

CARISMA Regional Studies Series

Study Two: The Total Condom Market

May 2009

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The CARISMA Regional Studies Series

Between 2005 and 2008, CARISMA¹, a regional HIV & AIDS Prevention Programme using Social Marketing, was implemented across 13 PANCAP countries and territories². Over the first phase of the CARISMA programme, numerous research studies were conducted by Social Marketing Organisations involved in the programme. From in-depth ethnographic research to knowledge, attitude and practices surveys, these studies represent a wealth of data that merit widespread dissemination. Options, the Regional Consultant responsible for managing the programme on behalf of PANCAP, has also conducted a programme of research drawing regional conclusions and reflecting on findings. The CARISMA Regional Research Studies series has been published to ensure that learning from the first phase of CARISMA programme is captured and shared with a wide audience.

¹ CARISMA is a development programme of CARICOM - co-financed by the Federal Republic of Germany through the German Development Bank (KfW) and the Canadian Development Agency (CIDA). Launched in March 2005, the project supports condom social marketing programmes across the Caribbean.

² Belize, the Dominican Republic, Jamaica, Haiti and the Eastern Caribbean islands of Antigua & Barbuda, Barbados, Dominica, Grenada, St. Kitts & Nevis, St Maarten, St. Lucia, St. Vincent & the Grenadines and Trinidad & Tobago



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Acronyms and Abbreviations

CARISMA	Caribbean Social Marketing Programme for HIV & AIDS Prevention
CCNAPC	Caribbean Coalition of National AIDS Programme Co-ordinators
HIV	Human Immunodeficiency Virus
MSPP	Ministère de la Santé Publique et de la Population
OECS	Organisation of Eastern Caribbean States
PSI	Population Services International
SM	Social Marketing
SMO	Social Marketing Organisation
TCM	Total condom market
TRaC	Tracking Results Continuously (PSI survey)



Acknowledgements

Thanks to our donors KfW and PANCAP for their funding and support of this Regional Studies Series.

Thanks go to the condom companies who provided sales data to CARISMA. Thanks also to Elizabeth Gardiner and Rachel Fisher, who provided valuable insights into interpreting the data. The authors are also grateful to the social marketing organisations who provided data and interpretation to assist in the writing of this report. CCNAPC collected public condom sales data for several countries, which assisted greatly in efforts to compile these figures.

Report Structure

This report consists of the following sections:

- **Part One:** Total Condom Market Regional Data
- **Part Two:** Lessons Learned and Next Steps in Monitoring the Total Condom Market



Part One: Total Condom Market Regional Data

1.1 Introduction

Throughout the Caribbean, commercial companies, the public sector, and social marketing organisations (SMOs) distribute and sell condoms. Together, they make up the total condom market (TCM). Over the CARISMA programme (2005 – 2008), condom sales and distribution data were collected from each sector. The aim of tracking these data was to measure whether social marketing programmes were increasing access to condoms by growing the total market. This report analyses trends in sales and distribution over time, discusses implications of this novel approach to TCM monitoring, and explores implications for social marketing in the region. The report concludes with a discussion about how to improve the measurement of the impact of social marketing programmes in future.

CARISMA aimed to increase the demand for and use of condoms from *all* sectors through social marketing. The total market approach recognises that each sector has a role to play in supporting condom availability, access and use³. An efficiently operating total market makes maximum and efficient use of each sector's strengths, such that resources are used most effectively. Each sector has specific strengths and target segments of the population according to willingness to pay. Indeed, any successful social marketing programme must go beyond taking market share from the commercial sector (known as "crowding out"), and should ideally increase overall demand, including demand for commercial condoms ("crowding in").

Free condoms provide access to condoms for the poor who are unwilling or unable to pay for them. However, distributing free condoms is expensive to the provider (e.g. Ministry of Health), and is only efficient if condoms are effectively targeted at those who would otherwise not have access. Additionally, distribution may involve a high degree of wastage, and condoms may not be available in all sites (as distribution channels are supply rather than demand-driven, and are consequently less efficient). A study in India found that up to a third of free condoms may be wasted due to over-procurement and poor storage which meant that large volumes expired before use⁴.

Commercial brands are financially more sustainable, but are often only available to the consumer at a high cost (due to import taxes, profit taking at each stage of the distribution chain and lack of subsidy). Companies selling them may not invest in behaviour change communications, and may not market or distribute in less profitable population segments, outlet types or regions, often without investing in determining whether or not there is need or demand. In particular, distribution to small islands or high risk groups may not be deemed commercially viable.

Social marketing brands aim to be affordable to the majority of people. They may be subsidised to a greater or lesser degree, but price and distribution are as far as possible governed by willingness to pay and identification of access gaps. Profits fund a variety of operating costs and

³ John Meadley, Richard Pollard & Mark Wheeler. Review of DFID Approach to Social Marketing. DFID Health Systems Resource Centre 2003. www.dfidhealthrc.org/publications/srh/SM_review_Sept03.pdf Accessed February 10 2009.

⁴ Availability and wastage of free distributed condoms in India. Goyal RS; International Conference on AIDS (15th : 2004 : Bangkok, Thailand). *Int Conf AIDS*. 2004 Jul 11-16; 15: abstract no. MoPeE3996.



behaviour change work which enables SMOs to target high risk groups who are often not served by either of the other sectors.

In order to monitor the dynamics of this market, CARISMA compiled country level data on sales and distribution from all sectors:

- Subsidized: SMO branded condoms
- Free: Public sector condoms
- Commercial: Branded condoms

It is important to note that this supply-side method of monitoring has limitations, as does monitoring through user surveys. These limitations will be discussed in the report's conclusions.

The collection and dissemination of TCM data represents a significant development in the monitoring of social marketing sales and their impact on both public and commercial condom distribution. The figures represent a unique opportunity to analyse trends and geographical patterns.

1.2 Data Collection Methodology

1.2.1 Social Marketing Sales

Six social marketing organisations provided quarterly sales data:

- Dominican Republic (PSI condoms and IPPF affiliate (Profamilia))
- Haiti (PSI)
- Belize (PASMO)
- Dominica (PSI and IPPF affiliate)
- St. Vincent & the Grenadines (PSI and IPPF affiliate)

1.2.2 Commercial Sales

Following considerable efforts by the CARISMA team leader, five international condom manufacturers and distributors were persuaded to provide quarterly sales data of their brands on a confidential basis⁵ from 27 PANCAP countries and territories. These were Trojan, Durex, Slam, the Female Health Company, and Ansell. Obtaining sales figures from the commercial sector was only possible using a format whereby confidential sales data were provided to Options Consultancy Services as a third party. The data were compiled and used to generate regional and country-level figures on total condom sales without providing brand-specific information.

