 100 to 200 population in the towns themselves. Of course, these outlets generally serve a wider area than the towns themselves.

Table 2

Retail Outlets in Representative Urban AreasOutside Guatemala

	Population of Town	Supermercados, Almacenes de Abarrotes, Mini & Micro Mercados	Abarroturas Depositos, Super- Tiendas	Tiendas Grandes, Medranas & Pequinas
Taxisco	N.A.	1	0	43
Guazacapan	N.A.	1	0	36
Chiquimulilla	18667	4	2	67
Antigua	20411	5	7	114
Chimaltenango	15167	0	5	90
Santa Cruz del Quiche	8870	1	0	104
Totonicapan	10068	2	4	115
Hushuetenango	13583	4	8	180
Chiantala	N.A.	0	0	53
Barbarena	6792	3	1	59
Cuilapa de Santa Rosa	5018	30	1	52
Jutiapa	11636	3	1	116
El Progreso	5056	1	1	64
Jalapa	15942	2	2	131
Puerto Barrios	22722	9	4	185
Zacapa	14655	5	6	103
Chiquimula	18667	4	4	137
Esquipulas	7974	1	3	132
Salama	N.A.	1	0	67
Santa Cruz	N.A.	0	0	21

Table (cont'd)

Coban	13705	1	4	136
Carcha	5196	0	5	84
St. Cristobel	5778	0	0	42
Santa Lucia	N.A.	2	4	120
San Antonio Suctutepequez	N.A.	1	1	75
Magatenango	27868	8	12	254
Retallulen	23329	8	8	164
Villa Nueva	14253	2	1	114
Ciudad Tecum Uman	18400	0	0	46
Coatepequel	12530	5	6	226
Mixco	17734	0	0	91
Amatitlan	42893	0	6	165
Escuintla	N.A.	6	19	336
Petan	N.A.	1	2	100
Quezaltenango	53042	16	33	324

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## 2. Advertising Media

Commercial television, press, radio, cinema and billboards are widely used advertising media. According to advertising agency data, approximately 210,000 of the 1.2 million households constitute a regular TV audience, and this number is growing at more than 20 percent. Penetration is high in the capital (85%) and modest in the south and southwest (45%) but growing even more rapidly. (These areas contain the concentration of the potential market described later in this report). Some indication of the relative penetration by social class is available for the capital, where penetration is 97% for classes A and B, 95% for C and 70% for D and E. Costs vary over channels and for various times of the day. A 30-second spot on Channel 13 after 10 p.m. (the time most likely for any TV advertising) costs \$85, and 40 seconds on Channel 3 at the same time costs \$41. Discounts are available for larger purchases. Sophisticated audience rating data are available by program type to help in media selection.

The three largest newspapers (Prensa Libre, El Grafico and La Nacion) have total readership of 240,000. Of these, about half are women and half in C and D classes. Cost per 1000 exposures of large ads ranges from \$1.08 to \$3.65. Cost per column inch is \$3.00 to \$5.00 per insertion. In addition, there are five smaller daily papers and a number of other smaller newspapers and magazines.

There are 44 radio stations located outside Guatemala City and 30 in the city. Based on information supplied by marketing, advertising and business firms, it is reasonable to assume that radio offers nearly 100 percent penetration of the target market for this program. Time is sold for as little as 0.03 quetzals per second, and an annual schedule of four spots every day throughout the country would cost about \$190,000. A 30-second spot on a popular station in Guatemala City may cost as little as \$3 to \$5. Audience profile and penetration data are available for the important stations.

There are approximately 120 major cinemas which carry advertising. A movie film will cost approximately \$10,000 to \$12,000 for production in color, and the same film, reduced to 16 mm., can often be used for television transmission.

Billboards and smaller signs are common in the city and countryside, as are point-of-purchase materials (dispensers, signs, etc.) in even small stores. One brand of contraceptives (Protex) uses large billboards and explicit copy, "masculine contraceptive." Significant users of point-of-purchase materials include Rubio cigarettes, soft drinks, (Pepsi, Fanta, Coca Cola), beer, Bayer, Selsun Azul, Vicks, Nivea, Mejoral, Sol Andrews, Alka Seltzer, Chocks, Zenith, Jockey, Levis, Tappan, Banco del Occidente, Dr. Scholls, Hitachi and Tang.

The largest annual advertising budget is about \$500,000 for a beer firm. Two large package goods firms spend \$400,000 each, and \$100,000 is considered a major advertising budget which could purchase a nation-wide media schedule using most of the above media.

