

# Social Marketing in Senegal

*CMS program results and implications*

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**COMMERCIAL MARKET STRATEGIES**  
NEW DIRECTIONS IN REPRODUCTIVE HEALTH

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Commercial Market Strategies (CMS) is the flagship private sector project of USAID's Office of Population and Reproductive Health. The CMS project, in partnership with the private sector, works to improve health by increasing the use of quality family planning and other health products and services.



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## Introduction

The USAID mission in Senegal requested social marketing assistance from the CMS project and its local implementing agency ADEMAS (l'Agence pour le Développement du Marketing Social) to increase the supply of, and the demand for, reproductive health products and services through the private sector.

Currently CMS/ADEMAS markets a subsidized brand of condoms, *Protec*; a subsidized brand of oral contraceptives, *Securil*; and is also investigating the possibility of launching a new contraceptive injectable. In order to gather the information needed to effectively market *Protec* and *Securil*, and to design a potential campaign for marketing an injectable contraceptive, CMS/ADEMAS conducted a nationally representative household survey of Senegalese men and women of reproductive age in the summer of 2002.

The broad objectives of the study were to:

- Obtain population-level indicators against which to measure the impact of the condom social marketing program in Senegal
- Gain a deeper understanding of current knowledge about oral contraceptives and injectables in order to create a more effective communication strategy
- Identify potential market niches for private sector expansion



## Research Methods

In collaboration with the Ministry of Health and USAID/Washington, CMS/ADEMÁS conducted a survey to obtain indicators and marketing information from four sources — households, men of reproductive age, women of reproductive age, and people who had recently been ill (defined as those who had recently sought health care).

The requirements for participating in each module and the kind of information collected for each included:

- *Household questionnaire*: Posed to household head; listed all household members and gathered information about economic status of household.
- *Women's questionnaire*: Administered to all women between the ages of 15 and 49 who were usual residents of the household and spent the previous night in the household. The questionnaire gathered data about knowledge and attitudes relative to family planning, use of reproductive health services, and willingness to pay for preventive health services and products.
- *Men's questionnaire*: Administered to all men either between the ages of 15 and 59 or married to an eligible woman and who were usual residents of the household and spent the previous night in the household. The questionnaire collected information on knowledge, attitudes, and practices relative to family planning, including use of condoms and willingness to pay for preventive health services and contraceptive products.
- *Health care seekers' questionnaire*: Posed to all household members who were ill with one of the following in the past 30 days:<sup>1</sup> fever/malaria, diarrhea, gynecological problems, sexually transmitted infections, insect bite, HIV/AIDS, headache/migraine, respiratory infection, or an intestinal problem, and who sought care for their condition. The questionnaire collected information on how the illnesses were treated and expenses incurred.<sup>2</sup>

## Sampling

CMS/ADEMÁS engaged the services of a Senegalese firm, ORGATECH, to organize and carry out data collection and data entry. ORGATECH created a sampling plan to cover 2,000 households nationally, of which approximately 1,400 were urban and 600 were rural. The plan also factored in a potential rejection (or non-response) rate of 10 percent. The household sample was representative of the population of Senegal as a whole, and was organized under three geographic zones:

- The primarily urban Dakar region, including the departments of Dakar, Pikine, and Rufisque
- Other urban areas

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<sup>1</sup> For children age 15 or younger, the mother or guardian responded to questions concerning the illness of the child.

<sup>2</sup> The results of this module are not reported in this document as they do not pertain directly to the CMS/ADEMÁS social marketing campaign.

- Rural zones

ORGATECH built on preparatory work done for the most recent national census (1997) by Senegal's Direction of Statistics (la Direction de la Prévision et de la Statistique, or DPS). DPS had created a file defining the census districts contained in each of the country's regions, and noting the average number of households in each district. ORGATECH used this information to create primary sampling units (see Table 1) and the three representative geographic zones, or strata, outlined above.

*Table 1: Number of primary sampling units by strata*

| <b>Region</b>  | <b>Number of census districts in the region</b> | <b>Average number of households in each census district</b> | <b>Population</b> | <b>% of the population</b> |
|----------------|---|---|-------------------|----------------------------|
| Dakar          | 1,440   | 135   |                   |                            |
| Ziguinchor     | 472   | 113   |                   |                            |
| Diourbel       | 732   | 90  |                   |                            |
| St-Louis       | 799   | 97  |                   |                            |
| Tambacounda    | 489   | 89  |                   |                            |
| Kaolack        | 929   | 90  |                   |                            |
| Thiès          | 1,068   | 92  |                   |                            |
| Louga          | 607   | 87  |                   |                            |
| Fatick         | 639   | 86  |                   |                            |
| Kolda          | 616   | 98  |                   |                            |
| <b>Strata</b>  |   |   |                   |                            |
| Dakar          | 1,440   | 135   | 2,326,929         | 24%                        |
| Other urban    | 1,330   | 107   | 1,797,661         | 19%                        |
| Rural          | 5,061   | 89  | 5,404,439         | 57%                        |
| <b>Total =</b> | <b>7,791</b>                                    | <b>101</b>  | <b>9,529,029</b>  | <b>100%</b>                |

Source: DPS/ EDS III — 1997

## Sampled population

Table 2 below shows the distribution of individuals identified in the household roster. The population of Senegal continues to be quite young, with close to half of the population under the age of 20.

Table 2: Distribution of household members by age and sex (percent)

| Age                            | Dakar       |             |             | Other Urban |             |             | Rural       |             |             |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                | Men         | Women       | Total       | Men         | Women       | Total       | Men         | Women       | Total       |
| 0-4                            | 11.2        | 8.9         | 10.1        | 12.7        | 11.4        | 12.0        | 16.4        | 14.5        | 15.4        |
| 5-9                            | 12.4        | 10.4        | 11.4        | 14.4        | 13.0        | 13.7        | 18.6        | 17.0        | 17.8        |
| 10-14                          | 14.6        | 13.5        | 14.1        | 18.7        | 14.9        | 16.7        | 18.2        | 13.1        | 15.6        |
| 15-19                          | 11.0        | 11.4        | 11.2        | 10.9        | 11.9        | 11.4        | 6.8         | 9.4         | 8.2         |
| 20-24                          | 9.6         | 11.7        | 10.7        | 9.1         | 9.6         | 9.3         | 6.3         | 7.6         | 7.0         |
| 25-29                          | 8.0         | 9.9         | 9.0         | 5.7         | 6.8         | 6.2         | 5.5         | 7.9         | 6.7         |
| 30-34                          | 6.6         | 7.5         | 7.0         | 3.9         | 5.2         | 4.6         | 4.4         | 5.9         | 5.2         |
| 35-39                          | 4.6         | 5.7         | 5.2         | 3.9         | 6.1         | 5.1         | 3.8         | 4.6         | 4.2         |
| 40-44                          | 4.4         | 4.8         | 4.6         | 3.5         | 5.1         | 4.4         | 3.5         | 4.5         | 4.0         |
| 45-49                          | 4.0         | 3.3         | 3.6         | 3.9         | 2.7         | 3.2         | 2.8         | 2.9         | 2.9         |
| 50-54                          | 2.2         | 5.2         | 3.8         | 2.6         | 4.9         | 3.8         | 2.7         | 4.6         | 3.7         |
| 55-59                          | 1.8         | 2.6         | 2.2         | 1.5         | 2.3         | 1.9         | 1.4         | 2.4         | 1.9         |
| 60-64                          | 4.0         | 2.1         | 3.0         | 3.5         | 2.3         | 2.8         | 3.2         | 1.9         | 2.6         |
| 65-69                          | 1.7         | 0.9         | 1.3         | 1.7         | 1.4         | 1.6         | 2.2         | 1.3         | 1.8         |
| 70-74                          | 1.1         | 0.7         | 0.9         | 1.6         | 0.9         | 1.2         | 1.8         | 0.7         | 1.3         |
| 75-79                          | 0.6         | 0.4         | 0.5         | 0.7         | 0.4         | 0.5         | 1.1         | 0.6         | 0.8         |
| 80 plus                        | 2.1         | 0.8         | 1.5         | 1.8         | 1.3         | 1.6         | 1.1         | 1.2         | 1.2         |
| Total                          | 100.0       | 100.0       | 100.0       | 100.0       | 100.0       | 100.0       | 100.0       | 100.0       | 100.0       |
| <b>Unweighted observations</b> | <b>2549</b> | <b>2618</b> | <b>5168</b> | <b>2231</b> | <b>2530</b> | <b>4764</b> | <b>2894</b> | <b>2989</b> | <b>5885</b> |

## Creation of a standard of living index

A weighted index of the various assets that are owned by households is used as a proxy for ability to pay for health services.<sup>3</sup> Households were ranked by their index score and then divided into five equal groups. Table 3 shows various household characteristics by the Standard of Living Index (SLI). The two lowest SLI groups appear to be very similar. Most respondents in these categories reside in rural areas where asset ownership is largely limited to farm animals, farm implements, and radios. In the third or middle socioeconomic group, about one-quarter live in cities, and there is increased ownership of radios and stoves. More than 90 percent of the highest and 75 percent of the second-highest socioeconomic groups are located either in Dakar or in other urban areas. In the middle-upper income category, many more people own stoves, and more than half own televisions. Finally, in the highest socioeconomic category, nearly everyone owns a radio and a television, and more than three-quarters own telephones, refrigerators, and stoves.

<sup>3</sup> The weights for each asset are derived from a factor analysis using the first principal component of a principal components analysis. Details are available from the authors. For a more general explanation of the method, see <http://www.worldbank.org/poverty/health/index.htm>.

*Table 3: Ownership of asset[s], disaggregated by standard of living index (percent)*

| <b>Residency</b>                                  | <b>Lowest 20%</b> | <b>Lower-middle</b> | <b>Middle</b> | <b>Middle-upper</b> | <b>Upper 20%</b> | <b>Total</b> |
|---|-------------------|---------------------|---------------|---------------------|------------------|--------------|
| Dakar   | 0.0               | 0.0                 | 4.6           | 34.1                | 67.0             | 21.2         |
| Other Urban                                       | 0.2               | 3.4                 | 24.5          | 41.7                | 24.9             | 19.0         |
| Rural   | 99.8              | 96.6                | 70.9          | 24.3                | 8.1              | 59.9         |
| <b>Asset</b>                                      |                   |                     |               |                     |                  |              |
| Electricity                                       | 0.0               | 1.4                 | 17.3          | 82.9                | 99.1             | 39.9         |
| Radio   | 67.5              | 73.6                | 80.2          | 91.1                | 98.7             | 82.2         |
| Television  | 0.0               | 3.2                 | 10.4          | 54.0                | 96.3             | 32.6         |
| Telephone   | 0.0               | 0.2                 | 3.7           | 18.3                | 76.2             | 19.5         |
| Refrigerator                                      | 0.0               | 0.0                 | 0.2           | 19.3                | 78.5             | 19.4         |
| Washing Machine                                   | 0.0               | 0.0                 | 0.3           | 3.2                 | 3.1              | 1.3          |
| Stove   | 1.4               | 9.1                 | 38.0          | 71.9                | 87.5             | 41.4         |
| Cooker  | 0.9               | 0.5                 | 2.4           | 2.6                 | 22.5             | 5.7          |
| Bicycle   | 16.2              | 21.2                | 10.6          | 9.0                 | 12.0             | 13.8         |
| Motorcycle  | 0.0               | 3.6                 | 5.8           | 10.3                | 11.3             | 6.2          |
| Car   | 0.0               | 0.9                 | 4.3           | 7.5                 | 29.1             | 8.3          |
| Truck   | 0.0               | 0.0                 | 0.3           | 1.6                 | 2.2              | 0.8          |
| Tractor   | 1.8               | 1.4                 | 0.3           | 0.9                 | 0.5              | 1.0          |
| Beast of burden                                   | 86.5              | 56.3                | 41.5          | 10.6                | 3.4              | 39.8         |
| Cart or plow                                      | 67.2              | 34.6                | 28.7          | 9.2                 | 2.6              | 28.6         |
| <b>Number of people per room in the household</b> |                   |                     |               |                     |                  |              |
| 1 person or fewer                                 | 8.1               | 12.7                | 13.2          | 11.6                | 17.2             | 12.6         |
| Between 1 and 2                                   | 35.7              | 41.0                | 35.8          | 36.0                | 37.6             | 37.2         |
| Between 2 and 3                                   | 28.3              | 27.6                | 30.7          | 30.3                | 25.1             | 28.4         |
| More than 3                                       | 27.9              | 18.8                | 20.3          | 22.1                | 20.2             | 21.9         |
| <b>Total N =</b>                                  | <b>407</b>        | <b>406</b>          | <b>408</b>    | <b>407</b>          | <b>407</b>       | <b>2035</b>  |

## Results

### Prevalence trends

Table 4 presents the historical trend in contraceptive prevalence rates for Senegalese women of reproductive age. The table includes data from DHS surveys dating from 1986, as well as data from the 2002 CMS/ADEMAs survey. The data suggest that contraceptive use has increased slightly over the years, and that the most recent increase was driven by an increase in traditional method use, particularly abstinence. An abstinence program, in place since 1999 for averting HIV and STIs, may explain why more women are reporting use of this contraceptive method. The increase in traditional methods may also be due to the fact that the CMS/ADEMAs survey is one of the first to record the levels of women using the Lactational Amenorrhea Method (LAM) for spacing births; results show that it is used by 2.2 percent of women as a form of contraception. Modern method use as a whole has remained stable at about 7 percent since 1997.