Unfortunately, the commercial sector data are not complete: data are not available for 9 countries⁶, some 'low end' brands are missing, and not all companies provided reports for all of 2004 or the second half of 2008. A small number of companies refused to take part, and two months into 2007, in spite of considerable efforts to persuade them to remain in the programme, Trojan stopped reporting sales data due to a change of commercial policy. Ansell subsequently declined to report sales data from mid-2008 onwards. Because of the confidential nature of the sales data, it is not possible to retrospectively remove their sales data from the

⁵ As this was commercially sensitive information, the companies were given a guarantee that the information they gave would be compiled with the other companies' data before being made publicly available.

⁶ Anguilla, British Virgin Islands, Cuba, French Guyana, Grenada, Guadeloupe, Montserrat, Turks and Caicos, Martinique.



figures, as it would have been possible to extrapolate what their sales had been, because sales data from 2004-2006 had already been published. Unfortunately this has introduced greater complexity and uncertainty into the interpretation of trends in commercial condom sales figures, which will be discussed in the results section.

1.2.3 Free Condom Distribution

Free condom data for the OECS⁷, Trinidad & Tobago and Barbados were compiled by CCNAPC⁸. In other countries, SMOs collected figures, either directly, or using a local market research organisation (in Jamaica). Data were collected from the International HIV/AIDS Alliance, Ministries of Health (who supply government stores, family planning departments, and health centres) and National AIDS programmes (who supply NGOs, health centres, and work places). Free condom data are also missing for some years in some countries (highlighted in the figures below).

The TCM data therefore represent the minimum condoms sold and distributed. Thus the data suggest trends but do not reflect exact sales and distribution figures.

⁷ Anguilla, Commonwealth of Dominica, St Lucia, Antigua and Barbuda, Grenada, St Kitts and St Nevis, British Virgin Islands, Montserrat and St Vincent and the Grenadines.

⁸ Caribbean Coalition of National AIDS Programme Co-ordinators.



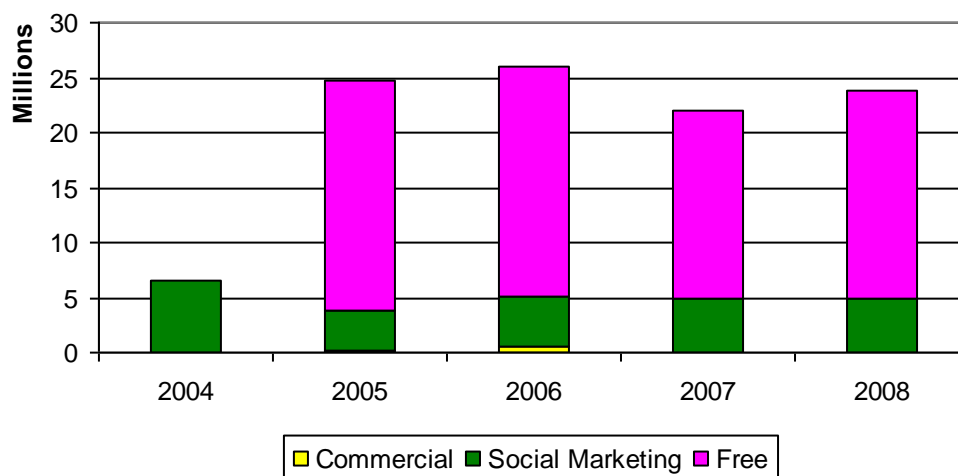
1.3 Results

Condom sales and distribution data and analysis are presented by individual country (or group of countries in the case of the OECS, Trinidad and Tobago, and Barbados). Finally, a regional analysis is presented.

1.3.1 Haiti

Figure 1 shows the number of commercially distributed, socially marketed (SM) and free condoms distributed and sold in Haiti since 2004. Free condom data were missing in 2004.

Figure 1. Condom sales and distribution, Haiti, 2004 – 2008 (millions)



Haiti is the poorest country in the Caribbean, and free – or generic (non-branded) – condoms dominate the market. Generic condoms are supplied both by USAID and UNFPA, and are distributed through public health centres and PEPFAR⁹ implementing partners working in HIV prevention. They are generally given out by community-based groups, peer educators, and health centres.

The number of free condoms distributed has varied over the past three years, which may have implications for the sustainability of the free condom sector. Although there was a fall in free condoms distributed in 2007 compared with the two previous years, the volume distributed in 2008 has risen again. USAID has made a greater quantity of generic condoms available to its implementing partners recently, which helps to explain this increase. The distribution system of the Ministère de la Santé Publique et de la Population (Ministry of Public Health and Population) does not target particular groups to receive free condom, and there have been problems in recent months in ensuring that condoms are effectively distributed from warehouses. Efforts are underway to improve the targeting and distribution of free condoms.

⁹ The United States President's Emergency Plan for AIDS Relief.



The question around sustainability is, if a country freely distributes condoms, but the resources to do this come to an end, will the users of free condoms revert to not using condoms, or will they be willing and able to pay for subsidised SM or commercial condoms? In the meantime, will the commercial or SM markets be damaged due to people switching to free condoms, thus weakening the total condom market? Although one would anticipate a large free condom sector in a country with high levels of poverty such as Haiti, discussions around what would represent a 'healthy' market share for commercial and socially marketed condoms are required.

Before 2005, there was cross-border 'leakage' of SM condoms to the Dominican Republic, which is thought to explain the drop in social marketing sales between 2004 and 2005 (when the Dominican Republic got its own SM programme). From 2005, there was year on year growth in socially marketed condoms, until 2008 when sales remained static. Haiti has experienced severe distribution problems following two hurricanes in 2008, reminding us that condom sales are highly sensitive to external factors. It may also be that the rise in the number of free condoms available has impacted on the growth of SM sales, although population survey data from Haiti do not suggest this to be the case (see below).

According to these data, there is a negligible commercial sector in Haiti. The sole company reporting to CARISMA stopped operating in the country in 2007 due to political and economic instability. However, other research indicates a more active private sector. Table 1 shows which sector sexually active youth who used a condom last time they had sex procured that condom from. Nearly 60% of youth said they used socially marketed condoms in 2006. By 2008, this switched to nearly 60% saying they used commercial condoms. In contrast, sales data suggest that nationally, only 2% of condoms were sold commercially.

Table 1. Condom user survey data compared with sales data, Haiti, 2006-2008

Data source	Commercial	Social Marketed	Free
2006 TRaC youth survey	35%	58%	2%
2008 TRaC youth survey	57%	38%	1%
Market share, sales data (2007)	2%	18%	81%

There is a large discrepancy between the source of condoms reported by youth, and the overall market share of different condom sectors according to CARISMA sales data. While the majority of youth report using SM and commercial condoms, with barely any using free condoms, the vast majority of condoms distributed in Haiti are 'free'. This raises the question of whether youth know the difference between the different sectors, particularly as free condoms may be subsequently sold; or whether Pantè (the SM brand) is perceived as a commercial brand. These potential sources of reporting error could be addressed by improving the methodology of surveys, e.g. by showing condom packaging from different sectors when asking questions.