### 3. Marketing Support

The Guatemalan marketing system is well-developed and provides a wide array of services which will be needed in support of the program.

#### a. Advertising agencies

The commercial telephone directory lists 46 advertising agencies. While these vary widely in size and capability, the largest (McCann-Ericsson) provides sophisticated and modern facilities for both copy writing and media selection. Some multi-national firms use local agencies.

#### b. Market research

In addition to the research capabilities of some of the larger advertising agencies, there are ten organizations offering various types of advertising research services. All types of research on consumer products (motivation research, brand and package tests, concept tests, etc.) have been done in Guatemala.

#### c. Packaging

Nine organizations offer services in designing and producing packaging.

#### d. Distributors

Thirty-seven "drogerias" are listed in the Directorio de Information concerning the medical and pharmaceutical industries. General wholesalers and distributors (the boundary between a large wholesaler and a distributor is blurred) number in the hundreds and provide distribution services into stores throughout urban and rural areas.

All advertising and research agencies and most distributors are concentrated in Guatemala City.

### III. ECONOMIC FEASIBILITY FOR A SUBSIDIZED CONTRACEPTIVE

The economic feasibility of the proposed project is examined in the context of a very rough sketch of ranges of decisions for the ultimate marketing plan. This involves five elements:

1. Determination of a potential market and projections of volumes within that market.
2. Buyer Behavior
3. Suggestions for general characteristics of the marketing decisions, including prices, product and brand mix, distribution and communication. These will include alternatives designed to appeal to different market segments.

4. Estimation of the cash generating potential of the program.
5. Suggestion of organizational forms that might be used to implement the project.

A. Market Potential and Forecast

The potential market for this project is defined as that part of the population of fertile couples which is not currently practicing some sort of form of modern contraception and has adequate cash income to be able to consider the purchase of low-priced contraceptives. This target is, in turn, segmented for program purposes into subcomponents involving certain elements which may require Ladino and Indian approaches.

The target market for this project includes families with incomes of \$50 or more per month. The choice of \$50 per month as the floor definition of the target market is based in part on the fact that minimum monthly wages in almost all non-agricultural settings are above this level. In March, 1976, it was estimated that 46 percent of the labor force was above this level, and it is also estimated that per capita incomes have risen by 20 percent since that time.

A further breakdown of the population includes the following characteristics:

While a substantial fraction of the population is urban, most live in small cities. Recent breakdowns are as follows:

Capital	827,500
Other cities larger than 20,000	190,200
10-20,000	242,400
5000-10,000 less than 5000	256,900
	<u>505,000</u>
Total urban	2,022,000 (34%)
rural	3,991,000 (66%)

Even though the target market is in all likelihood concentrated in the urban areas and towns, the distribution system must reach into small urban areas.

One breakdown of socio-economic class used by a consumer products company is as follows:

Upper and upper middle	10%
Middle class	38%
Lower class	52%

In this particular breakdown, however, families with incomes up to \$4000 are included in the last category, implying that a significant fraction of that group lies within our target.

An approximate assessment of the size of the potential market is based on these income groupings as follows:

Step 1. Of an estimated total population of 6.5 million persons, 46% (3 million) are between the ages of 15-49. About one-half of these, or 1.5 million, are women. This corresponds reasonably to an estimate provided by a consumer-marketing company that there are about 1.2 million households which form the basis of estimates of potential markets.

Step 2. Estimates of income distribution indicate that 30% of Indian households and 60% of Ladino households have incomes above the \$50 cut-off point. Of the 1.2 million households, 540,000 are Indian and 30% of these, or 162,000, are above the income threshold. Of the 660,000 Ladino households, 396,000 are above that level. The total potential market is thus 550,000.

Step 3. Given that current users number about 100,000 (85,000 Ladinos and 15,000 Indians, based on consumer behavior data), there are about 458,000 unserved families. Of these, 311,000 are Ladinos and 147,000 are Indian. It is reasonable to expect that a commercial program may reach 20% of these, or 91,600 households (62,200 Ladino and 29,400 Indian).

Step 4. A secondary market is those families with incomes of \$30 to \$50 per month. This would include 15 percent of all Ladino families (99,000) and 20 percent of the Indian families (108,000) for a total of 207,000. Twenty percent of this target will produce an additional 41,400 users, although a different strategy (described below) will probably be required to reach this secondary market.