*Table 4: Historical contraceptive prevalence and method mix: all women aged 15 to 49 (percent)*

|   | 1986      | 1992/93      | 1997         | 1999          | 2002         |
|---|-----------|--------------|--------------|---------------|--------------|
| <b>Current contraceptive use</b>                            |           |              |              |               |              |
| Any method  | 10.0      | 7.1          | 10.8         | 9.0           | 13.4         |
| Modern method   | 2.6       | 4.5          | 7.0          | 7.1           | 7.1          |
| Traditional method  | 7.4       | 2.6          | 3.8          | 1.9           | 6.3          |
| Not currently using   | 90.0      | 92.9         | 89.2         | 91.0          | 86.6         |
| <b>Current use of contraception by contraceptive method</b> |           |              |              |               |              |
| Pill  | 1.7       | 2.0          | 2.7          | 2.5           | 2.5          |
| IUD   | 0.7       | 1.2          | 1.4          | 0.6           | 0.5          |
| Injectable  | 0.0       | 0.1          | 1.3          | 1.9           | 2.0          |
| Condom  | 0.0       | 0.7          | 1.0          | 1.3           | 1.4          |
| Female sterilization  | 0.2       | 0.3          | 0.4          | 0.4           | 0.3          |
| Male sterilization  | 0.0       | 0.0          | 0.0          | NA            | 0.0          |
| Implant/Norplant  | NA        | 0.0          | 0.0          | 0.3           | 0.3          |
| Vaginal method  | 0.0       | 0.1          | 0.2          | 0.1           | 0.1          |
| Periodic abstinence   | 0.0       | 0.9          | 1.0          | 0.8           | 0.8          |
| Withdrawal  | 0.0       | 0.1          | 0.1          | 0.2           | 0.0          |
| LAM   | NA        | NA           | NA           | 0.0           | 2.2          |
| Gris-gris   | 0.0       | 1.0          | 0.7          | 0.0           | 0.7          |
| Abstinence  | 0.0       | 0.5          | 1.7          | 0.0           | 2.6          |
| Other   | 0.0       | 0.0          | 0.3          | 0.0           | 0.0          |
| <b>Total N =</b>  | <b>NA</b> | <b>6,310</b> | <b>8,593</b> | <b>17,189</b> | <b>3,438</b> |

Sources: Senegal DHS (1986), DHS (1993), DHS (1997), DHS (1999), CMS (2002)

Table 5 reports contraceptive prevalence among married women. Again, overall use of family planning has increased, with most of the increase accounted for by an increase in reported abstinence and the measurement for the first time of LAM. Again, modern method prevalence appears to have remained largely stable since 1997, at about 8 percent.

*Table 5: Historical contraceptive prevalence and method mix: married women aged 15 to 49 (percent)*

|   | 1986      | 1992/93      | 1997         | 1999          | 2002         |
|---|-----------|--------------|--------------|---------------|--------------|
| <b>Current contraceptive use</b>                            |           |              |              |               |              |
| Any method  | 11.3      | 7.4          | 12.9         | 10.5          | 14.6         |
| Modern method   | 2.4       | 4.8          | 8.1          | 8.2           | 7.8          |
| Traditional method  | 8.9       | 2.7          | 4.8          | 2.3           | 6.8          |
| Not currently using   | 88.7      | 92.6         | 87.1         | 89.5          | 85.4         |
| <b>Current use of contraception by contraceptive method</b> |           |              |              |               |              |
| Pill  | 1.2       | 2.2          | 3.3          | 3.2           | 3.2          |
| IUD   | 0.7       | 1.4          | 1.6          | 0.9           | 0.7          |
| Injectable  | 0.1       | 0.2          | 1.7          | 2.3           | 2.4          |
| Condom  | 0.1       | 0.4          | 0.6          | 0.7           | 0.7          |
| Female sterilization  | 0.2       | 0.4          | 0.5          | 0.5           | 0.4          |
| Male sterilization  | 0.0       | 0.0          | 0.0          | NA            | 0.0          |
| Implant/Norplant  | NA        | 0.0          | 0.0          | 0.4           | 0.4          |
| Vaginal method  | 0.1       | 0.1          | 0.2          | 0.1           | 0.1          |
| Periodic abstinence   | 0.9       | 0.8          | 1.1          | 0.9           | 0.8          |
| Withdrawal  | 0.1       | 0.1          | 0.2          | 0.2           | 0.1          |
| LAM   | NA        | NA           | NA           | NA            | 2.9          |
| Gris-gris   | 1.2       | 1.0          | 0.7          | NA            | 0.9          |
| Abstinence  | 2.6       | 0.7          | 2.5          | NA            | 2.2          |
| Other   | 0.1       | 0.1          | 0.4          | NA            | 0.0          |
| <b>Total N =</b>  | <b>NA</b> | <b>4,505</b> | <b>5,851</b> | <b>11,567</b> | <b>2,316</b> |

Sources: Senegal DHS (1986), DHS (1993), DHS (1997), DHS (1999), CMS (2002)

Table 6 presents trends in contraceptive use for all men from 1992 to 2002. The 2002 CMS survey reflects the generally rising trends in contraceptive use among men due to increases in both modern and traditional method use. Condom use in particular, has shown steady growth since 1992/93, with nearly one in five men reporting current condom use in 2002. As with women, male abstinence is reported in higher numbers than in the past (3.5%).

*Table 6: Historical contraceptive prevalence and method mix: all men aged 20 to 59 (percent)*

|   | 1992/93      | 1997         | 1999         | 2002*        |
|---|--------------|--------------|--------------|--------------|
| <b>Current contraceptive use</b>                            |              |              |              |              |
| Any method  | 22.1         | 29.0         | 27.0         | 34.2         |
| Modern method   | 18.0         | 24.3         | 24.5         | 26.1         |
| Traditional method  | 4.1          | 4.7          | 2.5          | 5.9          |
| Not currently using   | 77.9         | 71.0         | 73.0         | 65.9         |
| <b>Current use of contraception by contraceptive method</b> |              |              |              |              |
| Pill  | 2.3          | 2.4          | 2.0          | 1.9          |
| IUD   | 1.1          | 0.9          | 0.3          | 0.3          |
| Injectable  | 0.1          | 0.5          | 0.8          | 1.2          |
| Condom  | 13.9         | 20.0         | 20.8         | 22.3         |
| Female sterilization  | 0.5          | 0.2          | 0.2          | 0.0          |
| Male sterilization  | 0.0          | 0.0          | 0.1          | 0.0          |
| Implant/Norplant  | 0.0          | 0.1          | 0.2          | 0.4          |
| Vaginal method  | 0.1          | 0.1          | 0.1          | 0.0          |
| Periodic abstinence   | 2.1          | 1.7          | 1.4          | 2.2          |
| Withdrawal  | 0.3          | 0.2          | 0.3          | 0.1          |
| LAM   | NA           | NA           | NA           | 1.5          |
| Gris-gris   | 0.8          | 2.0          | NA           | 0.7          |
| Abstinence  | 0.9          | 0.7          | NA           | 3.5          |
| Other   | 0.0          | 0.2          | 0.8          | 0.1          |
| <b>Total N =</b>  | <b>1,196</b> | <b>3,479</b> | <b>1,951</b> | <b>2,050</b> |

\* While CMS collected data for men aged 15 to 59, for comparison purposes with the DHS CMS data in this table refer to men aged 20 to 59.

Sources: Senegal DHS (1993), DHS (1997), DHS (1999), CMS (2002)

Trends in contraceptive prevalence for married men are displayed in Table 7. Contraceptive use among married men appears to have increased due largely to increases in the use of traditional methods. Percentages of LAM and abstinence, not previously recorded in the 1999 DHS, are 2.4 and 2.9 percent, respectively.

*Table 7: Historical contraceptive prevalence and method mix: married men aged 20 to 59 (percent)*

|   | 1992/93    | 1997         | 1999         | 2002*        |
|---|------------|--------------|--------------|--------------|
| <b>Current contraceptive use</b>                            |            |              |              |              |
| Any method  | 13.1       | 19.0         | 21.0         | 24.2         |
| Modern method   | 8.1        | 11.9         | 16.6         | 14.8         |
| Traditional method  | 5.0        | 7.1          | 4.4          | 9.4          |
| Not currently using   | 86.9       | 80.9         | 79.0         | 75.8         |
| <b>Current use of contraception by contraceptive method</b> |            |              |              |              |
| Pill  | 3.5        | 4.0          | 4.3          | 3.0          |
| IUD   | 1.8        | 1.5          | 0.6          | 0.4          |
| Injectable  | 0.0        | 0.7          | 1.8          | 1.9          |
| Condom  | 2.0        | 4.9          | 8.8          | 8.8          |
| Female sterilization  | 0.7        | 0.3          | 0.3          | 0.0          |
| Male sterilization  | 0.0        | 0.1          | 0.3          | 0.0          |
| Implant/Norplant  | 0.0        | 0.3          | 0.4          | 0.6          |
| Vaginal method  | 0.1        | 0.2          | 0.2          | 0.1          |
| Periodic abstinence   | 2.5        | 2.4          | 2.4          | 2.8          |
| Withdrawal  | 0.4        | 0.2          | 0.5          | 0.1          |
| LAM   | NA         | NA           | NA           | 2.4          |
| Gris-gris   | 1.4        | 3.4          | NA           | 1.1          |
| Abstinence  | 0.7        | 1.0          | NA           | 2.9          |
| Other   | 0.0        | 0.2          | 1.5          | 0.1          |
| <b>Total N =</b>  | <b>717</b> | <b>2,071</b> | <b>1,160</b> | <b>1,157</b> |

\* While CMS collected data for men aged 15 to 59, for comparison purposes with the DHS CMS data in this table refer to men aged 20 to 59.

Sources: Senegal DHS (1993), DHS (1997), DHS (1999), CMS (2002)



## Source of supply

Table 8 presents the trends in source mix for modern family planning methods. The public sector continues to be an important source of contraceptives, representing 67 percent of all women using a modern method. Just over one-quarter of women — 25.5 percent — report going to the private sector to obtain contraceptives in 2002. Here, the pharmacy is the most commonly used source (12.6%). Increases in private sector supply came primarily from ASBEF. However, pharmacies, kiosks, and midwives also showed slight increases. Of the 6.3 percent of women who report they “don’t know” where they obtained their contraceptive product, it is presumed that friends or partners were the source.

Table 8: Historical source mix: All women aged 15 to 49 using modern methods (percent)

| Source of contraception | 1986        | 1992/93     | 1997        | 1999      | 2002        |
|-------------------------|-------------|-------------|-------------|-----------|-------------|
| <b>Public</b>           | <b>46.7</b> | <b>59.1</b> | <b>69.3</b> | <b>NA</b> | <b>67.1</b> |
| Public hospital         | 16.8        | 15.7        | 15.7        |           | 15.7        |
| Maternity               | 0.0         | 0.0         | 0.0         |           | 4.8         |
| Health center           | 17.8        | 17.5        | 27.8        |           | 15.9        |
| Dispensary              | 12.1        | 0.0         | 0.0         |           | 25.6        |
| House visit             | 0.0         | 0.0         | 0.0         |           | 0.3         |
| Mobile team             | 0.0         | 0.0         | 0.0         |           | 0.3         |
| Other public            | 0.0         | 25.9        | 25.8        |           | 4.5         |
| <b>Private</b>          | <b>43.0</b> | <b>31.1</b> | <b>21.2</b> | <b>NA</b> | <b>25.5</b> |
| ASBEF                   | 0.0         | 0.0         | 0.0         |           | 5.2         |
| Private clinic          | 38.3        | 14.7        | 6.9         |           | 4.4         |
| Pharmacy                | 4.3         | 11.9        | 11.6        |           | 12.6        |
| Doctor                  | 0.0         | 4.5         | 1.2         |           | 0.3         |
| Midwife                 | 0.0         | 0.0         | 0.0         |           | 1.1         |
| Kiosk                   | 0.0         | 0.0         | 0.0         |           | 1.4         |
| Other private           | 0.0         | 0.0         | 0.0         |           | 0.6         |
| <b>Other</b>            | <b>10.3</b> | <b>5.2</b>  | <b>8.0</b>  | <b>NA</b> | <b>7.4</b>  |
| Parent/Friend           | 0.0         | 5.2         | 8.0         |           | 1.1         |
| Other                   | 0.0         | 0.0         | 0.0         |           | 0.0         |
| Don't know              | 0.0         | 1.4         | 0.7         |           | 6.3         |
| <b>Total N =</b>        | <b>NA</b>   | <b>286</b>  | <b>603</b>  | <b>NA</b> | <b>307</b>  |

Sources: Senegal DHS (1986), DHS (1993), DHS (1997), CMS (2002)

Details of women’s source of condoms over the years are found in Table 9. While roughly one in four women used the public sector as a condom outlet in the early 1990s, only 7.9 percent report obtaining condoms from this sector in the 2002 survey. Over the same time period, private-sector procurement of condoms greatly increased and then stabilized: 55.1 percent of women obtained condoms from the private sector in 2002 (it was 58.0% in 1997), compared to 33.3 percent in the 1992–1993 DHS survey. Finally, the “other” category varies from survey to survey. In 1992, this category was quite high because of the number of women reporting friends and parents (26.7%)

as their source for condoms.<sup>4</sup> In 2002, a large percentage of women stated that they “don’t know” where they obtained condoms (31.2%). This increase in the “don’t know” category is due in part to differences between DHS and CMS interviewing protocol on this variable. DHS interviewers were instructed to ask women who said “don’t know” what their best guess was, whereas CMS interviewers were not.