The discrepancy could also reflect other factors: there might be a social desirability bias towards reporting using commercial rather than free condoms. Additionally, it could be that older people have different preferences and are more likely to source condoms from the free sector than the young people in this survey.

Finally, the discrepancy could suggest that the commercial sales data from Haiti are inaccurate and do not represent the true state of the total condom market in Haiti at present. Commercial



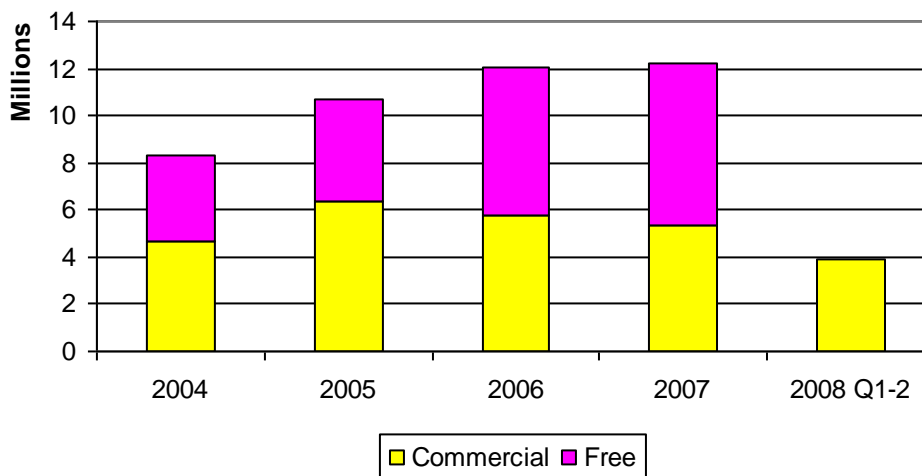
condoms are thought to be largely imported by 'suitcase traders' whose figures would not show up in the data compiled from international companies.

Straightforward correlations between sales and behavioural surveillance data are notoriously difficult. However, if, as most social marketing research specialists now argue, user reported data are a more valid way of measuring patterns of condom use, then it appears the commercial sector in Haiti is growing, and is not threatened by social marketing or free condoms.

1.3.2 Jamaica

Figure 2 shows the number of commercial and free condoms distributed and sold in Jamaica since 2004. Free condom data have not been compiled for 2008 and commercial sales data are only available for quarters 1-2 of 2008.

Figure 2. Condom sales and distribution, Jamaica, 2004 – 2008 (quarters 1 & 2) (millions)



There is no SM condom brand in Jamaica, so the condom market is made up of free and commercial condoms only. There has been year on year growth in the total condom market in Jamaica, with free condoms responsible for that growth in each year since 2005. Until 2008, the commercial sector seemed to be under threat from free condoms, as sales had fallen from 6.3 million in 2005 to 5.3 million in 2007. This represented a fall in the commercial market share from 59% in 2005 to 44% in 2007. The factors behind the growth in public sector condom distribution are not known, and little is known about how and where they are distributed.

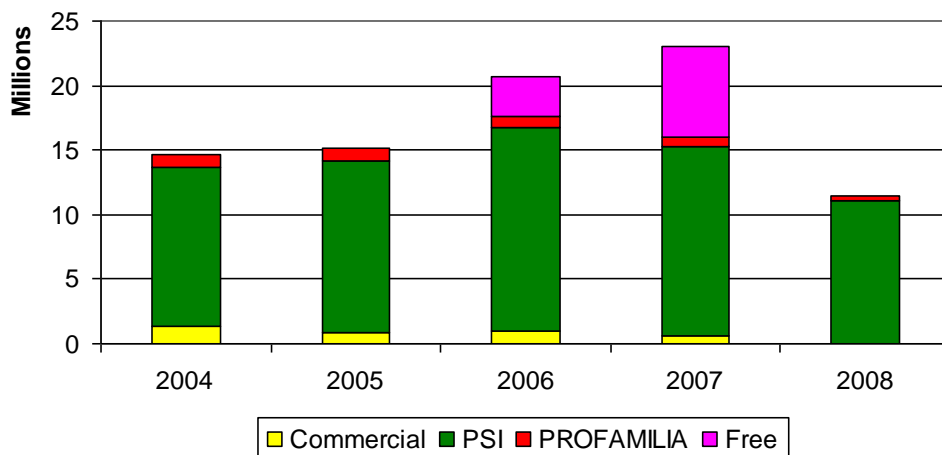
However, the commercial sector appears to have been boosted in 2008. If commercial sales in the second half of 2008 are as high as the first half, 7.7 million condoms will be sold, exceeding 2007 sales by 2.4 million condoms. Trends in the growth of the total market are evident from before the CARISMA-supported mass media campaign (which began in mid-2007), but commercial condom sales appear to have risen since the campaign began.



1.3.3 Dominican Republic

Figure 3 shows the number of commercial, social marketing and free condoms sold or distributed in the Dominican Republic since 2004. Free condom data are only available in 2006 and 2007. In the Dominican Republic there are two SM organisations selling condoms: PSI and Profamilia. Full sales data for 2008 are available for PSI's condoms, but not for Profamilia.

Figure 3. Condom sales and distribution, Dominican Republic, 2004 – 2008 (quarters 1 & 2 for Profamilia and commercial condoms; whole year for PSI condoms) (millions)



The condom market in the Dominican Republic is dominated by SM condoms. Historically, there has been no large commercial sector in the Dominican Republic, although the scale of the 'suitcase trade' is unknown and could be quite large. These data show a 24% decline in commercial sales between 2005 and 2007. It should be remembered that some of this decline is attributable to the removal of Trojan sales from 2007 data¹⁰. Commercial brands are relatively expensive in the DR compared to other Caribbean countries, and incomes are generally low. It will be particularly challenging to grow the commercial condom market in this context, particularly with increasing competition from free condoms, and because there is not an established precedent for a commercial condom market.

Stock-outs caused drops in SM sales in 2007, and there was an additional stock-out in 2008¹¹. This has contributed to the relatively low condom sales in 2008, which represents a 25% decline in sales from 2007.

Social marketing and commercial condom sales may also be under pressure from the distribution of free condoms. Although data on free condoms are incomplete, the growth in volume of free condoms between 2006 and 2007 corresponds with a decline in the other

¹⁰ The precise value of this cannot be reported, as it would allow Trojan's sales to be retrospectively calculated, thus breaking the agreement to keep individual company data confidential.

¹¹ Several factors were involved in this, including delayed shipments from China and stock being delayed in customs when it arrived.