## B. Buyer Behavior

Forecasts of volumes for a subsidized commercial distribution program are most likely to be reasonable in the following circumstances:

- general levels of awareness and knowledge of family planning are high;
- attitudes towards the general concept of fertility limitation are favorable for a substantial fraction of the population;
- among those with reasonable levels of general knowledge and favorable attitudes, there should be indications of a lack of specific knowledge about methods and about where to obtain information.

While only limited KAP information is available for Guatemala, there are

indications that these conditions are met, particularly among the Ladino population. Some indications of this situation are:\*

	<u>Ladino</u>	<u>Indian</u>
Heard of Family Planning	94.2%	35.6%
Favor Family Planning	67.4%	22.8%
Currently Practicing	9.5%	2.6%

Perceived lack of availability of information and contraceptives appears to be a major problem in the populations studied.

The historical split of contraceptives used also indicates the importance of the pill to the program:

Oral contraceptives	70%
IUD	23%
Injections	4.5%
Others	2.5%

However, there are indications that interest in the pill is declining and is increasing in other methods (especially condoms and foaming tablets). A multiple-product program, certainly including the pill, is indicated.

In addition, a high level of abortion is reported, particularly in the cities, and this further encourages open promotion of family planning and contraceptives. One study in Guatemala City reported that one in three women studied had had at least one abortion.

### C. Elements of the Marketing Program

The functional elements of the marketing program are discussed below in terms of two tiers. The first is a single pricing and product mix strategy that can reach the primary target market but which will have limited further potential for penetration into the very low income segments of the Indian populations especially. The second is a two-tier price-product strategy that has greater future potential in the lower-income segments, but which is substantially more complex in terms of design and management.

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Health Sector Assessment: Guatemala, F. Schieck, G. Hill, N. Parker, Dr. E. Long, USAID, November 1977, pp. 132-147.

## 1. Prices

### a. Single Price Strategy

Previous experience with similar programs is that prices designed to reach the target market should be a fraction of one percent of the minimum monthly income cut-off and should correspond to purchase units of other products commonly bought by the household. This suggests a price range of 30 to 40 cents for a month's supply, e.g., a cycle of pills, a dozen condoms or a tube of foaming tablets. This is less than one percent of the income of the lowest group in the target market. Usual units of purchase and prices of the most typical food and manufactured products are also consistent with this suggestion:

- Beans by the pound	25¢/lb.
- Corn	12-15¢/lb.
- Rice	18-20¢/lb.
- Coffee	4.25/big jar of instant
or ground	1.25/lb.
- Matches	58¢ for 50 packs
- Aspirin	5¢/1
- Cigarettes (Casino)	25¢
- Coca Cola	15¢
- Bottle beer	35¢
- Butter	50-60¢/lb.
- Cooking oil	2.85/gallon
- Kerosene	70¢/gallon
- Propane	6.50/35 lbs. - 4-5 weeks
- Gillette	5¢/1
- Batteries	12 to 35¢ for smaller, usually purchased in multiples; 50¢ for larger
- Meat	1.40 per pound
- Eggs	7-9¢/1

## b. Multiple-price strategy

For the program to reach the secondary market of the lower-income segments, prices of 15 to 20¢ (half the price of the single-price strategy), are likely to be in the feasible range. These are, in fact, about the prices charged by the health centers, community-based distributor systems and municipal pharmacies, so a promotional program can be expected to increase volumes in these outlets as well.

## 2. Product

### a. Single product strategy

The single market strategy should involve pills, condoms and foaming tablets provided by USAID or some other source. Brand names should be developed and tested separately for the Indian and Ladino markets, with special emphasis placed on the possibilities for common symbols and language which might produce complementary promotional impact and might also simplify the brand structure.

### b. Two-tier product strategy

A two-tier market strategy will require that two different products in each category be procured, probably through different sources and through different types of financing. Separate brand names should be developed and tested for each product for each of the cultural markets. It is important in this strategy to search for common elements in terms of symbols and promotions in order to allow interaction of the promotional schemes and to reduce the number of different promotion-brand-product combinations.

### c. Advertising

With a project budget of \$125,000 for annual maintenance advertising, one-third might be allocated to focus on the Indian target population of 137,000 householders, and the remaining two-thirds or \$80,000 on the Ladino target population of 160,000 households. Based on the prevailing costs of production of media messages and media time, it is reasonable to believe that a campaign comparable to that of other widely distributed consumer products is possible.