*Table 9: Historical source mix: All women aged 15 to 49 using condoms (percent)*

| <b>Source of contraception</b> | <b>1986</b> | <b>1992/93</b> | <b>1997</b> | <b>1999</b> | <b>2002</b> |
|--------------------------------|-------------|----------------|-------------|-------------|-------------|
| <b>Public</b>                  | <b>NA</b>   | <b>24.4</b>    | <b>30.6</b> | <b>NA</b>   | <b>7.9</b>  |
| Public hospital                |             | 8.9            | 8.9         |             | 6.7         |
| Maternity                      |             | 0.0            | 0.0         |             | 0.0         |
| Health center                  |             | 8.9            | 9.3         |             | 0.0         |
| Dispensary                     |             | 0.0            | 0.0         |             | 0.0         |
| House visit                    |             | 0.0            | 0.0         |             | 0.0         |
| Mobile team                    |             | 0.0            | 0.0         |             | 0.0         |
| Other public                   |             | 6.7            | 12.5        |             | 1.3         |
| <b>Private</b>                 | <b>NA</b>   | <b>33.3</b>    | <b>58.0</b> | <b>NA</b>   | <b>55.1</b> |
| ASBEF                          |             | 0.0            | 0.0         |             | 0.0         |
| Private clinic                 |             | 8.9            | 1.7         |             | 0.0         |
| Pharmacy                       |             | 24.4           | 56.3        |             | 49.2        |
| Doctor                         |             | 0.0            | 0.0         |             | 0.0         |
| Midwife                        |             | 0.0            | 0.0         |             | 0.0         |
| Kiosk                          |             | 0.0            | 0.0         |             | 4.4         |
| Other private                  |             | 0.0            | 0.0         |             | 1.5         |
| <b>Other</b>                   | <b>NA</b>   | <b>42.3</b>    | <b>11.4</b> | <b>NA</b>   | <b>36.9</b> |
| Parent/Friend                  |             | 26.7           | 4.5         |             | 5.7         |
| Other                          |             | 0.0            | 5.4         |             | 0.0         |
| Don't know                     |             | 15.6           | 1.5         |             | 31.2        |
| <b>Total N =</b>               | <b>NA</b>   | <b>45</b>      | <b>83</b>   | <b>NA</b>   | <b>59</b>   |

Sources: Senegal DHS (1993), DHS (1997), CMS (2002)

<sup>4</sup> The decline in friends and parents as a condom source has been accompanied by an expansion of the private sector, which is now the dominant source for condoms.

Table 10 shows the source for contraceptives disaggregated by method for women currently using family planning. Roughly 80 percent of pill users and 74 percent of IUD users report using the public sector to obtain their methods. Almost 90 percent of injectable users report that they received their method from the public sector, which may be due to the strong effort by the public sector to promote injectables. In the private sector, 20.0 percent of women who use the pill and 22.6 percent of IUD users report obtaining their method through commercial outlets. Condoms are the one method that is more commonly obtained in the private sector: 55 percent of women report purchasing condoms in the private sector.

*Table 10: Contraceptive source disaggregated by method: Women aged 15 to 49 currently using family planning (percent)*

| <b>Source of contraception</b> | <b>Pill</b> | <b>IUD</b>  | <b>Injectable</b> | <b>Condom</b> |
|--------------------------------|-------------|-------------|-------------------|---------------|
| <b>Public</b>                  | <b>80.1</b> | <b>73.7</b> | <b>89.2</b>       | <b>7.9</b>    |
| Public hospital                | 11.8        | 10.9        | 14.8              | 6.7           |
| Maternity                      | 5.2         | 11.3        | 7.7               | 0.0           |
| Health center                  | 23.0        | 17.9        | 20.0              | 0.0           |
| Dispensary                     | 35.1        | 22.6        | 40.5              | 0.0           |
| House visit                    | 0.9         | 0.0         | 0.0               | 0.0           |
| Mobile team                    | 0.9         | 0.0         | 0.0               | 0.0           |
| Other public                   | 3.2         | 10.9        | 6.2               | 1.3           |
| <b>Private</b>                 | <b>20.0</b> | <b>22.6</b> | <b>11.0</b>       | <b>55.1</b>   |
| ASBEF                          | 5.1         | 11.3        | 4.3               | 0.0           |
| Private clinic                 | 7.4         | 7.8         | 1.8               | 0.0           |
| Pharmacy                       | 5.8         | 0.0         | 1.0               | 49.2          |
| Doctor                         | 0.0         | 0.0         | 1.0               | 0.0           |
| Midwife                        | 1.7         | 3.5         | 0.9               | 0.0           |
| Kiosk                          | 0.0         | 0.0         | 1.0               | 4.4           |
| Other private                  | 0.0         | 0.0         | 1.0               | 1.5           |
| <b>Other</b>                   | <b>0.0</b>  | <b>3.9</b>  | <b>0.0</b>        | <b>36.9</b>   |
| Parent/Friend                  | 0.0         | 0.0         | 0.0               | 5.7           |
| Don't know                     | 0.0         | 3.9         | 0.0               | 31.2          |
| <b>Total N =</b>               | <b>100</b>  | <b>22</b>   | <b>91</b>         | <b>59</b>     |

Source: CMS 2002

Note: Three cases that cited a source but did not report using a method were dropped. In addition, 26 cases did not report a source but were using a method. These were not included.

Table 11 presents the last source for condom purchases among men. The DHS survey in Senegal did not collect data on family planning source, so we only report information on source among men from the CMS survey. Slightly more than two-thirds of male condom users — 68.6 percent — report purchasing them from the private sector, and over half of overall condom purchases have been made at pharmacies. Kiosks, a new outlet source developed by the social marketing program, were also found to be an important source of supply. In the public sector, the predominant source was a dispensary (10.3 percent).

*Table 11: Source for last condom purchase among men aged 15 to 59 (percent)*

| <b>Source of contraception</b> | <b>2002</b> |
|--------------------------------|-------------|
| <b>Public</b>                  | <b>16.7</b> |
| Public hospital                | 1.9         |
| Maternity                      | 0.0         |
| Health center                  | 2.6         |
| Dispensary                     | 10.3        |
| Mobile team                    | 0.3         |
| Other public                   | 1.6         |
| <b>Private</b>                 | <b>68.6</b> |
| ASBEF                          | 0.5         |
| Private clinic                 | 0.1         |
| Pharmacy                       | 53.7        |
| Doctor                         | 0.1         |
| Midwife                        | 0.1         |
| Kiosk                          | 9.1         |
| Other private                  | 5.0         |
| <b>Other</b>                   | <b>14.6</b> |
| Parent/Friend                  | 13.8        |
| Don't know                     | 0.8         |
| <b>Total N =</b>               | <b>677</b>  |

Source: CMS 2002

## **Brand-specific results**

Table 12 reports on knowledge of *Protec* condoms, the brand marketed by CMS/ADEMAs in Senegal, by sex and marital status. Familiarity with *Protec* is much more prevalent among sexually active unmarried Senegalese — over half of single women and almost three-fourths of single men have heard of *Protec*. The majority of men and women who have heard of *Protec* know a source for the product and also live within 30 minutes of a *Protec* source. Among the men and women who have an opinion about the quality of *Protec* condoms, the vast majority reported that the quality was either “good” or “very good”. In terms of the *Protec* radio campaign, 64.9 percent of single women and 68 percent of single Senegalese men have heard the advertisements. Married men and women reported moderate levels of exposure to the campaigns.

Table 12: Indicators of knowledge and attitudes relative to socially marketed condoms in Senegal, 2002 (percent)

| Product knowledge & attitudes  | Women (aged 15 to 49) |                           | Men (aged 15 to 59) |                           |
|--|-----------------------|---------------------------|---------------------|---------------------------|
|  | Married               | Sexually active unmarried | Married             | Sexually active unmarried |
| % who know of <i>Protec</i>  | 19.2                  | 59.1                      | 30.9                | 73.9                      |
| <b>Total N =</b>   | <b>2,316</b>          | <b>110</b>                | <b>1,280</b>        | <b>635</b>                |
| % who know a private source for <i>Protec</i> among people that know about <i>Protec</i> | 76.2                  | 80.5                      | 97.0                | 96.9                      |
| <b>Total N =</b>   | <b>625</b>            | <b>71</b>                 | <b>485</b>          | <b>617</b>                |
| % who live within 30 minutes of a sales point among those that know a private source     | 89.5                  | 95.9                      | 80.2                | 91.7                      |
| <b>Total N =</b>   | <b>370</b>            | <b>44</b>                 | <b>478</b>          | <b>607</b>                |
| Perception of the quality of <i>Protec</i>   |                       |                           |                     |                           |
| Very good  | 8.8                   | 11.5                      | 17.1                | 30.1                      |
| Good   | 33.3                  | 42.2                      | 41.7                | 53.3                      |
| Average  | 3.2                   | 4.8                       | 5.1                 | 7.2                       |
| Bad  | 2.8                   | 0.0                       | 0.7                 | 1.1                       |
| Very bad   | 0.5                   | 1.5                       | 0.6                 | 0.1                       |
| Don't know or refused  | 51.4                  | 40.0                      | 34.6                | 8.1                       |
| <b>Total N =</b>   | <b>490</b>            | <b>59</b>                 | <b>517</b>          | <b>614</b>                |
| Have heard a radio campaign about family planning  | 43.6                  | 64.9                      | 58.0                | 68.0                      |
| <b>Total N =</b>   | <b>2,316</b>          | <b>110</b>                | <b>1,280</b>        | <b>635</b>                |

Table 13 reports on the knowledge of *Securil* oral contraceptives. *Securil* pills were introduced at approximately the same time as the survey was fielded. As expected, knowledge of the product is very low. It is highest among sexually active unmarried women (6.8 percent).

Table 13: Indicators of knowledge and attitudes relative to socially marketed oral contraceptives in Senegal, 2002 (percent)

| Product knowledge & attitudes | Women (aged 15 to 49) |                           | Men (aged 15 to 59) |                           |
|-------------------------------|-----------------------|---------------------------|---------------------|---------------------------|
|                               | Married               | Sexually active unmarried | Married             | Sexually active unmarried |
| % who know of <i>Securil</i>  | 1.1                   | 6.8                       | 1.9                 | 2.1                       |
| <b>Total N =</b>              | <b>2,316</b>          | <b>110</b>                | <b>1,280</b>        | <b>635</b>                |

Table 14 presents the intention to use family planning in the future among men and women. Unmarried men and women show higher percentages of intention to use contraceptives in the next 12 months (and in the future more generally) than married men and women. About 15 percent of married men and women intend to use family planning at some time in the future. For married and unmarried women, injectables are cited as most highly desirable method for future use (34%). The second-most-desirable method cited by women is the pill. Among unmarried men, condoms are overwhelmingly the most popular contraceptive mentioned for future use (71%). Conversely, condoms are a less common future choice for married men (20.1%), who also cite the pill as a possible future method (21.4%).

*Table 14: Intention to use family planning or condoms in the future (percent)*

| Intention to use                              | Women (aged 15 to 49) |                           | Men (aged 15 to 59) |                           |
|---|-----------------------|---------------------------|---------------------|---------------------------|
|   | Married               | Sexually active unmarried | Married             | Sexually active unmarried |
| Not intending to use any method of FP         | 85.4                  | 45.7                      | 75.9                | 25.7                      |
| <b>Total N =</b>                              | <b>2,316</b>          | <b>110</b>                | <b>1,280</b>        | <b>635</b>                |
| Intend to use FP or condoms in next 12 months | 11.2                  | 32.5                      | 8.6                 | 15.7                      |
| <b>Total N =</b>                              | <b>1,893</b>          | <b>50</b>                 | <b>827</b>          | <b>140</b>                |
| Intend to use FP or condoms later             | 6.8                   | 27.7                      | 4.9                 | 12.7                      |
| <b>Total N =</b>                              | <b>1,893</b>          | <b>50</b>                 | <b>827</b>          | <b>140</b>                |
| <b>Of those who intend to use</b>             |                       |                           |                     |                           |
| Intend to use condoms                         | 2.6                   | 2.9                       | 20.1                | 71.0                      |
| Intend to use pills                           | 28.5                  | 19.4                      | 21.4                | 2.5                       |
| Intend to use injectables                     | 34.4                  | 34.0                      | 9.2                 | 5.1                       |
| Intend to use Norplant                        | 4.5                   | 10.9                      | 2.1                 | 1.1                       |
| Intend to use IUD                             | 2.3                   | 2.6                       | 0.5                 | 0.0                       |
| Intend to use traditional method              | 5.8                   | 2.9                       | 8.3                 | 8.9                       |
| Don't know                                    | 20.5                  | 24.6                      | 36.5                | 11.4                      |
| <b>Total N =</b>                              | <b>398</b>            | <b>33</b>                 | <b>116</b>          | <b>41</b>                 |

## Attitudes and perceptions of women

Table 15 provides information concerning basic characteristics of current contraceptive users and those who have not ruled out using contraceptives in the future. Public sector users tend to be urban (71.4%), fall between the ages of 25 to 44, be of high socioeconomic status, have no education or only primary schooling, and have five or more children.