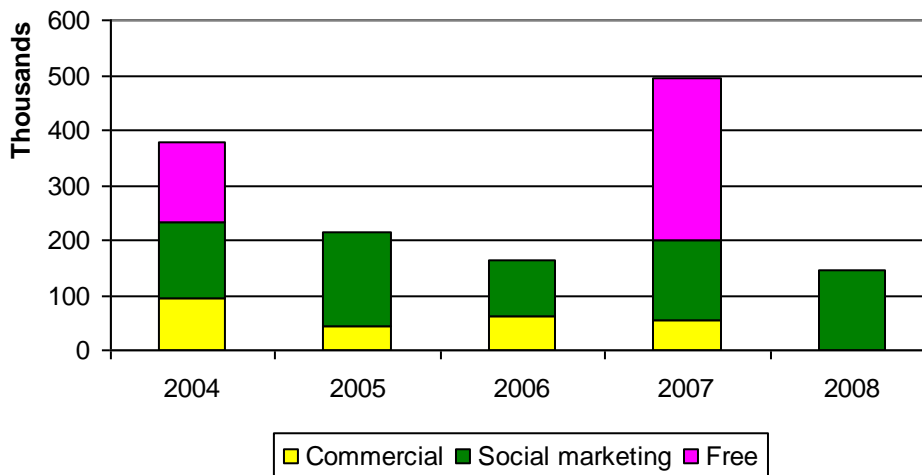
sectors. Qualitative data from the bateyes also testify to a growth in availability of free condoms (see CARISMA Regional Research Series, Study 1.2).

The case of the Dominican Republic illustrates the importance of collecting more accurate and consistent free condom data in future. In 2006 and 2007 the only data available were estimates based on PSI quarterly reports. The magnitude of these figures (3 million in 2006; at least 7 million in 2007) means that if 2008 figures were available, the picture of the national total condom market could change considerably.

1.3.4 Belize

Figure 4 shows the number of commercial, social marketing and free condoms sold or distributed in Belize since 2004. Free condom data are only available in 2004 and 2007. No commercial sales were reported for 2008.

Figure 4. Condom sales and distribution, Belize, 2004 – 2008 (thousands)



The overall picture in Belize is difficult to interpret, partly due to the lack of free condom data in several years¹². Reported commercial sales were down by 44% between 2004 and 2007. However, this is thought to be due to a problem with the accuracy of commercial sales data from Belize, rather than reflecting a true decline in sales. Observations in-country suggest that commercial condoms were in fact available in Belize in 2008, despite no commercial sales being reported. Further investigations are required to establish the cause of this problem.

Social marketing sales increased by 41% between 2006 and 2007 when the CARISMA supported programme started, but there were still 5% fewer sales in 2007 than in 2005. SM sales in 2008 remain fairly similar to 2007, but are down by 2,000 overall. From August to November 2008, PSI in Belize were without a condom sales agent, which limited their marketing and distribution activities.

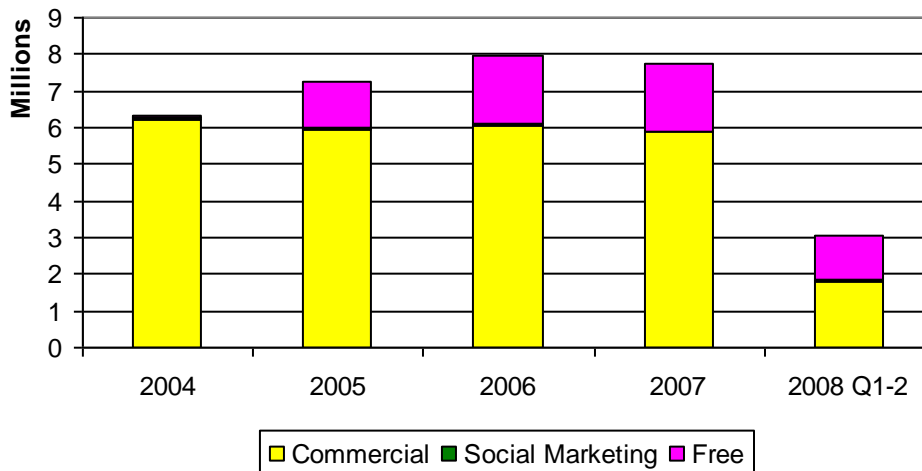
¹² PASMO's 2005 and 2006 estimates for free condoms were guesses or estimates based on stock in store. Their predicted estimates for 2007 were inaccurate.



1.3.5 OECS, Trinidad and Tobago, and Barbados

These countries were considered together as a sub-region, due to inter-island trading of condoms, and the fact that PSI manages a regional programme across the islands. Figure 5 shows the number of commercial, SM and free condoms sold or distributed in the OECS, Trinidad and Tobago, and Barbados since 2004. Free condom data are unavailable in 2004.

Figure 5. Condom sales and distribution, OECS, Trinidad and Tobago, and Barbados, 2004 – 2008 (quarters 1 & 2) (millions)



Socially marketed condoms barely show up in figure 5 as there were fewer than 90,000 sales even in the year with the largest sales (2005). This is to be expected as PSI does not distribute its own SM condom brand in these countries, and IPPF only distributes SM condoms from clinics (rather than a wide variety of outlets) on a small number of islands.

Commercial sales have been fairly consistent across the countries from 2004 to 2007. However, if sales in the second half of 2008 remain similar to the first half, commercial sales will not be as strong in 2008 as they were in 2007 (they would be 3.6 as opposed to 5.9 million).

If these sub-regional data are broken down by country, very different individual profiles emerge. Trinidad and Tobago sold over twice as many condoms in 2007 (just over 4 million) as the other countries in the sub-region put together, which reflects its much larger population.

Commercial sales declined in some countries between 2005 and 2007. In Barbados, reported annual sales decreased by 800,000 (from 1.7 million to just over 900,000). This decline cannot be explained by increasing competition from free condom distribution, as only 34,000 free condoms had been distributed in 2005 and 2006. However, the lack of Trojan sales data will have contributed significantly to this decline. In Antigua and Barbuda, and St Kitts and Nevis, annual commercial condom sales decreased by around 50,000 between 2005 and 2007.