It is important for purposes of efficiency and management that branding be simplified as much as practicable should a two-tier product/price approach be proposed.

We suggest that \$125,000 be budgeted for the introductory campaign in the first year, including point-of-purchase materials, displays, dispensers, etc.

### d. Promotion

Mass-marketed consumer products in Guatemala use a wide variety of promotional measures. These include point-of-purchase displays for various items, sound trucks in markets, posters, street signs and packaging of related products (baby powder and Q-tips, for example).

Other more aggressive means of promotion such as those used in commercial programs in other countries may be considered for gradual introduction after pretesting and assessment of public and trade reaction. While the vending machine system is not well-developed, some experimentation with vending machines seems reasonable, particularly in bus stations and other heavy-traffic locations.

e. Distribution

The initial targets for distribution to be achieved at the time of the initial product launch will be the approximately 1200 A, B and C pharmacies described earlier. These penetrate deeply enough into the countryside to provide access to the target segments mentioned earlier. There should be no policy problems with securing such distribution for condoms or foaming tablets, but adequate training and follow-up materials must be developed for the class C pharmacies to allow distribution to be acceptable as a policy matter. It may be good strategy to provide the initial stock to retailers free of charge.

After the launch, distribution of condoms and foaming tablets (and where feasible, orals) should be expanded to larger tiendas by steps, using the pharmaceutical margins. Prices would be:

	<u>Primary Market</u>	<u>Secondary Market</u>
Retail price	35¢	20¢
Price to retailer	28¢	16¢
Price to wholesaler	22.4¢	12.8¢
Less packaging cost	1.5¢	1.5¢
Revenue to program	20.9¢	11.3¢

f. Revenue to program

Return to the program will be, under the single-tier program servicing 91,600 users consuming 12 units per year, approximately \$230,000 per year. The program serving the secondary market should produce an additional \$56,000 per year.

It is useful to note that an average price increase of \$.05 in the primary target market will increase revenues to the program by approximately \$40,000. The revenue levels to the program are also such that margins might be expanded to make the products more attractive to distributors, wholesalers and retailers.

g. Detailing

Detailing of pharmacies of all classes, of physicians and of clinics should be a component of the program. In addition to the pharmacies of various classes,

the new products should be detailed to the following classes of private physicians:

- Obstetricians - gynaecologists 180
- General practitioners 800

Virtually all of the 1500 physicians employed by the Ministry of Health and the Social Security system practice privately, most about half-time.

#### h. Test marketing and roll-out

While extensive test marketing is probably not necessary, it may be useful to identify local areas outside Guatemala City in which the introduction can be started as a trial run. Esquintla, a predominantly Ladino area, might play such a role, as could Machatenango, a predominantly Indian area.

It appears that the program can yield substantial cash (provided the contraceptives are provided free) when it reaches the full level of operation sometime toward the end of the second year.

#### D. Organization and Management

##### 1. Personnel

The basic organizational form must provide for:

- a. a marketing manager;
- b. two full-time sales representatives and one working for one calendar year who will call first on 200 wholesalers and distributors, and then on 1000 large retailers during the introductory period. As the distribution system expands, these same persons can play the role of missionary sellers, in addition to doing bi-monthly calls on the wholesalers;
- c. a detail man working for one calendar year to call on all first-class pharmacies, some second and third class pharmacies, the municipal pharmacies, hospitals and selected physicians in private practice. In addition, literature would be mailed to all physicians listed in the medical directory.

##### 2. Time frame

The product launch should occur about nine months from the starting date of the actual work on branding, packaging and advertising. These developments should require about six months of research and development, plus two to three months of sell-in to secure initial distribution. Long-term sales levels should be reached about 12 months later. The project should thus last about two years plus the time needed to get the project manager in place in Guatemala.

### 3. Management

For reasons mentioned earlier, it is desirable that the program be developed as an independent organization in liaison with APROFAM. Day-to-day program activities might be managed in several ways, among these:

1) a U.S. contractor sends a permanent resident manager to Guatemala for a period of two years, with explicit plans to hire a local manager to participate in all phases of project development;

2) a U.S. contractor may act as financial and administrative manager for a Guatemalan marketing firm which might actually run the project. This option might best be exercised by publicizing the contract among advertising, consulting and major marketing firms in Guatemala City. Regardless of the method selected for management of the technical marketing operations, overall responsibility for policy-making and any contact with government or public organizations would rest with APROFAM.