Women who go to the private sector for their contraceptive method are also urban (88.7%), fall between the ages of 20 and 39, and have very high socioeconomic status. They are more likely, however, to have higher levels of secondary education, and to have no children.

Senegalese women who intend to use contraceptives in the next 12 months, or who are not sure if they intend to use, are more similar to each other than to women who state they intend to use sometime in the future. Potential contraceptive users in the two former groups have higher percentages living in rural areas, are of lower socioeconomic status, and have a greater concentration of respondents with no education. However, there are two key differences: age and parity. Women who intend to use in the next 12 months are older and have more children. Conversely, women who intend to use in the future show higher percentages of living in Dakar and are of higher socioeconomic status and education overall.

*Table 15: Characteristics of current contraceptive users and non-users (women aged 15 to 49, percent)*

| Characteristics      | Current users                 |                                | Women who did not say that they were unwilling to use FP in the future |                             |                             |
|----------------------|-------------------------------|--------------------------------|--|-----------------------------|-----------------------------|
|                      | Modern method (public sector) | Modern method (private sector) | Intend to use in the next 12 months                                    | Intend to use in the future | Don't know if intend to use |
| % of total           | 4.0                           | 1.8                            | 8.8  | 8.6                         | 14.8                        |
| <b>Residence</b>     |                               |                                |  |                             |                             |
| Dakar                | 41.3                          | 57.1                           | 30.3   | 42.3                        | 28.6                        |
| Other Urban          | 30.1                          | 31.6                           | 19.5   | 24.9                        | 23.3                        |
| Rural                | 28.7                          | 11.4                           | 50.2   | 32.9                        | 48.1                        |
| <b>Age Groups</b>    |                               |                                |  |                             |                             |
| 15-19                | 2.3                           | 3.1                            | 11.7   | 32.0                        | 28.5                        |
| 20-24                | 12.1                          | 23.2                           | 29.0   | 30.6                        | 27.7                        |
| 25-29                | 20.3                          | 15.0                           | 21.7   | 19.9                        | 15.2                        |
| 30-34                | 21.8                          | 21.3                           | 18.7   | 8.7                         | 12.8                        |
| 35-39                | 17.1                          | 19.6                           | 10.9   | 5.3                         | 8.1                         |
| 40-44                | 18.2                          | 8.0                            | 5.7  | 2.4                         | 4.9                         |
| 45-49                | 8.2                           | 9.9                            | 2.1  | 1.0                         | 2.7                         |
| <b>SES</b>           |                               |                                |  |                             |                             |
| Very Low             | 1.2                           | 2.9                            | 17.1   | 7.6                         | 12.8                        |
| Low                  | 11.1                          | 2.9                            | 13.1   | 14.1                        | 13.1                        |
| Medium               | 13.1                          | 7.6                            | 14.4   | 9.2                         | 18.9                        |
| High                 | 37.2                          | 33.0                           | 29.8   | 27.6                        | 26.0                        |
| Very High            | 37.5                          | 53.6                           | 25.6   | 41.5                        | 29.2                        |
| <b>Education</b>     |                               |                                |  |                             |                             |
| None                 | 43.9                          | 29.0                           | 55.0   | 35.6                        | 53.9                        |
| Primary              | 35.7                          | 29.9                           | 22.8   | 28.0                        | 24.7                        |
| Secondary+           | 17.9                          | 36.0                           | 19.8   | 31.0                        | 19.5                        |
| Superior             | 2.6                           | 4.2                            | 1.2  | 3.0                         | 1.3                         |
| Don't know           | 0.0                           | 1.0                            | 1.2  | 2.4                         | 0.6                         |
| <b># of Children</b> |                               |                                |  |                             |                             |
| No children          | 2.1                           | 20.6                           | 24.0   | 59.9                        | 49.1                        |
| 1                    | 13.0                          | 14.9                           | 16.7   | 14.2                        | 11.4                        |
| 2                    | 16.6                          | 18.0                           | 11.9   | 9.0                         | 9.6                         |
| 3                    | 12.4                          | 10.1                           | 9.4  | 5.7                         | 6.4                         |
| 4                    | 9.2                           | 10.2                           | 8.2  | 1.8                         | 5.3                         |
| 5+                   | 46.8                          | 26.3                           | 29.8   | 9.3                         | 18.2                        |
| <b>Total N =</b>     | <b>151</b>                    | <b>61</b>                      | <b>303</b>   | <b>293</b>                  | <b>510</b>                  |

Table 16 presents the desired number of children for contraceptive users and women who intend to use family planning in the future. Overall desired family size is large, at four or more children. Current users who frequent the private sector and women who intend to use in the future desire the fewest children (two to three). This difference may be attributed to larger numbers of young women in these two groups.

*Table 16: Desired number of children among current contraceptive users, and those who intend to use family planning in the future (women aged 15 to 49, percent)*

| Desired number of children | Current users                 |                                | Women who intend to use family planning in the future |                             |
|----------------------------|-------------------------------|--------------------------------|---|-----------------------------|
|                            | Modern method (public sector) | Modern method (private sector) | Intend to use in the next 12 months                   | Intend to use in the future |
| 0-1                        | 1.2                           | 2.1                            | 0.6   | 0.4                         |
| 2-3                        | 7.8                           | 26.9                           | 17.5  | 24.2                        |
| 4-5                        | 36.9                          | 31.7                           | 37.4  | 36.1                        |
| 6 or more                  | 23.4                          | 17.2                           | 22.3  | 18.7                        |
| Don't know                 | 30.7                          | 22.1                           | 22.2  | 20.6                        |
| <b>Total N =</b>           | <b>150</b>                    | <b>60</b>                      | <b>297</b>  | <b>295</b>                  |

Table 17 presents attitudes and perceptions relative to family planning. Over 70 percent of both modern method users and women who intend to use in the future agree that partners, families, and friends should be supportive of one's choice to use contraception and that contraceptive use overall is a positive experience. Conversely, women unsure of future contraceptive use show lower percentages concerning these questions. Uncertain women also have lower knowledge levels about where to find family planning information (54%), are less likely to know women who use contraceptives (25.4%), and to have health professionals recommend family planning (43.8%).



*Table 17: Attitudes and perceptions regarding family planning among current modern method users and non-users (women aged 15 to 49, percent)*

| Attitudes & perceptions   | Modern method |            |     | Intends to use in the future |            |      | Unsure if intends to use |            |      |
|---|---------------|------------|-----|------------------------------|------------|------|--------------------------|------------|------|
|   | Yes           | No         | DK  | Yes                          | No         | DK   | Yes                      | No         | DK   |
| 1. Women who use family planning participate in debauchery or prostitution  | 9.9           | 85.5       | 4.3 | 12.7                         | 72.3       | 15.1 | 8.7                      | 49.0       | 42.3 |
| 2. Women who use family planning are responsible and conscientious of their health and well-being of their family | 91.7          | 6.8        | 1.5 | 80.9                         | 7.3        | 11.8 | 55.8                     | 5.2        | 39.0 |
| 3. Husbands should support the decision of their wives concerning family planning                                 | 95.6          | 1.1        | 3.3 | 83.6                         | 3.2        | 13.2 | 52.6                     | 4.1        | 43.4 |
| 4. Families should support decisions concerning family planning   | 82.6          | 11.6       | 5.8 | 72.2                         | 12.6       | 15.2 | 44.1                     | 8.6        | 47.3 |
| 5. Friends should support decisions concerning family planning  | 80.9          | 12.5       | 6.6 | 67.9                         | 13.7       | 18.4 | 40.2                     | 11.4       | 48.4 |
| 6. You know women/couples that use family planning  | 88.5          | 8.3        | 3.2 | 58.7                         | 30.8       | 10.5 | 32.6                     | 34.3       | 33.2 |
| 7. I know women who practice family planning and recommend its use  | 80.0          | 16.9       | 3.2 | 52.4                         | 35.3       | 12.3 | 25.4                     | 42.6       | 32.1 |
| 8. You know where to obtain information concerning family planning  | 96.0          | 3.1        | 0.9 | 79.0                         | 10.6       | 10.5 | 54.0                     | 18.4       | 27.6 |
| 9. Health professionals recommend the practice of family planning   | 90.1          | 4.1        | 5.8 | 73.0                         | 4.7        | 22.3 | 43.8                     | 7.0        | 49.2 |
| <b>Total N =</b>  |               | <b>252</b> |     |                              | <b>712</b> |      |                          | <b>608</b> |      |

Attitudes and perceptions relative to oral contraceptives are shown in Table 18. The table includes current modern method users, women who intend to use in the future, and those who are unsure. Among all three groups there are considerable misconceptions regarding oral contraceptives — with misconceptions being the greatest among non-users. On the other hand, all three groups showed high percentages of knowing where to obtain information about oral contraceptives.

*Table 18: Attitudes and perceptions regarding oral contraceptives among modern method users and non-users (women aged 15 to 49, percent)*

| Attitudes & perceptions   | Modern method |            |      | Intends to use in the future |            |      | Unsure if intends to use |            |      |
|---|---------------|------------|------|------------------------------|------------|------|--------------------------|------------|------|
|   | Yes           | No         | DK   | Yes                          | No         | DK   | Yes                      | No         | DK   |
| 1. The pill is certain  | 59.3          | 10.5       | 29.6 | 40.6                         | 15.3       | 43.8 | 26.8                     | 10.0       | 63.2 |
| 2. A woman can easily become pregnant once she stops using the pill                 | 54.9          | 6.7        | 38.1 | 42.3                         | 7.9        | 49.6 | 31.9                     | 5.7        | 62.5 |
| 3. Using the pill does not increase the risk of death                               | 18.4          | 26.5       | 55.1 | 14.2                         | 20.4       | 65.3 | 10.1                     | 13.7       | 76.2 |
| 4. The pill creates bad health effects  | 28.4          | 30.8       | 40.6 | 31.5                         | 12.7       | 55.7 | 23.8                     | 7.1        | 69.1 |
| 5. The pill is easy to take   | 69.1          | 2.8        | 27.7 | 45.7                         | 5.4        | 48.8 | 34.0                     | 2.5        | 63.6 |
| 6. The pill is not expensive  | 57.6          | 9.6        | 32.5 | 30.5                         | 7.1        | 62.3 | 27.3                     | 3.5        | 69.1 |
| 7. It's difficult to become pregnant after having taken the pill                    | 37.7          | 23.6       | 38.4 | 32.0                         | 15.3       | 52.6 | 19.7                     | 10.9       | 69.5 |
| 8. The pill is efficient in preventing one from becoming pregnant.                  | 71.1          | 1.2        | 27.4 | 59.7                         | 2.2        | 37.9 | 43.0                     | 1.3        | 55.8 |
| 9. It's easy to forget to take the pill.  | 60.2          | 14.7       | 24.9 | 46.9                         | 9.3        | 43.7 | 33.8                     | 5.6        | 60.7 |
| 10. You know where to obtain information about the pill                             | 87.8          | 1.6        | 10.2 | 79.2                         | 2.9        | 17.9 | 71.7                     | 5.4        | 22.9 |
| 11. The pill brings about side effects that disappear after a couple month's of use | 35.2          | 16.1       | 48.7 | 21.1                         | 8.6        | 70.1 | 13.8                     | 7.7        | 78.4 |
| <b>Total N =</b>  |               | <b>240</b> |      |                              | <b>589</b> |      |                          | <b>368</b> |      |

Table 19 presents information on women's attitudes concerning injectables. Overall, there are considerable misconceptions and lack of information. For almost all questions, the level of uncertainty ("don't know") is high particularly among those who intend to use in the future, and is highest among those who are unsure of future contraceptive use. The overall level of knowledge is greater among women who are already using family planning.

*Table 19: Attitudes and perceptions regarding injectables among modern method users and non-users (women aged 15 to 49, percent)*

| Attitudes & perceptions   | Modern method |            |      | Intends to use in the future |            |      | Unsure if intends to use |            |      |
|---|---------------|------------|------|------------------------------|------------|------|--------------------------|------------|------|
|   | Yes           | No         | DK   | Yes                          | No         | DK   | Yes                      | No         | DK   |
| 1. It's is to remember to receive an injection every three months         | 71.0          | 2.9        | 26.1 | 51.8                         | 5.2        | 42.5 | 39.2                     | 2.1        | 58.7 |
| 2. Injectables lead to negative health effects                            | 27.0          | 29.1       | 43.6 | 21.0                         | 15.2       | 63.8 | 22.5                     | 6.4        | 71.2 |
| 3. Injectables lead to sterility  | 13.2          | 35.0       | 51.5 | 14.1                         | 19.2       | 66.7 | 12.9                     | 7.8        | 79.4 |
| 4. Injectables are easy to obtain   | 64.7          | 2.4        | 32.6 | 40.1                         | 5.0        | 54.9 | 27.5                     | 2.7        | 69.9 |
| 5. Injectables offer protection for several months                        | 70.5          | 0.7        | 28.5 | 50.1                         | 1.0        | 48.9 | 35.0                     | 1.1        | 64.0 |
| 6. Injectables are not expensive  | 53.8          | 6.4        | 39.5 | 28.3                         | 6.4        | 65.4 | 19.7                     | 2.7        | 77.7 |
| 7. Injectables make women gain weight                                     | 41.7          | 15.4       | 42.5 | 35.7                         | 6.1        | 58.2 | 26.7                     | 5.2        | 68.1 |
| 8. Injectables are unlikable because the cause spotting                   | 30.1          | 23.7       | 45.9 | 22.4                         | 6.7        | 70.9 | 19.9                     | 1.6        | 78.5 |
| 9. Injectables are practical because you only need one every three months | 71.3          | 0.7        | 27.6 | 55.9                         | 1.2        | 43.0 | 40.9                     | 0.3        | 58.8 |
| 10. You know where to obtain information about injectables                | 83.7          | 2.1        | 14.2 | 75.2                         | 2.5        | 22.3 | 72.1                     | 7.0        | 20.8 |
| 11. Injectables are bad because they disrupt menstruation                 | 36.3          | 18.8       | 44.9 | 28.4                         | 6.1        | 65.5 | 24.8                     | 2.4        | 72.8 |
| <b>Total N =</b>  |               | <b>217</b> |      |                              | <b>514</b> |      |                          | <b>287</b> |      |

Attitudes and perceptions about condoms can be viewed in Table 20. The levels of knowledge about actual use of condoms and their properties are quite low across all groups of women; upwards of almost 60 percent or more of respondents from the three groups report “don’t know” when asked about the effects of condom usage. However, more than 60 percent of women in all the three groups know where to obtain information about condoms, and that they protect from unwanted pregnancy and sexually transmitted infections.