Several other countries increased their commercial sales between 2005 and 2007: in Dominica, annual sales were up 72,000 (from 17,000 to 89,000), and in Grenada and St Lucia, annual sales



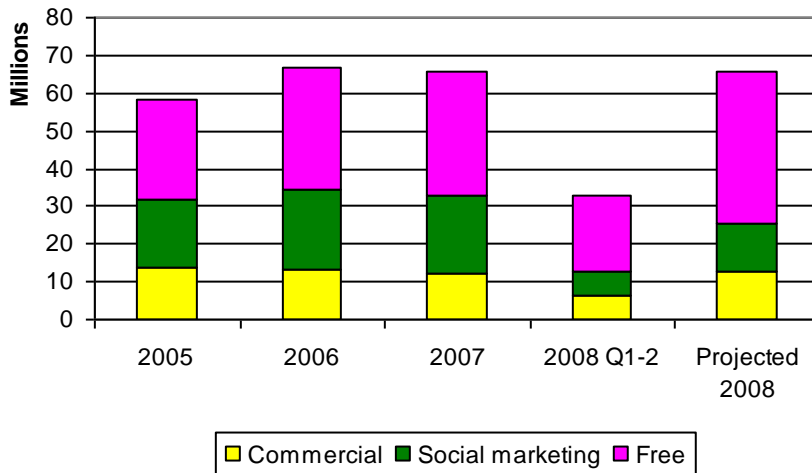
were both increased by over 100,000 (to 103,000 and 308,000 respectively). This may be due to the large number of mass media spots that the 'Got it? Get it' behaviour change campaign was able to secure (due to low rates for mass media advertising) on these islands. Condom awareness was thus thought to be extremely high in these markets in 2007.

The PSI Caribbean office reports that there are some brands that are increasingly popular in the region that CARISMA was not able to collect data from. Another factor that effects the interpretation of sales data from small islands is that some islands act as distribution points to other islands, with an unknown proportion of condoms distributed by small scale traders (the so-called 'suitcase trade').

1.4 Regional Overview of Condom Sales and Distribution

Figure 6 shows the number of commercial, social marketing and free condoms sold or distributed in the countries for which CARISMA compiled data since 2005. The lack of free condom data in several years in different countries (as highlighted in the individual country profiles above) should be taken into account. The projected total condom sales for 2008 are also included, based on the assumption that the same number of condoms will be sold or distributed in the second half of 2008 as in the first (for countries that could not provide data for the second half of 2008). 2004 figures are not included as many countries do not have complete commercial or free condom data from that year.

Figure 6. Condom sales and distribution, all countries, 2005 – 2008 (millions)



The total volume of condoms recorded peaked in 2006 at 66.7 million sold or distributed. A very similar number of 65.7 million will be sold or distributed in 2008 if the same volume of condoms is sold in the second half of the year as in the first.

While market shares between the different sectors were very similar between 2006 and 2007, the free condom sector has taken a larger share in 2008 (see table 2).



Table 2. Market shares of commercial, social marketing and free condoms, 2005 and 2008.

Market shares	2005	2008	% Change
Commercial	24%	19%	Down 19%
Social marketing	31%	19%	Down 37%
Free	45%	62%	Up 36%

Although the commercial sector's market share has decreased, their overall reported sales have experienced a relatively small absolute fall (from 13.8 million in 2005 to 12.5 million in 2007). Considering these figures underestimate actual sales (due to not counting some smaller brands and one company dropping out of data collection during the period reported), this drop is unlikely to represent significant 'crowding out' to the extent that the future of the commercial market is under threat in the short term.

The social marketing and commercial sectors appear to be under increasing pressure from free condom distribution (especially in the Dominican Republic and in Jamaica in 2006-2007). There are implications for the sustainability of the total condom market if free condoms attract people switching from commercial or social marketed condoms rather than attracting new users, particularly if these people can afford to pay for commercial or SM brands. Although these sales data alone do not prove that free condoms are depressing the social marketing and commercial sectors, they highlight that this is a potentially important issue.

These data show that markets across the region differ widely. For example, while in Haiti, nearly all condoms are either SM or free, in Dominica there was an even distribution between commercial and free condoms. Future plans for working to promote access to and use of condoms in these countries according to the total market approach need to take these differences into account.

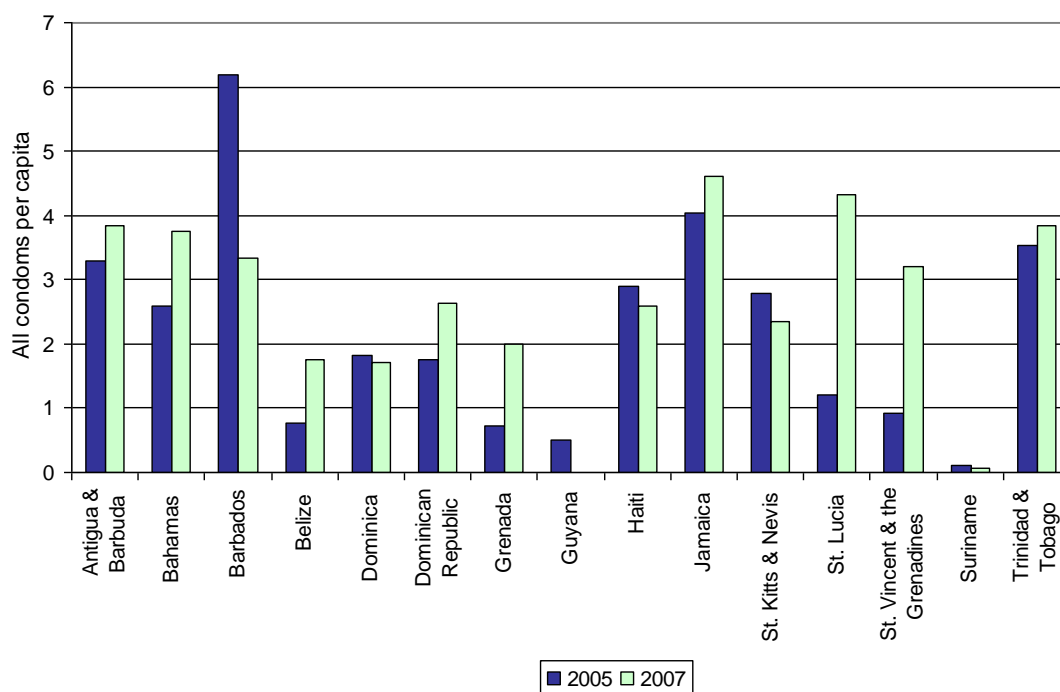


1.5 Per Capita Condom Sales

Figure 7 shows variation in the number of condoms sold (excluding free condoms) per capita in countries with social marketing. These data are not available for many other countries in the world. However, to put these figures into some context, in Zimbabwe in 2004, per capita PSI condom sales (excluding free and commercial brands) stood at 4¹³. This was considered the highest figure in the region at the time. In Brazil, between 1992 and 2002, per capita condom sales (including commercial and SM condoms) rose from 1.33 to 8.7¹⁴, which is substantially higher than any figure recorded in the Caribbean in 2007.