#### IV. PROJECT DEVELOPMENT

This section outlines areas of activity that should be specified in competitive proposals for such a project. These proposals, which usually involve a visit by each bidder to the country and consultation with various involved parties, will provide more specific descriptions of program elements than are included in the last section of this report.

Activities to be addressed in each technical proposal include:

##### A. Background Information

1. Statement of trends in socio-economic demographic status and key indicators related to the commercial market and to the public and voluntary family planning programs.
2. A review of all available materials on knowledge about, attitude toward and practice of family planning by current and potential consumers.
3. Description of the role of culture, ethnic diversity, language, religion, education, literacy, and social organization in family planning in general and on marketing of consumer products.
4. A statement of laws and policies governing family planning activities and marketing of various contraceptives.
5. A description of the activity levels of various components of the medical delivery systems.
6. A description of social security and other insurance programs.
7. A list of all importers, distributors and manufacturers of contraceptive products.
8. Estimates of volumes and trends of movement of contraceptive products through commercial, government and voluntary organization channels. This should include all brands on the market along with their retail prices and all brands available in non-commercial channels.
9. Background information on the current government and voluntary family planning programs including approaches to education and communication.
10. A clear statement of the specific reaction of all interested parties (including potential suppliers of services to the program and significant suppliers of contraceptives to the private sector, Government of Guatemala, USAID-Guatemala, APROFAM and relevant commercial organizations whose participation or cooperation would be necessary), to the general concept of a commercial distribution program and to the specific elements of the proposal.

## B. Analysis of Marketing System

1. Distribution - distributors, wholesalers, retailers of a variety of consumer products, including pharmaceuticals. This should include conventional margins, terms of business, inventory practices and selling practices. It should also include numbers of outlets of various types and the number of outlets used for distribution by some representative consumer products.

### 2. Advertising

a. Importance of various media in the advertising mixes of relatively heavily advertised consumer products. This should include attention to media, message type and language and geographic placement.

b. Advertising rates and estimates of costs of production and cost per exposure for each medium should be included.

3. Promotion - a general summary of promotional practices, including examples which might be used by the proposed program.

4. Prices - Retail prices of representative, frequently purchased consumer products.

5. Packaging - A statement and description of the quality of packaging and the importance of the role it plays in product promotion in Guatemala.

## C. Preparation of a Marketing Plan

The bidder will prepare a draft marketing plan for implementation at a nationwide level, along with procedures for moving from local trial to national distribution.

1. Definition and analysis of target market, including enumeration of the specific market segments to be served. This should include segment size, potential and socio-demographic characteristics. It should also include the level of general knowledge, attitude and practice of family planning, and of specific contraceptives in the segment, or specification of means to determine this information before commencement of any marketing activities.

2. Objectives in terms of volumes to be achieved during the program and including expected sales levels during the introductory and maintenance phases.

### 3. Elements of the Marketing Plan

a. establish prices to consumers at a level which will make contraceptives available to the target market chosen;

b. propose procedures for developing and testing brand names in various relevant languages;

- c. propose a specific distribution structure for the various contraceptive products including the number and type of retail outlets and their geographic coverage;
- d. establish margins for compensation of the various elements of the distribution system;
- e. lay-out procedures for developing and testing packaging and point-of-purchase materials;
- f. propose a schedule of advertising and promotion, including media and expenditures;
- g. examine the potential for the use of vending machines;
- h. propose consumer instructional material in appropriate languages for each contraceptive product in the program and appropriate tests;
- i. propose methods for training retailers in sale of products and use of instructional materials;
- j. propose an information system and program of on-going research to provide information for management of the launch and for post-program evaluation.

#### 4. Introductory Program

In addition to the nation-wide program, the bidder should propose a schedule for introduction, with local test markets of limited duration in limited geographic areas, involving languages and economic segments in the defined target. This should include recommendations for locations for initial introduction supported by rationale for site selection and timing, as well as data gathering procedures and uses of information gained for recalibration of the nationwide program.

#### D. Procedural Elements of the Program

The bidder should:

1. propose methods and criteria for choosing an advertising agency and identify candidates;
2. propose methods and criteria for choosing a distributor or distributors and identify candidates;
3. propose methods and criteria for choosing an organization to perform marketing research and identify candidates;
4. propose methods and criteria for choosing an organization to provide packaging and preparation of point-of-purchase materials and identify candidates;

5. establish a time schedule for developing and testing components of the marketing program, and for launching the products;

6. establish procedures for measurement of program results against objectives;

7. propose procedures for importing and warehousing of contraceptive products, including arrangements for exemption from duties and sales taxes;

8. propose procedures for initial stocking of products by various elements of the distribution structure;

9. propose procedures for providing necessary information to physicians in the private sector.