*Table 20: Attitudes and perceptions regarding condoms among modern method users and non-users (women aged 15 to 49, percent)*

| Attitudes & perceptions  | Modern method |            |      | Intends to use in the future |            |      | Unsure if intends to use |            |      |
|--|---------------|------------|------|------------------------------|------------|------|--------------------------|------------|------|
|  | Yes           | No         | DK   | Yes                          | No         | DK   | Yes                      | No         | DK   |
| 1. Prolonged use of condoms reduces virility and can make men impotent.          | 8.9           | 24.3       | 66.5 | 11.4                         | 16.4       | 72.2 | 7.4                      | 9.7        | 82.7 |
| 2. If the condom comes off during sex, it is lost in the woman's body            | 12.7          | 27.9       | 59.4 | 11.9                         | 13.8       | 74.3 | 5.2                      | 13.0       | 81.7 |
| 3. Condoms don't have side effects   | 23.8          | 12.5       | 63.7 | 19.9                         | 8.7        | 71.4 | 17.7                     | 5.9        | 76.2 |
| 4. Using a condom reduces pleasure for the couple                                | 27.6          | 13.8       | 58.6 | 20.6                         | 5.4        | 74.0 | 12.9                     | 5.3        | 81.6 |
| 5. The latex used to make condoms can cause illness during sexual intercourse    | 7.9           | 12.8       | 79.4 | 8.1                          | 6.2        | 85.7 | 7.5                      | 3.9        | 88.4 |
| 6. You know where to obtain information about condoms                            | 75.2          | 1.8        | 23.0 | 62.3                         | 3.5        | 34.2 | 61.6                     | 4.5        | 33.9 |
| 7. The use of condoms permits the spacing of births and protection against STIs. | 68.3          | 1.5        | 30.2 | 65.0                         | 1.3        | 33.7 | 61.9                     | 0.8        | 37.3 |
| 8. Condoms are not expensive   | 57.0          | 7.2        | 35.8 | 52.1                         | 5.7        | 42.2 | 49.0                     | 4.3        | 46.7 |
| <b>Total N =</b>   |               | <b>223</b> |      |                              | <b>575</b> |      |                          | <b>375</b> |      |

Table 21 displays where women who have ever used a method obtained information about that method. In Senegal, women of different socioeconomic status are likely to use different health care providers for their health care needs. Therefore, the sample is divided according to the standard of living index, which has been collapsed from five to two categories.

For pills, midwives are the key source of information regardless of socioeconomic status, although, for the upper-income groups, specialist doctors are also an important source. Lower-income groups also rely on nurses. For IUDs, midwives again are the primary source of information with nurses also playing an important role to lower-income groups. For injectables, midwives are the primary source for upper-income women while a large percentage of lower-income women cited “no one” as their primary information source. With condoms, virtually no one receives counseling through medical channels; most information is obtained through friends, parents, or others. The latter category is assumed to primarily be women’s sexual partners.

*Table 21: Counseling source for modern family planning methods among women, aged 15 to 49, who have used a method or are currently using a method (percent)*

| Counseling Source   | Pill      |            | IUD       |            | Injectable |           | Condom    |            |
|---------------------|-----------|------------|-----------|------------|------------|-----------|-----------|------------|
|                     | Low 60%   | Upper 40%  | Low 60%   | Upper 40%  | Low 60%    | Upper 40% | Low 60%   | Upper 40%  |
| General doctor      | 3.3       | 5.9        | 0.0       | 6.3        | 0.0        | 2.3       | 0.0       | 0.0        |
| Specialist doctor   | 5.4       | 13.7       | 6.1       | 5.3        | 21.2       | 16.4      | 0.0       | 2.4        |
| Nurse               | 17.9      | 3.6        | 17.2      | 4.7        | 0.0        | 3.2       | 1.6       | 0.0        |
| Midwife             | 49.9      | 50.0       | 31.0      | 53.9       | 31.4       | 52.9      | 6.5       | 3.9        |
| Traditional midwife | 0.0       | 0.3        | 2.6       | 0.0        | 0.0        | 0.0       | 0.0       | 0.0        |
| Pharmacist          | 0.0       | 1.3        | 0.0       | 0.0        | 0.0        | 0.0       | 0.0       | 1.6        |
| Friend/parent       | 5.5       | 8.0        | 8.7       | 13.5       | 5.2        | 11.4      | 23.1      | 17.8       |
| No one              | 14.9      | 10.5       | 22.4      | 12.0       | 42.1       | 13.8      | 32.7      | 37.4       |
| Media               | 0.0       | 0.3        | 0.0       | 0.6        | 0.0        | 0.0       | 0.0       | 3.1        |
| Community meetings  | 0.0       | 0.3        | 0.0       | 1.6        | 0.0        | 0.0       | 0.0       | 0.8        |
| Other               | 3.2       | 5.5        | 10.3      | 2.3        | 0.0        | 0.0       | 31.2      | 27.1       |
| Don't know          | 0.0       | 0.8        | 1.7       | 0.0        | 0.0        | 0.0       | 4.9       | 6.1        |
| <b>Total N =</b>    | <b>75</b> | <b>326</b> | <b>81</b> | <b>129</b> | <b>17</b>  | <b>79</b> | <b>49</b> | <b>109</b> |

## Attitudes and perceptions of men, and men versus women

Husbands and men in the community are sometimes cited as reasons women do not use family planning. To the extent that differences in attitudes and perceptions exist between men and women, family planning may be discouraged. Tables 22 and 23 display the attitudes of men and women of reproductive age concerning family planning and condoms. In Table 22, results show that men hold a slightly less favorable opinion toward family planning than women. Fewer men than women agree that husbands, friends, and family should support decisions concerning family planning. Interestingly, men show a higher percentage of respondents reporting that health professionals recommend practicing family planning than women (55.0 percent versus 42.2 percent). Men and women also report not knowing answers to questions at relatively similar rates.

Table 22: Attitudes toward family planning by sex (percent)

| Attitudes   | Women (age 15-49) |      |      |      | Men (age 15-59) |      |      |      |
|---|-------------------|------|------|------|-----------------|------|------|------|
|   | Yes               | No   | DK   | N    | Yes             | No   | DK   | N    |
| 1. Women who use family planning participate in debauchery or prostitution  | 11.8              | 46.9 | 41.3 | 3426 | 18.5            | 42.4 | 39.1 | 2601 |
| 2. Women who use family planning are responsible and conscientious of their health and well-being of their family | 49.0              | 9.7  | 41.2 | 3431 | 44.7            | 15.1 | 40.2 | 2600 |
| 3. Husbands should support the decision of their wives concerning family planning                                 | 48.6              | 8.5  | 42.8 | 3429 | 40.0            | 18.5 | 41.5 | 2600 |
| 4. Families should support decisions concerning family planning   | 42.1              | 13.4 | 44.5 | 3432 | 34.9            | 21.7 | 43.5 | 2600 |
| 5. Friends should support decisions concerning family planning  | 38.9              | 14.9 | 46.1 | 3430 | 30.6            | 24.8 | 44.6 | 2600 |
| 6. You know women/couples that use family planning  | 34.3              | 31.7 | 33.9 | 3430 | 24.2            | 48.3 | 27.5 | 2596 |
| 7. I know women who practice family planning and recommend its use  | 30.2              | 35.2 | 34.5 | 3431 | -               | -    | -    | -    |
| 8. You know where to obtain information concerning family planning  | 50.1              | 19.0 | 30.9 | 3432 | 53.9            | 23.3 | 22.8 | 2600 |
| 9. Health professionals recommend the practice of family planning   | 42.2              | 7.1  | 50.7 | 3431 | 55.0            | 6.6  | 38.5 | 2600 |

Table 23 presents a comparison of men's and women's attitudes toward condoms. Men are more likely to express positive or negative attitudes about the use of condoms, while women respond that they "don't know" for the vast majority of questions pertaining to facts and myths about condoms (e.g., condoms reduce pleasure; there are no side effects). The largest concern by men is that that condoms reduce sexual pleasure (38.9%). As seen with trends in previous tables, both men and women show high percentages of knowing where to obtain information about condoms and that they protect against unwanted pregnancy and sexually transmitted infections.

*Table 23: Attitudes and perceptions toward condoms by sex (percent)*

| Attitudes & perceptions   | Women (age 15-49) |      |      |             | Men (age 15-59) |      |      |             |
|---|-------------------|------|------|-------------|-----------------|------|------|-------------|
|   | Yes               | No   | DK   | N           | Yes             | No   | DK   | N           |
| 1. Prolonged use of condoms reduces virility and can make men impotent.         | 8.6               | 13.8 | 77.4 | <b>2125</b> | 11.8            | 38.9 | 49.3 | <b>2100</b> |
| 2. If the condom comes off during sex, it's lost in the woman's body            | 8.5               | 11.1 | 80.3 | <b>2106</b> | 10.9            | 37.7 | 51.4 | <b>2099</b> |
| 3. Condoms do not have side effects   | 15.7              | 5.9  | 78.3 | <b>2103</b> | 27.5            | 20.4 | 52.1 | <b>2100</b> |
| 4. Using a condom reduces pleasure for the couple                               | 16.3              | 4.4  | 79.2 | <b>2103</b> | 38.9            | 15.7 | 45.4 | <b>2100</b> |
| 5. The latex used to make condoms can cause illness during sexual intercourse   | 5.7               | 4.6  | 89.7 | <b>2102</b> | 11.2            | 23.4 | 65.4 | <b>2099</b> |
| 6. You know where to obtain information about condoms                           | 55.8              | 4.3  | 40.0 | <b>2101</b> | 70.6            | 8.3  | 21.1 | <b>2097</b> |
| 7. The use of condoms permits the spacing of births and protection against STIs | 55.7              | 1.4  | 42.9 | <b>2105</b> | 75.8            | 2.0  | 22.2 | <b>2099</b> |
| 8. Condoms are not expensive  | 41.6              | 4.1  | 54.4 | <b>2104</b> | 59.1            | 10.9 | 30.0 | <b>2099</b> |

Table 24 presents the attitudes of men toward condoms disaggregated by modern method users and non-users. The differences between current contraceptive users and the other two groups are quite distinct. Misinformation and lack of knowledge regarding condoms is high among non-users. For example, in the first question, almost two-thirds of the men using a modern method of family planning disagree with the statement that long term use of condoms reduced virility; while only 31.8 percent of men intending to use family planning in the future and 23.3 percent of men who are unsure of future use disagree with this statement. However, a majority of men in all three groups know where to obtain condoms and that they protect against unwanted pregnancy and sexually transmitted infections as well as reporting that condoms are not expensive.

*Table 24: Men's attitudes toward condoms, by method use and intention to use (age 15 to 59, percent)*

| Attitude   | Modern method |      |      | Intends to use in the future |      |      | Unsure if intends to use |      |      |
|--|---------------|------|------|------------------------------|------|------|--------------------------|------|------|
|  | Yes           | No   | DK   | Yes                          | No   | DK   | Yes                      | No   | DK   |
| 1. Prolonged use of condoms reduces virility and can make men impotent.          | 13.1          | 66.1 | 20.8 | 16.2                         | 31.8 | 52.0 | 5.6                      | 23.3 | 71.1 |
| 2. If the condom comes off during sex, it is lost in the woman's body            | 16.0          | 64.7 | 19.3 | 10.6                         | 31.1 | 58.4 | 6.9                      | 23.2 | 70.0 |
| 3. Condoms don't have side effects   | 49.4          | 28.4 | 22.2 | 27.6                         | 16.5 | 56.0 | 13.4                     | 13.8 | 72.8 |
| 4. Using a condom reduces pleasure for the couple                                | 60.9          | 29.2 | 10.0 | 34.2                         | 11.6 | 54.2 | 22.5                     | 5.6  | 71.9 |
| 5. The latex used to make condoms can cause illness during sexual intercourse    | 19.7          | 45.0 | 35.4 | 7.7                          | 17.5 | 74.8 | 3.6                      | 10.0 | 86.4 |
| 6. You know where to obtain information about condoms                            | 91.8          | 4.6  | 3.6  | 74.0                         | 5.9  | 20.2 | 66.3                     | 9.2  | 24.6 |
| 7. The use of condoms permits the spacing of births and protection against STIs. | 96.7          | 1.5  | 1.9  | 80.9                         | 1.4  | 17.7 | 69.3                     | 0.3  | 30.4 |
| 8. Condoms are not expensive   | 79.8          | 14.8 | 5.4  | 66.3                         | 8.0  | 25.7 | 57.1                     | 8.1  | 34.8 |
| <b>Total N =</b>   | <b>728</b>    |      |      | <b>281</b>                   |      |      | <b>301</b>               |      |      |

## Contraceptive market growth in Senegal

A second purpose of this survey is to identify areas where growth in the Senegalese family planning market is possible. To analyze this potential, women have been separated into two groups: women who fall in the middle category or lower on the standard of living index (60 percent of households) and women who reside in upper-middle or higher households (40 percent of households).