Although the total number of condoms sold in these countries remained similar between the two years (33 million in 2005 and 34 million in 2007), there is significant variation between countries in terms of per capita sales. Jamaica, St Lucia and Trinidad and Tobago are currently the three countries with the highest number of condoms sold per capita, while Guyana and Suriname report virtually no sales per capita in 2007. Barbados is the only country to report a large decline in per capita sales (though Barbados was believed to be particularly affected by Trojan ceasing to report sales). Per capita condom use also fell slightly in Haiti, Dominica and St Kitts and Nevis. In the rest of the countries, per capita sales increased.

Figure 7. Number of condoms sold or distributed per capita annually in countries with social marketing, 2005 compared to 2007



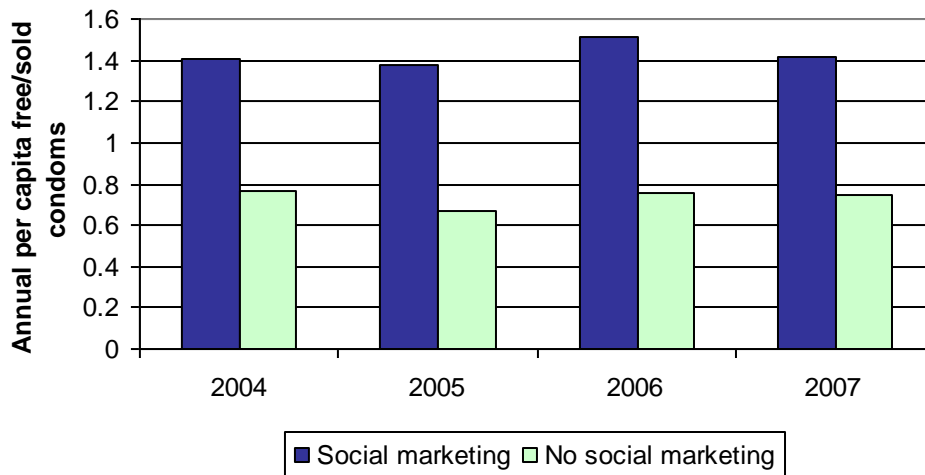
¹³ See www.psi.org/Where_We_Work/zimbabwe.html

¹⁴ The contribution of the social marketing of male condoms in Brazil as a strategy for HIV/AIDS prevention: a 10-year experience analysis by a participant. Fernandes ME, Moraes JC, Ferreiros C, Takemoto (in memoriam) A, Lamptey P, Shellstede W; International Conference on AIDS (15th : 2004 : Bangkok, Thailand). *Int Conf AIDS*. 2004 Jul 11-16; 15: abstract no. ThPeC7415. Associacao Saude da Familia, Sao Paulo, Brazil. <http://gateway.nlm.nih.gov/MeetingAbstracts/ma?f=102281194.html>



Figure 8 compares condoms sold per capita each year in countries with and without SM programmes, which gives an indication of whether SM programmes have an impact on sales (see Annex A for a list of countries with and without SM programmes in the Caribbean).

Figure 8. Number of condoms sold per capita annually, comparing countries with and without social marketing, 2004 – 2007



There is a substantial difference between the two categories: about twice as many condoms per capita are distributed in countries with SM programmes.



Part Two: Lessons Learned and Next Steps in Monitoring the Total Condom Market

2.1 Introduction

For social marketing programmes working within the Total Market Approach, these data are extremely useful. It is crucial to monitor trends such as whether the commercial market is being 'crowded out' by free or SM condoms, as the commercial sector represents a local, efficient and sustainable solution for those people who can afford commercial condoms. Particularly in Jamaica, Trinidad & Tobago, Barbados and the OECS, where PSI did not market their own SM condom, sales data are a key measure of the success or otherwise of SM programmes.

Whilst recognizing the limitations of these data, it is hoped that by widely disseminating findings, they will contribute to regional and national strategies for growing the total condom market, including procurement, research, programming, and monitoring. With the exception of Jamaica, before these data were compiled, countries in the region had little idea about how many condoms they were selling and distributing. CARISMA will work with countries to best utilize these and future findings concerning the TCM as a regional and national resource. Data have already been presented at the CCNAPC Annual General Meeting, and at the CARISMA Consultative Monitoring Group meeting, attended by regional stakeholders.

The way that the TCM will be monitored in future will change, due to two commercial companies leaving the data collection system employed during CARISMA's first phase. We are no longer confident that the brands we continue count are broadly representative of the total commercial market. At the start of the next CARISMA programme, we reflect on lessons learned from monitoring the TCM, and how we can continue to do so in future. There are strengths and limitations to each potential approach, most of which were discussed at length in the Research and Monitoring plan for the first CARISMA programme¹⁵. This report summarises the main issues, concentrating on lessons learned, and describes potential future methodologies. A research and monitoring plan will then be finalised in the first half of 2009.

2.2 Condom sales and distribution data need to be better contextualised

Detailed contextual information is required to interpret the dynamics of the TCM in any country. The following contextual factors affected CARISMA sales at one or more points during the programme:

- Overstocking in one year leading to an apparent decline in sales the next year, which does not necessarily equate to a decline in consumer purchasing
- Stock outs of condoms (e.g. due to poor forecasting of supplies needed, condoms being stuck in customs, or shipping delays)
- Increasing distribution of free condoms (SM or commercial users may switch to free condoms)

¹⁵ Available at www.carisma-pancap.org/Research/documents/FinalResearchandMonitoringPlan.pdf



- Some countries acting as informal distribution points for other smaller islands: ‘Suitcase salesmen’ bring condoms into some of the smaller countries and their sales are not measured (thought to be an issue in Haiti in particular)
- Other countries (e.g. Jamaica) acting as transit hubs for condom distribution, as they do not impose import taxes on condom imports
- Hurricanes and civil unrest affecting distribution channels, and unfavorable environment for the private sector to operate in (particularly in Haiti)
- Lack of, or change in, key staff such as sales agents
- Changes in cost of living (e.g. world food price rises)
- Changes in prices of condoms

However, these events were not routinely collected alongside sales and distribution data in CARISMA. Although this background intelligence is available through subsequent ‘detective work’ (reviewing quarterly reports, discussing with SMO country directors), the information is not available for ready interpretation whilst conducting routine monitoring and evaluation.

2.2.1 Recommendations for CARISMA 2:

- Establish a systematic approach to gathering narrative data to accompany sales figures to assist with analysis and interpretation.

2.3 Challenges in measuring the TCM: commercial condom data

Measuring the TCM through the methods outlined in this report will not continue in the next CARISMA phase due to two of the five major companies declining to participate further. Social marketing programmes can exert only limited influence on commercial companies, and thus face great difficulties if their commercial partners withdraw part-way through a project.

While three commercial companies remained committed to involvement in the CARISMA programme, it is thought that others felt that they did not receive sufficient direct benefits for their participation for it to be worth their while. In a competitive commercial environment, they may have perceived sharing sales figures (which they usually keep a close secret) as presenting a potential risk, without direct benefits for their companies.