#### E. Measurement of Project Output

The bidder should establish measurement techniques in terms of the following:

1. movement of subsidized products relative to objectives;

2. a detectable increase in sale and use of contraceptives through commercial outlets;

3. behavioral measurements of increased knowledge and awareness;

4. inferred impact on the national and voluntary family planning activities;

#### F. Project Organization

The bidder should:

1. provide alternative methods for program continuation after expiration of the contract;

2. propose means to establish and maintain continuous and open communications and relationship among interested parties;

3. propose a timetable for project activities, including length of time before project is launched, reaches full expected level of activity, and can be expected to be self-sufficient in any sense (e.g., totally, except for product costs, etc.)

4. establish necessary procedures for accounting and control of project inventory, receipts and disbursements;

5. establish reporting procedures for monthly, quarterly and annual reports of sales, distribution;

6. establish procedures for hiring and training a counterpart marketing manager and sales salesman.

G. Post Contract Award Activities

The bidder should propose procedures and organizational framework to:

1. establish relationships with government representatives, voluntary organizations and representatives of the medical, pharmaceutical and business communities;
2. hire and train local personnel;
3. revise the marketing plan after consultation with firms in distribution, advertising and market research.

H. Cost, Revenue and Volume Estimates

The bidder should provide:

1. initial and recurring costs for developing distribution;
2. initial and recurring cost for developing the advertising program;
3. cost of required market research;
4. initial and recurring cost for packaging;
5. costs for personnel and support required to develop and manage the program;
6. total costs of the project by year;
7. gross and net revenues by year.

## V. SOURCES OF INFORMATION

### Publications

1. Development Assistance Program, USAID/GUATEMALA, April 1978.
2. Media Analysis, McCann-Ericsson Centroamericana, 1978.
3. Annis, Sheldon, "Private Commercial Distribution of Contraceptives in the Highlands: Summary of Consultants' Findings and Recommendations, APHA/USAID, October 1978.
4. U.S. Embassy Quarterly Economic Report, Guatemala, 1978.
5. Tarifas de Medios, McCann-Ericsson Centroamericana, 1978.
6. Media Survey, Monsanto & Associates/Aragon and Associates, Guatemala, 1976.
7. Encuesta de Hogares Sobre Recursos Humanos, Direccion General de Estadistica Ministerio de Economia, May 1977.
8. Proposed Health Code, Chapter II, Guatemala, 1979.
9. Glittenberg, J.K., "A Comparative Study of Fertility in Highland Guatemala: A Ladino and an Indian Town, 1976."
10. Directorio Estadistico Comercial, Servicio de Investigacion de Mercados, Guatemala, 1978.
11. Directorio de Informacion Medica, Farmaceutica, Odontologica, Veterinaria, Guatemala, 1978.
12. Health Sector Assessment, USAID/Guatemala, 1977.
13. Informacion Socio-Economica, MARPLAN, Guatemala, 1978.
14. Dun and Bradstreet International Business Directory, 1979.
15. Law and Population Programme Reports and Files, Tufts University.
16. U.N. Statistical Yearbook, 1977.

### Persons

1. Scott Edmonds, USAID/Guatemala
2. Arthur Danart, USAID/Washington
3. Neil Woodruff, USAID/Guatemala

Persons (cont'd)

4. Gene Schreiber, USAID/Guatemala
5. Dr. Roberto Santiso, Executive Director, APROFAM
6. Rolando Sanchez, APROFAM
7. Lawrence P. Finnegan, General Manager, Gillette, Guatemala
8. Julio Cesar Cetina, Wyeth International Ltd., Guatemala
9. Juan Esperon, MARPLAN, Guatemala
10. Randy Smith, Rayovac, Guatemala
11. Sr. Flores, McCann-Ericsson Centroamericana, Guatemala
12. Sergio Barrientos, Myles Laboratorios, Guatemala
13. Paul DeWitt, Johnson & Johnson, Guatemala
14. Rodolfo Mendoza, Johnson & Johnson, Guatemala
15. Manager, Drogeria Colon, Guatemala