Table 25 presents the reasons why women are not currently using family planning, disaggregated by the two standard of living groups. Among women of higher socioeconomic status, almost half cite “single and/or never had sex” (45.1%) as a reason for non-use of contraception, while less than 20 percent in the lower half of the SLI cite this as a reason for not using contraception. Women in the lower category of the SLI cite “desire children” (16.5%), as well as “don’t know any method” (12.1%) as reasons for not using contraception.

*Table 25: Reasons for non-use of contraception by standard of living index (percent)*

| <b>Standard of Living Index</b>            | <b>Of women responding</b> | <b>Of women responding</b> |
|--|----------------------------|----------------------------|
|  | <b>Lower 60%</b>           | <b>Upper 40%</b>           |
| <b>Reasons related to sexual activity</b>  |                            |                            |
| Single and/or never had sex                | 18.9                       | 45.1                       |
| Infrequent sex                             | 1.5                        | 2.9                        |
| <b>Reasons relative to fecundity</b>       |                            |                            |
| Menopause/hysterectomy                     | 3.6                        | 1.6                        |
| Sterile                                    | 0.6                        | 0.3                        |
| <b>Reasons relative to childbearing</b>    |                            |                            |
| Breastfeeding                              | 7.2                        | 4.6                        |
| Desire children                            | 16.5                       | 12.0                       |
| Pregnant                                   | 7.0                        | 5.7                        |
| <b>Opposition</b>                          |                            |                            |
| Opposed to family planning                 | 6.1                        | 4.0                        |
| Husband opposed to family planning         | 6.8                        | 5.5                        |
| Others opposed to family planning          | 0.0                        | 0.2                        |
| Religious reasons                          | 8.7                        | 3.6                        |
| <b>Access and knowledge</b>                |                            |                            |
| Don't know any method                      | 12.1                       | 1.6                        |
| Don't know a source for contraception      | 1.2                        | 0.2                        |
| Distance to source of contraception        | 0.1                        | 0.0                        |
| Price                                      | 1.1                        | 0.0                        |
| Health problems                            | 0.8                        | 1.6                        |
| Afraid of secondary effects                | 1.2                        | 3.7                        |
| Interference with normal processes of body | 1.1                        | 1.4                        |
| <b>Method-related reasons</b>              |                            |                            |
|  | 3.1                        | 6.7                        |
| <b>Other</b>                               |                            |                            |
|  | 4.0                        | 4.8                        |
| <b>Don't know</b>                          |                            |                            |
|  | 1.6                        | 1.0                        |
| <b>Total N =</b>                           | <b>1,665</b>               | <b>1,157</b>               |

Table 26 presents the percentage of women who have discontinued family planning methods and the reasons for discontinuation. Percentages of discontinuation are highest among injectable users (71.0 percent) and are also high among pill users (68.2%) and IUD users (68.6%). Discontinuation rates are lowest among condom users (54.3 percent). The most commonly cited reason for stopping contraception is secondary effects: one-third of pill and IUD users mention secondary effects as a reason for discontinuing that method. Almost half of injectable users also cite this reason for their discontinuation. Other commonly cited reasons for discontinuing a method include wanting to get pregnant (roughly 10% in all method groups), and, among IUD and condom users, wanting to change to another modern method.

*Table 26: Reasons for family planning discontinuation by method type (percent)*

|  | Pill       | Injectable | IUD       | Condom    |
|--|------------|------------|-----------|-----------|
| <b>Discontinuing out of total ever use</b> | 68.2       | 71.0       | 61.8      | 54.3      |
| <b>Reasons for discontinuation</b>         |            |            |           |           |
| Wanted to get pregnant                     | 11.1       | 11.1       | 10.7      | 9.0       |
| Pregnant                                   | 8.3        | 7.9        | 4.3       | 10.7      |
| Breastfeeding                              | 7.0        | 2.4        | 0.0       | 9.6       |
| <b>Reasons related to childbearing</b>     |            |            |           |           |
| Infertile/menopause                        | 1.9        | 1.7        | 2.9       | 0.0       |
| Infrequent sex                             | 5.2        | 3.6        | 4.0       | 11.6      |
| <b>Fertility related reasons</b>           |            |            |           |           |
| Secondary effects                          | 33.3       | 46.0       | 30.3      | 1.0       |
| Forgot                                     | 3.1        | 1.1        | 0.0       | 0.0       |
| Reduces pleasure                           | 0.0        | 0.0        | 0.0       | 1.0       |
| <b>Method related reasons</b>              |            |            |           |           |
| Wanted to change to a modern method        | 8.9        | 4.0        | 11.7      | 12.2      |
| Wanted to change to a natural method       | 1.0        | 1.1        | 4.3       | 0.0       |
| <b>Change Method</b>                       |            |            |           |           |
| Too expensive                              | 0.3        | 3.3        | 1.3       | 0.9       |
| Product unavailable                        | 1.8        | 1.7        | 0.0       | 0.0       |
| <b>Access</b>                              |            |            |           |           |
| Religious reasons                          | 0.3        | 0.0        | 0.0       | 0.9       |
| Partner opposition                         | 5.5        | 4.5        | 4.1       | 3.8       |
| Rumor                                      | 1.2        | 0.6        | 0.0       | 1.0       |
| <b>Other</b>                               | 14.2       | 13.2       | 9.6       | 18.2      |
| <b>Don't know</b>                          | 1.2        | 0.6        | 6.6       | 2.9       |
| <b>Total N =</b>                           | <b>278</b> | <b>125</b> | <b>66</b> | <b>88</b> |

## Profiles of potential customers by standard of living index

Table 27 presents simple socio-demographic characteristics of women broken down by the standard of living categories. Virtually all of the women in the lowest two quintiles live in rural areas, whereas more women in the middle to high categories reside in urban areas or Dakar. The age distributions of women in the SLI groups are approximately the same across all socioeconomic levels. Women of higher socioeconomic status are better educated and report lower numbers of children.

Table 27: Characteristics of women, age 15 to 49, disaggregated by standard of living (percent)

| Characteristics      | Lowest     | Low-Middle | Middle     | Upper-Middle | High       | Total        |
|----------------------|------------|------------|------------|--------------|------------|--------------|
| <b>% of total</b>    | 18.8       | 17.7       | 19.3       | 21.9         | 22.4       |              |
| <b>Residence</b>     |            |            |            |              |            |              |
| Dakar                | 0.0        | 0.0        | 3.4        | 29.9         | 67.2       | 22.2         |
| Other Urban          | 0.1        | 2.6        | 19.3       | 37.9         | 23.9       | 17.8         |
| Rural                | 99.9       | 97.4       | 77.3       | 32.2         | 9.0        | 60.0         |
| <b>Age Groups</b>    |            |            |            |              |            |              |
| 15–19                | 22.3       | 18.8       | 22.3       | 24.4         | 23.4       | 22.4         |
| 20–24                | 16.8       | 20.5       | 16.6       | 20.6         | 21.4       | 19.3         |
| 25–29                | 15.5       | 17.8       | 17.9       | 17.0         | 17.3       | 17.1         |
| 30–34                | 16.3       | 16.6       | 11.8       | 12.3         | 14.0       | 14.1         |
| 35–39                | 10.4       | 8.9        | 12.5       | 10.2         | 10.4       | 10.5         |
| 40–44                | 10.4       | 9.8        | 13.8       | 9.9          | 9.0        | 10.5         |
| 45–49                | 8.0        | 7.6        | 5.1        | 5.7          | 4.4        | 6.1          |
| <b>Education</b>     |            |            |            |              |            |              |
| None                 | 88.3       | 85.0       | 77.1       | 54.3         | 29.2       | 64.9         |
| Primary              | 10.4       | 12.1       | 17.4       | 27.7         | 29.1       | 20.0         |
| Secondary+           | 0.8        | 2.4        | 4.1        | 16.7         | 36.2       | 13.1         |
| Superior             | 0.0        | 0.0        | 0.0        | 0.5          | 4.3        | 1.1          |
| Don't know           | 0.5        | 0.6        | 1.5        | 0.8          | 1.2        | 0.9          |
| <b># of Children</b> |            |            |            |              |            |              |
| No children          | 21.1       | 21.5       | 30.0       | 40.4         | 49.7       | 33.5         |
| 1                    | 11.6       | 11.8       | 12.9       | 13.1         | 13.0       | 12.5         |
| 2                    | 8.8        | 12.0       | 7.6        | 10.6         | 9.6        | 9.7          |
| 3                    | 11.8       | 9.3        | 11.7       | 7.5          | 6.6        | 9.2          |
| 4                    | 11.5       | 7.8        | 6.6        | 6.1          | 5.6        | 7.4          |
| 5+                   | 35.3       | 37.7       | 31.2       | 22.3         | 15.5       | 27.7         |
| <b>Total N =</b>     | <b>647</b> | <b>607</b> | <b>664</b> | <b>751</b>   | <b>769</b> | <b>3,438</b> |

User groups disaggregated by the standard of living categories are displayed in Table 28. Women from higher socioeconomic households are more likely to be modern contraceptive users overall, and to obtain their family planning products predominantly in the public sector, but do also use the private sector. Traditional method use is roughly the same across all groups. More than 40 percent of the women in each of the two highest income categories intend to use, whereas 25 in each of the lowest two SLI groups are intenders. In addition, over half of women in each of the lowest categories say that they do not intend to use.

*Table 28: User groups by standard of living categories (percent)*

| <b>User groups</b>                                  | <b>Lowest</b> | <b>Low-Middle</b> | <b>Middle</b> | <b>Upper-Middle</b> | <b>High</b> | <b>Total</b> |
|---|---------------|-------------------|---------------|---------------------|-------------|--------------|
| Modern method (public sector)                       | 0.3           | 2.8               | 3.0           | 7.5                 | 7.3         | 4.3          |
| Modern method (private sector)                      | 0.3           | 0.3               | 0.7           | 2.7                 | 4.2         | 1.8          |
| Traditional methods                                 | 4.8           | 8.6               | 6.4           | 5.5                 | 6.6         | 6.4          |
| <b>Total users =</b>                                | <b>5.4</b>    | <b>11.7</b>       | <b>10.1</b>   | <b>15.2</b>         | <b>17.5</b> | <b>12.2</b>  |
| Intend to use in the next 12 months                 | 8.0           | 6.6               | 6.6           | 12.0                | 10.1        | 8.8          |
| Intend to use in the future                         | 3.5           | 6.8               | 4.1           | 10.8                | 15.9        | 8.6          |
| Don't know if intend                                | 10.2          | 11.0              | 14.5          | 17.6                | 19.4        | 14.8         |
| <b>Total intenders =</b>                            | <b>21.7</b>   | <b>24.4</b>       | <b>25.3</b>   | <b>40.8</b>         | <b>45.8</b> | <b>32.3</b>  |
| Do not Intend to use in future (and not menopausal) | 65.5          | 55.7              | 58.6          | 40.2                | 33.6        | 49.8         |
| Menopausal or infecund                              | 7.5           | 8.2               | 6.1           | 3.7                 | 3.0         | 5.5          |
| <b>Total non-intenders =</b>                        | <b>73.0</b>   | <b>63.9</b>       | <b>64.7</b>   | <b>43.9</b>         | <b>36.6</b> | <b>55.3</b>  |
| <b>Total N=</b>                                     | <b>647</b>    | <b>607</b>        | <b>664</b>    | <b>751</b>          | <b>769</b>  | <b>3,438</b> |

Table 29 profiles the characteristics of women in the different geographic survey strata. The age distributions are similar across locations, with a concentration of women in the lower age groups. Women in Dakar and other urban areas have a higher standard of living and are better educated than those in rural areas. In rural areas, only 2.0 percent of women have received more than a primary education, and the vast majority have no schooling at all. Women in rural areas have more children than those in Dakar or other urban areas.