2.3.1 Recommendations for CARISMA 2:

- Develop methods for monitoring the TCM that can be commissioned or conducted by CARISMA, rather than relying on commercial companies for data.

2.4 Challenges in measuring the TCM: free condom data

There were also challenges in obtaining free condom data. Across the Caribbean, there are various systems (or no systems at all) for collecting these data. There is no standard reporting format and countries provided their data across different time intervals. CCNAPC reported that they had to be extremely cautious not to double count free condom figures, as condoms recorded once at the Ministry of Health may have been counted again when distributed later by an NGO. Any efforts to improve



comparability, reliability and comprehensiveness of regional free condom data would require investment in a regional data collection system. While some countries, including Jamaica, conduct regular inventories of free condoms, at present, monitoring and evaluation capacity is extremely limited at most National Aids Programmes. Although staff are said to understand the value of these data, they find it difficult to collect extra data on top of existing workloads, especially as regular systems are not always in place to help them do so. A strong case for the usefulness of free condom data for the region would have to be made, and in the current absence of regional strategies and policies around free condoms, the context for making this case is not clear.

There were also challenges in interpreting the trends in free condom volumes. As an example, in Jamaica it proved difficult to obtain background contextual data to interpret free condom distribution figures. The National Family Planning Board (NFPB) are said to act as ‘order takers’ for health centres, and distribute condoms on behalf of the Ministry of Health. Despite enquiries to the NFPB, nobody was able to shed light on the observed increases in free condom distribution, e.g. whether health centres were demanding more condoms, or whether the Ministry had procured more and encouraged the health centres to take up the extra stock, and if either of these were the case, what were the driving forces behind these trends?

A total market approach involves segmenting markets according to willingness to pay. According to this approach, free condoms should be available to poor people. However, at present, we only have data on crude distribution figures, and do not know where free condoms are distributed, to whom, and what proportions are used, wasted, or even possibly re-sold. Without greater intelligence on these issues, we do not know whether free condoms are a cost-effective public health measure, or whether they are a means of supplying condoms to people who would otherwise willingly buy SM or commercial condoms, which would represent an inefficient use of national resources.

In conclusion, patchy and inconsistent data on free condoms reflects the lack of clear direction on the distribution, forecasted need, and sustainability of the free condom sector in the Caribbean.

2.4.1 Recommendations for CARISMA 2:

- Work with PANCAP and other regional organisations to develop clearer condom policy and targeting, as per PANCAP/CARICOM’s Regional Model Condom Policy, including the free condom sector. Advocate that such policies include an appropriate focus on developing monitoring and evaluation capacity, including regular, systematic and comparable data collection systems across the region.
- Socioeconomic status of users and non-users of free condoms should be collected in population-based surveys in order to monitor whether free condoms are being accessed by those with the greatest need.
- For M&E purposes in CARISMA 2, collect free condom data regularly over the course of the programme (e.g. yearly) rather than retrospectively. Provide a reporting template to NAPs to encourage timely and sufficiently detailed reporting. Ask for an accompanying narrative description of method of compilation of free condom data (to assess for completeness of data and the risk of double counting).



- Consider a regional research study into where free condoms come from, who pays for them, distribution channels, and who ultimately uses them.

2.5 Reported condom use, rather than sales, to monitor the TCM

Experience from the first CARISMA programme shows that in spite of its usefulness, sales data only tell a partial, and often confusing, picture. Condom sales and distribution data rarely match estimates of condom use behaviour. In extensive research in this area, straightforward correlations between sales and reported use are rare. The authoritative study in this area is by Meekers & Van Rossen's (2004)¹⁶. Six Demographic and Health Surveys were analysed to estimate the total annual number of condoms used. These figures were then compared with reported data on condom sales and distribution. Erratic patterns were found in the relation between condoms reported used and sold, with fluctuations appearing to reflect stocking up at various levels in the distribution chain. There are several reasons for this:

- Delays: Condoms sold to the trade one year might not be sold to consumers until a year or two later.
- Wastage at user level: In a study in South Africa¹⁷, only 52% of free condoms had been used in sex 6 weeks after procurement. Condoms may expire before use, break, be lost, etc.
- Wastage at distribution level: condoms expiring in warehouses etc.

Therefore, changes in condom sales do not necessarily indicate changes in condom use behaviour. Whilst the ultimate concern of commercial condom companies is their sales, social marketing programmes are also concerned with increased condom use behaviour. PSI has strongly advocated the use of reported condom use data for monitoring condom sales and distribution. Although these data do not provide information on overall sales, they can describe market share and trends over time.

In conclusion, for greater rigour, representativeness, and usefulness, population based surveys offer a preferable approach to monitoring the TCM than sales based data for the following reasons:

- They can track whether different condom market sectors are meeting the needs of a market according to willingness/ability to pay
- They can track switching between sectors over time
- They measure what SMOs are primarily interested in: condom use behaviour (rather than, for instance, how many condoms are sitting in a warehouse)
- CARISMA and its partner SMOs can take full responsibility for implementing the methodology (whereas with sales and free condom distribution we rely on other organisations to collect the data and have limited control over its accuracy)

¹⁶ Explaining Inconsistencies between Data on Condom Use and Condom Sales Dominique Meekers and Ronan Van Rossem. February 2004. MEASURE Evaluation Working Papers series.

¹⁷ Landon Myer, Catherine Mathews and Francesca Little. Tracing Condom Fates: Design and Pilot Results of a Study Investigating the Use and Wastage of Public Sector Condoms. African Journal of Reproductive Health. 2001; 5[1]: 66-74



- SMOs in CARISMA need only to incorporate appropriate questions into surveys which they would undertake routinely. Subject to large enough sample sizes (see below), the approach requires few additional resources, largely at the analysis stage.

Although there are several benefits to using reported condom use to monitoring the total condom market, there are also some important limitations:

- Respondents are subject to recall errors: they may not remember, or may not know where their condom(s) came from, especially if partner provided it. This can be minimised by showing respondents packaging from different condom brands to prompt their memory.
- Social desirability bias: people may be more likely to report use of commercial or SM condom if free condoms are seen as less socially acceptable.
- Sample sizes: within a population based survey, the number of people who qualify as sexually active adults who remember where they got their condom(s) from may be too small to detect significant differences in socioeconomic status etc¹⁸. Over sampling or additional sample surveys may be required to address this issue.

2.5.1 Recommendations for CARISMA 2:

- Future attempts to measure TCM growth (including switching behaviour between public, SM and private sector sources of condoms) should consider using population-based sample surveys¹⁹.
- Survey questions need to be very carefully designed if they are to collect valid and reliable data (e.g. asking about the total number of sex acts and/or the total number of condoms used in a fixed time period; showing respondents condom packaging to aid recall).

2.6 Alternative Approaches to Measuring Sales

Although this report concludes that condom use data are a more appropriate way to monitor the TCM in future, it will be important to continue to selectively monitor sales and distribution trends from different sectors. These data are needed to monitor the sustainability of the commercial sector, and the context in which SMOs are operating (e.g. competition from free condoms). In countries where there is no SM brand, total sales are still crucial for monitoring performance.

We considered setting up a system to collect data on retail sales from outlets, but do not believe this to be feasible because of the lack of standardized record-keeping in outlets and because many condoms are distributed through informal retailers such as street vendors. While it may be possible to contract a market research agency to include condoms in its list of products monitored through electronic point of sale systems, these will be in traditional outlets, such as supermarkets and pharmacies, which are not the primary vendors to many of the target groups of interest in CARISMA (e.g. youth, sex workers).

¹⁸ This was a problem in the first CARISMA programme: researchers had planned to answer some of the questions around sourcing of condoms and socioeconomic status, but were unable to do so due to small sample sizes.

¹⁹ See extensive discussion in CARISMA Research & Monitoring Framework



2.6.1 Recommendations for CARISMA 2:

- Rather than establishing a new comprehensive regional TCM data collection system, an alternative approach for CARISMA 2 is to set up tailored sales/distribution monitoring studies in key countries. As this report has demonstrated, the TCM in each country is very different, and SMOs take different social marketing approaches across the region. A 'one size fits all' monitoring plan will not be appropriate in this context. In addition, a few key countries contribute disproportionately to the TCM in the Caribbean, and should be prioritized as sentinel sites for monitoring.
- The following examples show how TCM monitoring might look in key countries (methods will be confirmed by June 2009):
 - **Trinidad:** Measuring sales from branded outlets through a new reporting system using Condom Sales Promotion Agents
 - **Jamaica and DR:** Engage a market research company to conduct market analysis (key informant interviews, discussions with MoH etc) including quantitative analysis and narrative description (see Annex B for recommended approach by the World Health Organisation).
 - **Haiti:** Assess nature and scale of commercial sector before planning monitoring system. In what form does it exist or is it entirely informal? Complement with retail audits to monitor trends in availability of commercial brands (e.g. PSI geographical availability (MAP) studies).

2.7 Increased focus on demonstrating impact on poor and vulnerable groups

The rationale behind the total market approach is to grow the total condom market, and to ensure that the poorest and highest risk groups have access to condoms when they would not do otherwise. For example, commercial condoms may be expensive, or condoms may be sold mainly in traditional outlets such as pharmacies and supermarkets, which are not accessible during the night, or near sex work venues, or which are not easily frequented by young people.

Therefore, a central aspect of the success or otherwise of CARISMA 2 will be the extent to which it encourages growth in a condom market that provides the right price condoms, through the most appropriate distribution channels, to the right people. To measure this, CARISMA 2 will analyse who is using different sectors of the Total Market according to their socioeconomic status, or other social category (e.g. profession, urban/rural residence). While CARISMA had aimed to synthesize this information, the level of detail and breadth of studies was ultimately inadequate to come to firm regional conclusions (though available data are presented in CARISMA Regional Research Series, Study 3).

An additional issue that needs to be addressed is, how does a country decide what proportion of its market should be free, commercial, or socially marketed? This will differ by country, but without having a broad idea of how to determine the ideal proportions, and how these would then be obtained, the Total Market Approach remains at some level a theoretical framework rather than a practical tool.



2.7.1 Recommendations for CARISMA 2:

- Discuss the issue of ideal market share for different condom sectors. This discussion should feed into regional/national condom policy (N.B. This discussion is planned to take place during the Consultative Monitoring Group meeting in 2009).
- Work more closely with SMOs to ensure that they produce data required to answer questions around the Total Condom Market and poverty or socioeconomic vulnerability.



Annexes

A. Countries with and without Social Marketing

<i>Countries with SMOs supporting commercial brands:</i>	<i>Countries with SM brands:</i>	<i>Countries without SM:</i>
Antigua	Belize (PSI)	Anguilla
The Bahamas	Dominica (IPPF affiliate)	Aruba
Barbados	DR (PSI and IPPF affiliate)	Bermuda
Belize	Haiti (PSI)	British Virgin Islands
Dominica	St Vincent and Grenadines (IPPF affiliate)	Cayman Islands
Grenada		Cuba
Guyana		French Guyana
Monserrat		Guadeloupe
St. Kitts and Nevis		Martinique
St. Lucia		Puerto Rico
St. Vincent and the Grenadines		Bonaire, Curacao, Stacia, Saba
Suriname		St. Maarten (Netherlands)
Trinidad and Tobago		St. Martin (France)
Jamaica		Turks & Caicos
		US Virgin Islands

B. Other methods of monitoring condom distribution

One method for measuring condom distribution (see annex 2 of the CARISMA Research & Monitoring Plan and Rehle, Saidel et al 2001²⁰) which UNAIDS²¹ confirms has been field-tested extensively. It is also recommended by the Caribbean Health Research Council (2004)²².

[WHO/GPA protocol for estimating condom availability for distribution at central and peripheral level](#)²³

Measures the number of condoms available for in-country use during the previous 12 months.

- Key informants interviewed (major condom donors, private importers of condoms, government procurement officers, NGO providers of condoms), providing information on all sources of condom manufacture, importation, distribution and storage

²⁰ Rehle T, T Saidel, S Mills & R Magnani (2001) Evaluating Programs for HIV/AIDS Prevention and Care in Developing Countries (FHI)

²¹ See UNAID's monitoring and evaluation website

²² Caribbean Health Research Council (2004) Caribbean Indicators and Measurement Tools (CIMT) for the Monitoring and Evaluation of National AIDS Programmes (pp28-29).

²³ www.cpc.unc.edu/measure/publications/un aids-00.17e/tools/whocondom.pdf



- Data collected from all manufacturers, major commercial distributors, major donors, condom storage facilities, and government and NGO bodies involved in acquiring and distributing condoms
- Number of condoms summed from:
 - Condoms in stock nationally at the start of the 12-month period
 - Condoms imported during the same period
 - Condoms manufactured in country (if applicable) during this period
 - Minus any exports of condoms over this period
- The sum of all condoms available for use in the country during the past 12 months is divided by the total population aged 15-49
- Limitations to the method:
 - Not all condoms in stock at the central level are distributed, or reach the individuals that most need them to protect against HIV, i.e. this method by itself will not give a picture of how many in-stock condoms actually get distributed or used.
 - Condoms may be imported by a wide variety of commercial companies, NGOs, donors and government departments, not all of whom report numbers imported to a central body (or readily make available their figures to an outside evaluator)