*Table 29: Characteristics of women, age 15 to 49, disaggregated by geographic location (percent)*

| <b>Characteristics</b> | <b>Dakar</b> | <b>Other Urban</b> | <b>Rural</b> | <b>Total</b> |
|------------------------|--------------|--------------------|--------------|--------------|
| <b>% of total</b>      | 22.2         | 17.8               | 60.0         | 100.0        |
| <b>Age Groups</b>      |              |                    |              |              |
| 15–19                  | 21.9         | 26.9               | 21.2         | 22.4         |
| 20–24                  | 21.3         | 19.6               | 18.4         | 19.3         |
| 25–29                  | 18.5         | 13.9               | 17.5         | 17.1         |
| 30–34                  | 14.0         | 10.8               | 15.1         | 14.1         |
| 35–39                  | 9.6          | 12.8               | 10.1         | 10.5         |
| 40–44                  | 9.0          | 10.6               | 11.1         | 10.5         |
| 45–49                  | 5.7          | 5.1                | 6.5          | 6.1          |
| <b>SES</b>             |              |                    |              |              |
| Very Low               | 0.0          | 0.1                | 31.4         | 18.8         |
| Low                    | 0.0          | 2.6                | 28.7         | 17.7         |
| Medium                 | 2.9          | 21.0               | 24.9         | 19.3         |
| High                   | 29.4         | 46.5               | 11.7         | 21.9         |
| Very High              | 67.7         | 30.0               | 3.4          | 22.4         |
| <b>Education</b>       |              |                    |              |              |
| None                   | 31.8         | 42.8               | 83.7         | 64.9         |
| Primary                | 29.6         | 30.9               | 13.2         | 20.0         |
| Secondary+             | 34.1         | 24.2               | 2.0          | 13.1         |
| Superior               | 3.8          | 1.3                | 0.0          | 1.1          |
| Don't know             | 0.8          | 0.9                | 1.0          | 0.9          |
| <b># of Children</b>   |              |                    |              |              |
| No children            | 47.9         | 42.9               | 25.4         | 33.3         |
| 1                      | 13.0         | 10.5               | 12.9         | 12.5         |
| 2                      | 10.9         | 8.4                | 9.7          | 9.7          |
| 3                      | 6.7          | 8.7                | 10.3         | 9.2          |
| 4                      | 5.4          | 5.4                | 8.7          | 7.4          |
| 5+                     | 16.2         | 24.1               | 33.0         | 27.7         |
| <b>Total N =</b>       | <b>764</b>   | <b>613</b>         | <b>2,062</b> | <b>3,438</b> |

Table 30 shows market segments disaggregated by geographic location. Dakar, followed by other urban areas, has the largest percentage of contraceptive users (19.8%). As for intention to use family planning, 24 percent of women in rural areas intend to use family planning or are uncertain about future use, versus more than 47.4 percent in Dakar. Over 60 percent of women in rural areas say that they have no intention to use family planning.

Table 30: Contraceptive user groups by geographic location (percent)

| User groups                         | Dakar       | Other Urban | Rural        | Total        |
|-------------------------------------|-------------|-------------|--------------|--------------|
| Modern method (public sector)       | 8.2         | 7.4         | 2.1          | 4.4          |
| Modern method (private sector)      | 4.5         | 3.1         | 0.3          | 1.8          |
| Traditional method                  | 7.1         | 5.9         | 6.2          | 6.4          |
| <b>Total users =</b>                | <b>19.8</b> | <b>16.4</b> | <b>8.6</b>   | <b>12.6</b>  |
| Intend to use in the next 12 months | 12.0        | 9.7         | 7.4          | 8.8          |
| Intend to use in the future         | 16.3        | 11.9        | 4.7          | 8.6          |
| Don't know if they intend           | 19.1        | 19.4        | 11.9         | 14.8         |
| <b>Total intenders =</b>            | <b>47.4</b> | <b>40.0</b> | <b>24.0</b>  | <b>32.2</b>  |
| Do not intend to use in future      | 29.5        | 38.3        | 60.7         | 49.8         |
| Menopausal or infecund              | 3.3         | 4.3         | 6.7          | 5.5          |
| <b>Total non-intenders =</b>        | <b>32.8</b> | <b>42.6</b> | <b>67.4</b>  | <b>45.3</b>  |
| <b>Total N =</b>                    | <b>764</b>  | <b>613</b>  | <b>2,062</b> | <b>3,438</b> |

## Willingness to pay for public health commodities in the private sector

CMS/ADEMAs is considering the launch of a commercial injectable contraceptive product. The following scenario describing injectables and how they would be sold was presented to women and men in the survey:

Now, I would like to ask you some questions about injectables. Injectable contraception is a family planning product that is given to a woman with a simple injection and prevents a woman from becoming pregnant for three months. After three months, if another injection is not given (or another family planning method is not used), a woman can become pregnant just like she could before taking the injection. Injectables are a certified product, approved by the Direction de la Pharmacie.

ADEMAs, the same organization that promotes *Protec* condoms and the oral contraceptive, *Securil*, is considering the promotion of an internationally identified brand of injectable. Like the injectables offered by governmental organizations, the injectables promoted by ADEMAs would also prevent a woman from becoming pregnant for 3 months. The new injectable brand would be sold individually at pharmacies, and the injection would be given by the medical professional of your choosing.

Table 31 shows the results from questions about the feasibility of a privately marketed injectable. The first row reflects responses to the question of whether a person was interested in buying the injectable. The following information details how much they would be willing to pay for the product. Roughly equal percentages of women and men declared themselves to be likely customers (9.9 and 8.5%). Of those potential customers, 44 percent of men and 54 percent of women said they would pay at least 800 FCFA for a commercial injectable product. Of those who felt comfortable answering the question, virtually no one said they would not pay anything for the

product. However, 25.1 percent of women and 39.4 percent of men did not feel comfortable or sufficiently informed to answer the question.

*Table 31: Willingness to pay for a privately marketed injectable (percent)*

| <b>Willingness to pay</b>           | <b>Women</b> | <b>Men</b> |
|-------------------------------------|--------------|------------|
| % who say they are likely customers | 9.9          | 8.5        |
| Unwilling to pay anything           | 1.2          | 0.6        |
| Willing to pay at least 200 FCFA    | 2.9          | 3.6        |
| Willing to pay at least 400 FCFA    | 9.3          | 6.6        |
| Willing to pay at least 600 FCFA    | 7.7          | 5.2        |
| Willing to pay at least 800 FCFA    | 53.8         | 43.7       |
| Unable to respond to question       | 25.1         | 39.4       |
| <b>Total N =</b>                    | <b>340</b>   | <b>220</b> |

\$1 US = 527 FCFA

## Condom use for HIV/AIDS prevention

Most of the preceding analysis has been related to use of contraceptives and condoms for family planning purposes. In Senegal, HIV prevention is also an important use of condoms. This section of the report provides information useful for developing marketing plans for condoms and also for reinforcing the importance of condom marketing in Senegal.

Table 32 shows that women consistently show a higher percentage of ever having sex across all ages. At age sixteen, 29.6 percent of women have had sex; for men, the percentage that have had sex at sixteen is only 18.0 percent. By age twenty, 68.4 percent of Senegalese women and over half of Senegalese men are sexually active.

*Table 32: Ever had sex, by age and gender*

| <b>Age</b>   | <b>Women (aged 15-49)</b> |   | <b>Men (aged 15-59)</b> |   |
|--------------|---------------------------|---|-------------------------|---|
|              | <b>Percentage</b>         | <b>Number of women in age group in sample</b> | <b>Percentage</b>       | <b>Number of men in age group in sample</b> |
| 15           | 21.2                      | 140   | 14.4                    | 74  |
| 16           | 29.6                      | 133   | 18.0                    | 108   |
| 17           | 37.6                      | 157   | 27.0                    | 103   |
| 18           | 46.3                      | 208   | 30.8                    | 167   |
| 19           | 53.1                      | 145   | 47.9                    | 103   |
| 20           | 68.4                      | 197   | 51.2                    | 145   |
| 21           | 60.3                      | 117   | 58.4                    | 73  |
| 22           | 73.3                      | 144   | 61.4                    | 87  |
| 23           | 75.4                      | 98  | 68.5                    | 79  |
| 24           | 83.6                      | 105   | 73.4                    | 56  |
| <b>Total</b> |                           | <b>1,444</b>                                  |                         | <b>1,034</b>                                |

Table 33 presents information on condom use by age for both sexes. Among men, there is significantly more reported use of condoms than with women: over 50 percent of sexually active men ages 15 to 24 have used condoms, while less than 8 percent of women in this age range report ever using condoms.

An important issue surrounding condom use for the prevention of sexually transmitted infections is partner type. For more than 85 percent of women in all age groups, the last sex partner is reported to be their husband. On the other hand, for men ages 15 to 24, close to 90 percent cited regular or occasional partner, rather than spouse, as their last partner.

The table also shows what percentage of men and women having sex with someone other than a spouse used a condom at last intercourse. Women ages 15 to 19 reported using condoms at last intercourse more often than older women. Men in the 20 to 24 age group reported the highest percentage of condom usage (68.1%). Overall, men again display higher percentages of condom use at last intercourse than women.

*Table 33: Condom use and reasons for non-use (percent)*

| Use & reasons   | Women      |            |              | Men        |            |              |
|---|------------|------------|--------------|------------|------------|--------------|
|   | 15-19      | 20-24      | 25+          | 15-19      | 20-24      | 25+          |
| <b>Utilization</b>  |            |            |              |            |            |              |
| Ever used condoms among those that have had sex   | 3.1        | 7.4        | 4.1          | 51.4       | 56.9       | 27.5         |
| <b>Total N =</b>  | <b>255</b> | <b>426</b> | <b>1,742</b> | <b>145</b> | <b>275</b> | <b>1,495</b> |
| <b>Who was last partner?</b>  |            |            |              |            |            |              |
| Spouse  | 90.5       | 86.3       | 94.3         | 1.7        | 13.9       | 71.4         |
| Regular partner   | 7.8        | 11.4       | 3.7          | 61.5       | 68.2       | 19.0         |
| Occasional partner  | 1.7        | 2.3        | 2.0          | 36.9       | 18.0       | 9.6          |
| <b>Total N =</b>  | <b>234</b> | <b>410</b> | <b>1,718</b> | <b>137</b> | <b>274</b> | <b>1,466</b> |
| Used condoms at last sex among those who had sex with a regular partner or occasional partner | 40.6       | 30.9       | 21.4         | 61.4       | 68.1       | 57.0         |
| <b>Total N =</b>  | <b>29</b>  | <b>72</b>  | <b>124</b>   | <b>155</b> | <b>272</b> | <b>482</b>   |



Table 34 presents information on awareness of HIV/AIDS among respondents. More than 80 percent of women are aware of HIV/AIDS, while about 90 percent of men know about HIV/AIDS. Among those who are HIV aware, between 60 and 70 percent of men and women in all age groups know of a sign of HIV infection. When self-assessing their risk of contracting HIV/AIDS, over 65 percent of all respondents stated that they had no risk of contracting the disease, while very few reported that they were at high risk.

Fidelity, abstinence, and using condoms are most often reported as mechanisms for avoiding HIV infection. Women are more likely to report fidelity and avoiding multiple partners as effective means for avoiding an infection. Men are more likely to report abstinence and condom use as effective ways of avoiding HIV infection.

Table 34: AIDS awareness

|   | Women (aged 15-49) |            |              | Men (aged 15-59) |            |              |
|---|--------------------|------------|--------------|------------------|------------|--------------|
|   | 15-19              | 20-24      | 25+          | 15-19            | 20-24      | 25+          |
| <b>Knowledge of HIV/AIDS</b>  |                    |            |              |                  |            |              |
| % who have heard of AIDS (prompted and spontaneous)                       | 79.5               | 81.6       | 86.4         | 89.5             | 92.5       | 93.1         |
| <b>Total N =</b>  | <b>769</b>         | <b>663</b> | <b>2,002</b> | <b>516</b>       | <b>461</b> | <b>1,629</b> |
| % who know at least one sign of HIV infection                             | 61.6               | 66.9       | 65.1         | 63.2             | 70.7       | 69.6         |
| <b>Total N =</b>  | <b>643</b>         | <b>569</b> | <b>1,820</b> | <b>473</b>       | <b>435</b> | <b>1,551</b> |
| <b>Perception of risk for being infected by HIV</b>                       |                    |            |              |                  |            |              |
| No risk   | 76.2               | 67.7       | 71.9         | 75.8             | 71.0       | 72.9         |
| Moderate risk   | 5.2                | 15.5       | 12.6         | 9.8              | 14.3       | 12.9         |
| High risk   | 0.0                | 0.1        | 0.0          | 0.4              | 1.6        | 0.7          |
| Don't know  | 18.6               | 16.7       | 15.4         | 14.0             | 13.0       | 13.5         |
| <b>Total N =</b>  | <b>645</b>         | <b>569</b> | <b>1,824</b> | <b>475</b>       | <b>441</b> | <b>1,569</b> |
| <b>Knowledge of ways to avert infection (multiple responses possible)</b> |                    |            |              |                  |            |              |
| Fidelity  | 53.2               | 69.3       | 73.2         | 44.5             | 55.3       | 73.5         |
| Abstinence  | 32.0               | 25.5       | 23.0         | 44.7             | 46.5       | 41.0         |
| Use a condom  | 18.0               | 21.9       | 16.6         | 41.6             | 61.1       | 41.5         |
| Avoid multiple partners   | 18.2               | 23.6       | 26.7         | 11.9             | 12.3       | 18.9         |
| Avoid prostitutes   | 5.6                | 6.6        | 7.0          | 7.7              | 10.2       | 7.6          |
| Avoid homosexual relationships  | 0.3                | 0.8        | 0.6          | 0.1              | 0.7        | 1.1          |
| Avoid blood transfusions  | 4.5                | 5.0        | 4.4          | 1.8              | 3.3        | 2.5          |
| Avoid injections  | 7.2                | 8.2        | 7.0          | 4.8              | 3.6        | 3.7          |
| Avoid embracing   | 0.0                | 0.2        | 0.1          | 0.3              | 0.3        | 0.2          |
| Avoid mosquito bites  | 0.7                | 0.5        | 0.7          | 1.2              | 2.2        | 2.8          |
| Avoid sharp objects   | 21.7               | 24.5       | 19.1         | 19.8             | 19.6       | 17.5         |
| Other   | 1.8                | 2.5        | 1.7          | 1.6              | 2.1        | 2.3          |
| Don't know  | 21.3               | 13.9       | 11.0         | 13.7             | 6.4        | 5.8          |
| <b>Total N =</b>  | <b>643</b>         | <b>570</b> | <b>1,822</b> | <b>475</b>       | <b>439</b> | <b>1,566</b> |

## Summary

Figures on current family planning use indicate that programs to promote contraceptive use among the general population have been effective in Senegal. Use of contraception in general has increased for men and women, although use of modern methods has slightly decreased as a proportion of total use. Interestingly, use of traditional methods has grown, with most of the increase accounted for by the practice of LAM and abstinence. Dakar and other urban areas have been most influenced by family planning programs, and have the largest percentages of contraceptive users. Overall, however, the vast proportion of Senegalese still do not use any form of contraception.

Of those Senegalese who intend to use family planning, unmarried men and women show the highest percentages of intention to use contraceptives in the next 12 months and beyond. Therefore, programs should continue to market injectables and the pill among single women and condoms among single men, which are cited as the most popular forms of family planning by each gender, respectively. Among women who do not use family planning, almost half of those with higher socioeconomic status say it is because they are single and/or have never had sex. Conversely, women of lower socioeconomic status often cite reasons related to fecundity and childbearing or a lack of knowledge as reasons for not using contraception. Over half of women in these lowest socioeconomic categories (most of whom live in rural areas) say they do not intend to use contraceptives. The most commonly cited reason for stopping modern method contraception is side effects: one-third of pill and IUD users mention secondary effects as a reason for discontinuing these methods, and almost half of injectable users cite this reason for discontinuation. Efforts to reduce the side effects of modern contraceptives (and to improve education concerning various contraceptive methods before women begin use) may therefore lead to more consistent use.

Current contraceptive users are quite knowledgeable overall. For example, they have more accurate information about both the facts and myths regarding different forms of family planning, compared to Senegalese who intend to use contraception. Men and women who are uncertain about using family planning in the future have high levels of the “don’t know” response when asked about contraceptive knowledge, indicating a need to target people who are indecisive about family planning. Men are slightly more negative about contraceptive use than women. Despite variations in actual knowledge, men and women of all groups know where to obtain information about contraceptives if they need it. In addition, men and women also know that condoms protect against unwanted pregnancy and STIs, although men are generally more knowledgeable about condoms than women.

Differences between women who use the public sector versus the private sector as a contraceptive source are quite distinct. The majority of pill, IUD, and injectable users report choosing the public sector as their contraceptive source. Public-sector users characteristically live in rural areas, are more likely to be between the ages of 25 to 44 and to have low, medium or high socioeconomic status. In addition, they are more likely to have lower educational levels and a greater number of children. The public dispensary has become a commonly used outlet for obtaining modern contraceptive methods for public-sector users, with one in four women choosing this source.

In the private sector, one-fifth of women who use the pill or IUD report obtaining their respective method through private sources. Women who go to the private sector for their contraceptive method are predominantly from Dakar, age 20 to 39, and of very high socioeconomic status. In addition, they have higher levels of secondary education, and are more likely to have no children.

Condoms are the one method that is more commonly obtained in the private sector than in the public sector: about 50 percent of women report purchasing condoms in the private sector. (The trend to purchase condoms from the private sector versus the public sector has increased over the past decade.) For men, the majority of male condom users report purchasing them from the private sector, and over half of overall condom purchases have been made at pharmacies. Of the 6.3 percent who report they “don’t know” where they obtained a family planning product, it is presumed that friends or partners were the actual sources. Future research should include a category that allows respondents to distinguish between friends, partners, and family members as contraceptive source.

Regarding family planning counseling, midwives most often counsel women on the utilization of contraceptives, and are used particularly by women of higher socioeconomic status. For injectables and pills, nurses are an important source of counseling for women in the lower 60 percent of socioeconomic status. For condoms, virtually no one receives counseling through medical channels; most information is obtained through friends, parents, or “others.” The latter are primarily presumed to be women’s sex partners.

Familiarity with *Protec* is much more prevalent among sexually active unmarried Senegalese. Over half of single women and almost three-fourths of single men have heard of *Protec*, and more than half of respondents find the condom quality and price “good.” Roughly three-fourths of both men and women live within 30 minutes of a *Protec* outlet, which means that proximity is not a hindrance in the procurement of these condoms. Regarding the *Protec* radio campaign, two-thirds of single Senegalese men and women have heard the advertisements. Married men and women reported moderate to lower levels of exposure to the campaigns.

Knowledge of *Securil* pills is very low overall, but is highest among sexually active unmarried women. Given that *Securil* campaigns were launched around the time of the CMS/ADEMAs survey, this result is not surprising. As for injectables, roughly one in 10 women declared themselves likely customers for this method. A similar number of men said their sexual partners would be likely customers. Of those potential customers, two-fifths of men and half of women said that they would pay at least 800 FCFA for a commercial injectable product.

Among men, there is significantly higher reported use of condoms than among women: nearly half of sexually active men age 15 to 24 have used condoms, whereas less than 8 percent of women in this age range report ever using condoms. This can be attributed, however, to the type of sex partner: 85 percent of all women and roughly 75 percent of men 25 and older report that their last sex partner was their spouse, while more than three-fifths of men ages 15 to 24 report that their last partner was a regular partner. Women age 15 to 19 reported using condoms at last intercourse more often than older women, and young men in the 20 to 24 age group reported the highest percentage of condom usage among men.

When the sex partner is an occasional partner, however, condom use is much lower for both men and women than it is with a regular partner. Overall, men again display higher percentages of condom use at last intercourse than women.

In general, the Senegalese population is quite knowledgeable about HIV/AIDS. More than 80 percent of women are aware of HIV/AIDS and about 90 percent of men are aware. Men and women age 25 and older show the highest percentages of having heard of HIV/AIDS. Among those who are HIV aware, over 60 percent of men and women in all age groups know of a sign of HIV infection. When self-assessing their risk of contracting HIV/AIDS, over 65 percent of all respondents stated that they had no risk of contracting the disease, while very few reported that

they were at high risk. Women are more likely to report fidelity and avoiding multiple partners as effective means for avoiding an infection, while men report that abstinence and condom use are efficient ways of avoiding HIV/AIDS.

## Conclusions

### Use of modern family planning methods

One of the key findings of this study is that the vast majority of married women (86.7%) still do not use any method of contraception. The two most popular methods, oral contraceptives and injectables, are used by only 2.5 percent and 2 percent of all women. Senegal remains a country where family planning is largely confined to urban areas and among upper-income groups, although women who intend to use a method in the future are increasingly found in rural and low-income groups.

The two highest socioeconomic groups account for 74.9 percent of modern method users in the public sector and 86.6 percent of users in the private sector. Women who intend to use a method in the future also tend to reflect similar socioeconomic characteristics. This poses special challenges for social marketing programs that aim to increase the use of modern methods overall, but particularly in low-income groups. When women in the upper-40 percent income group do not use a method, it is typically for reasons related to sexual activity, fecundity, or childbearing. For these women, method-related reasons or concerns about health or side effects account for 13.4 percent of non-use. This category of women is therefore most likely to respond to campaigns that emphasize the health benefits and safety of modern methods, rather than to activities designed to increase access or knowledge.

In the lower socioeconomic groups (60% of respondents), opposition to family planning and access or knowledge-related reasons account for 36 percent of non-use. Method- and health-related reasons account for only 6.2 percent of non-use. Simply put, lower-income women are less informed than upper-income women, and are more likely to oppose modern methods for religious or personal reasons. Increasing the adoption of family planning by these women would require a generic behavior change communication campaign focusing on the health and economic benefits of family planning, and providing method-specific information. It is important to note that price and geographic access to contraception account for only 1.1 percent and 0.1 percent of non-use among women in the lower 60 percent income group, suggesting that efforts to lower the cost of contraception or increase service outlets for family planning would have a negligible impact on this group.

For the vast majority of women in both lower- and higher-income groups, communication — both broad-based (all methods) and method-specific — is most likely to increase informed demand for modern methods. Efforts to decrease the rate of discontinuation for pills, IUD, and injectables should focus on reducing concerns about secondary effects, which account for a third of discontinuations among pill and IUD users, and for half of discontinuations among injectable users.

Communication efforts may take two forms: Mass media campaigns have the advantage of reaching large numbers of women across socioeconomic groups, but may have to be generic (unbranded) in order to avoid legal restrictions on contraceptive advertising. Provider-directed communication is also needed, since the majority of women obtain their methods from health providers. Both public- and private-sector providers can be targeted with detailing (medical visits by pharmaceutical or social marketing representatives) and training in order to increase their knowledge and ability to handle women's concerns about contraceptive methods. The social marketing program managed by ADEMAs in Senegal implemented such activities when it

launched the first social marketing pill in 2002. It is likely that sustained demand-side activities among the target group (middle- and low-income women) will be essential in attracting new users and minimizing the crowding-out of commercial brands, which high-income women can afford.

Overall use of private-sector sources of contraceptive methods is low, although it increased from 21.2 percent in 1997 to 25.5 percent in 2002. Use of private-sector sources is largely confined to the highest socioeconomic group — 53.6 percent of private sector users belong to this group. It appears that most women, regardless of their purchasing power, have become accustomed to seeking family planning services from the public sector, particularly from dispensaries, health centers, and public hospitals. Condoms, however, are the exception to this rule: More women than ever before — 55.1 percent — and 68.6 percent of men obtain condoms from the private sector (primarily from pharmacies), which most likely reflects the impact of condom social marketing in Senegal. The low percentage of women seeking oral contraceptives from the private sector (20 percent) is likely due to limited promotional activity in the media (prohibited by law) and the fact that the social marketing brand, *Securil*, had just been introduced in pharmacies at the time of the survey.

Injectables represent the method of choice among women who intend to use a method in the future (34.4 percent of them would choose this method), indicating much potential for growth. This method, however, is typically sourced in the public sector, which offers the advantage of low cost and one-stop service. Private-sector users of injectables are a very small group (11 percent of all users) and tend to belong to the highest socioeconomic group. Therefore, a low-cost social marketed injectable sold in pharmacies without a massive educational campaign to attract new users would essentially serve a clientele that can afford products at commercially sustainable prices. Introducing an injectable in the private sector for a low-income clientele would need to be supplemented with sustained efforts to promote the method and make low-cost injections available through neighborhood nurses or midwives. Provider training and detailing for this method is likely to be more intensive than for the pill, including proper injection training and education about managing side effects and sterility concerns (considering the high level of method-related concerns among women).

Although unmet need appears to be high in Senegal, knowledge of and trust in modern methods is very low, particularly among non-users and even intenders. This points again toward interventions based on consumer and provider communication, rather than on increased geographic or economic access. Questions relating to willingness to pay are particularly useful to social marketing programs that use the same distribution channels as commercial distributors. Social marketing products should be priced low enough to be affordable to the target group while refraining from competing for users of commercial brands. According to this study, most women are willing to pay at least 800 FCFA for an injectable product. This price should be placed in the context of a social marketing campaign designed to increase the number of users from a variety of socioeconomic groups. In the absence of such a campaign, a social marketing injectable product might be used by women who can afford higher prices.

## **Condom use and HIV/AIDS prevention**

Research findings regarding sexual behavior suggest high rates of abstinence among Senegalese women before the age of 18. For men, abstinence is the norm until 19. The promotion of abstinence among adolescents is a logical strategy in Senegal (as in other countries in the region), although it should not exclude condom promotion for sexually active youth. Evidence exists that

delaying the onset of sexual activity, particularly among young women, has helped reduce the rate of infection in countries such as Uganda. Therefore, a social marketing program targeting youth should adopt a comprehensive approach to HIV prevention and include messages about abstinence, partner reduction (when appropriate), as well as correct and consistent condom use.

For most social marketing programs in sub-Saharan Africa, 20 to 29 year olds constitute the core condom-user group. The Senegal project should pay special attention to this group, particularly women, who tend to report lower rates of condom use with occasional partners than with regular partners. Social marketing campaigns should focus on raising risk awareness (65 percent of respondents felt they had no risk of contracting HIV/AIDS, and confidence in a partner is a predominant reason for not using condoms) and on education about condom efficacy in preventing STI infection.

Developing integrated HIV/AIDS campaigns may require expanding current social marketing activities beyond mere condom distribution and promotion and related market-based research. Research activities need to be focused on at-risk populations (such as adolescents, especially young women and their partners) and explore behavioral issues such as risk perception, barriers to condom use, and preferred strategies to avoid STI infection. This study suggests that while cultural factors (such as lower-than-regional average rates of premarital and extramarital sexual activity ) may contribute to low contraceptive knowledge and use in Senegal, they also help lower STI and HIV/AIDS prevalence in the country. This should be interpreted as an opportunity for social marketing programs to engage in targeted, non-product-based communication campaigns with significant potential health impact.

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